International Journal Of Advance Research, Ideas And Innovations In Technology

VOLUME 7 - ISSUE 4

# IJARIIT

# SPECTRUM

International Journal of Advance Research, Ideas and Innovations in Technology

July-August, 2021

| 358 | 1034 | 279 | 6 |
|---|---|---|---|
| PAPERS | AUTHORS | INSTITUTIONS | COUNTRIES |

## INSIDE THIS ISSUE

Sign Language recognition system using Convolutional Neural Networks p. 1

Face mask detection system p. 5

Automatic number plate recognition using contours and Convolution Neural Networks p. 9

# IJARIIT SPECTRUM

Spectrum is an e-magazine with the comprehensive collection of all the papers that have been published in our journal over the last two months — Volume 7, Issue 4 (July-August, 2021). This edition brings together 358 papers by 1034 authors from 279 institutions. Each entry links to the abstract and the full paper.

# ABOUT IJARIIT

Our motto: to promote originality in thinking, backed by sincere and honest research.

International Journal of Advance Research, Ideas and Innovations in Technology is an open-access, peer-reviewed journal. We make publishing simple and transparent, so researchers can focus on their work:

- Online submission, free of charge
- Review result usually within 2 hours
- Updates by email and WhatsApp at every step
- Track your paper online with your tracking key
- One publication fee for all authors, paid only after acceptance
- Published online within 48 hours of payment
- e-Certificate for every author




e-ISSN 2454-132X

# THIS EDITION AT A GLANCE

© 2021, IJARIIT.COM All Rights Reserved

| Research areas | | Authors by country | |
|---|---|---|---|
| Civil Engineering | **26** | India | **342** |
| Machine Learning | **21** | Scotland | **5** |
| Computer Science | **15** | Afghanistan | **2** |
| Computer Science Engineering | **10** | Sri Lanka | **2** |
| Computer Science AndEngineering | **9** | Malaysia | **1** |
| Iot | **8** | Maharashtra | **1** |

© 2021, IJARIIT.COM All Rights Reserved

# Indexing of Volume 7 – Issue 4


| S. No | Title | Page Number | Links |
|---|---|---|---|
| 1. | **Sign Language recognition system using Convolutional Neural Networks**<br>*Puramshetty Srinidhi Rao, Potladurthy Sindhu Sri Vatsalya, Ruttala Bhanu Sree Sai, Polavarapu Janshi, Koda Indu*<br>**Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh** | 1-4 | View Abstract<br>Download PDF |
| 2. | **Face mask detection system**<br>*Korakam Mrudula, M. Sion Kumari, Landa Jayashree, Madala Meghana, Meesala Gnana Deepika*<br>**Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh** | 5-8 | View Abstract<br>Download PDF |
| 3. | **Automatic number plate recognition using contours and Convolution Neural Networks**<br>*Adithya M., Sumitha B. S., Rahul K., Nitish Kumar P., Pramod G. N.*<br>**Atria Institute of Technology, Bengaluru, Karnataka** | 9-13 | View Abstract<br>Download PDF |
| 4. | **Driver Fatigue Detection using Deep Learning**<br>*Sujay S., Aditya Ashok Illur, Poornima Kulkarni, Rekha B. S.*<br>**RV College of Engineering, Bengaluru, Karnataka** | 14-16 | View Abstract<br>Download PDF |
| 5. | **Reimagining the city's identity by strengthening the inner core – A research enquiry for design intervention**<br>*Kapil Gujarathi, Kuldeep Bhatia, Tushar Paithankar*<br>**Marathwada Institute of Technology, Aurangabad, Maharashtra** | 17-20 | View Abstract<br>Download PDF |
| 6. | **Handwritten Digit Recognition using Deep Learning**<br>*Sanjeeva Kumar, Seenakula Ravi Shankar, Shashank M. V., Vandana K. C., Farhana Kausar*<br>**Atria Institute of Technology, Bangalore, Karnataka** | 21-23 | View Abstract<br>Download PDF |
| 7. | **Analysis of Dropout in ANN using MNIST Dataset**<br>*Swathi N., Shreeraksha, Shruti A. P., Sparsha S. G., Farhana Kausar*<br>**Atria Institute of Technology, Bengaluru, Karnataka** | 24-27 | View Abstract<br>Download PDF |
| 8. | **Impact of social media on societal perception of youngsters: Empirical evidence from graduates in Bangalore City**<br>*Dr. Jaya Patil, Dr. Lakshmi P.*<br>**IFIM College, Bengaluru, Karnataka** | 28-32 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 9. | **Case study on measurement of productivity of WFH IT professionals**<br>*Dr. Veena Angadi*<br>**Bangalore City College, Bengaluru, Karnataka** | 33-37 | View Abstract<br>Download PDF |
| 10. | **Investigation of thermal properties in synthetic fiber reinforced lightweight concrete**<br>*Nandhini S., Muthuraj M. P.*<br>**Coimbatore Institute of Technology, Coimbatore, Tamil Nadu** | 38-45 | View Abstract<br>Download PDF |
| 11. | **Fringe area transformation of historical Satara village at Aurangabad city**<br>*Rajni Sharma, Pranita Pranjale*<br>**Marathwada Institute of Technology, Aurangabad, Maharashtra** | 46-53 | View Abstract<br>Download PDF |
| 12. | **Design and Implementation of a Vending Machine and its performance evaluation using EDA tools**<br>*Anand Jonathan Roy, Manish Kumar, K. Suganthi*<br>**SRM Institute of Science and Technology, Chennai, Tamil Nadu** | 54-60 | View Abstract<br>Download PDF |
| 13. | **Home security surveillance**<br>*Shubham Tiwari, Rohit Mishra, Ryan Sumbli, Subham Gupta*<br>**The National Institute of Engineering, Mysore, Karnataka** | 61-63 | View Abstract<br>Download PDF |
| 14. | **Use of solar energy to improve the performance of a jaggery manufacturing unit**<br>*Akshay Kaushal*<br>**Great Lakes Institute of Management, Bilaspur Khurd, Haryana** | 64-67 | View Abstract<br>Download PDF |
| 15. | **Implementation of IoT based smart village for rural development**<br>*Shwetha R., Ramyashree P., Sagar R. Sankole, Goutam R.*<br>**Atria Institute of Technology, Bengaluru, Karnataka** | 68-70 | View Abstract<br>Download PDF |
| 16. | **Dielectric Resonator Oscillator**<br>*Manisha B., Dr. K. Sreelakshmi, Ranjit Kumar Dora*<br>**RV College of Engineering, Bengaluru, Karnataka, Centum Electronics Ltd., Bangalore, Karnataka,** | 71-73 | View Abstract<br>Download PDF |
| 17. | **Study on thermal conductivity of fiber-reinforced light weight concrete using natural fibers**<br>*Shiva Shankari N., Nithyapriya K.*<br>**Coimbatore Institute of Technology, Coimbatore, Tamil Nadu** | 74-81 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 18. | **Improving the accuracy of Neural Networks through Ensemble Techniques**<br>*Monalika Padma Reddy, Deeksha A.*<br>**Visvesvaraya Technological University, Belgaum, Karnataka** | 82-86 | View Abstract<br>Download PDF |
| 19. | **Cold mix technology using granite waste and rubber waste in road construction**<br>*Shreyas Anil Patane, Gavrav Pandurang Bavdhane, Dhiraj Pradip Joshi, Omkar Sunil Chavan, Sanika Kandalekar*<br>**Vivekanand Education Society Polytechnic, Mumbai, Maharashtra** | 87-89 | View Abstract<br>Download PDF |
| 20. | **Design of water supply treatment process for rural areas**<br>*Falguni Dachewar, Dr. Harshal Warade*<br>**Yeshwantrao Chavan College of Engineering (YCCE), Nagpur, Maharashtra** | 90-94 | View Abstract<br>Download PDF |
| 21. | **Effectively developing a recommendation system by implementing collaborative filtering**<br>*Darshan C. M. Pawar, Arthi Sharma V., Syeda Fathima Zohra, Syeda Arbeena, Maqdum Shariff*<br>**Atria Institute of Technology, Bengaluru, Karnataka** | 95-99 | View Abstract<br>Download PDF |
| 22. | **Strengthening and compressive behavior of composite multilimbed lightweight CFS build up a column**<br>*C. N. Nazinin, Adila Abdulla Kunju*<br>**Ilahia College of Engineering and Technology, Mulavoor, Kerala** | 100-102 | View Abstract<br>Download PDF |
| 23. | **Multi regional GKE cluster implementation on GCP using Terraform**<br>*Aditya Ashok Illur, Aaryaman T P Katoch, Poornima Kulkarni, Manas M. N.*<br>**RV College of Engineering, Bengaluru, Karnataka** | 103-106 | View Abstract<br>Download PDF |
| 24. | **Web development system for online food and stationery products**<br>*Manasij Mandal, Dr. Bikramjit Sarkar, Ayusree Nandi, Pritilata Majumdar, Twinkel Dhar*<br>**JIS College of Engineering, Kalyani, West Bengal** | 107-112 | View Abstract<br>Download PDF |
| 25. | **Study on strength of gypsum composite wall panel**<br>*Sivasangari Gopalakrishnan G., Nithyapriya K.*<br>**Coimbatore Institute of Technology, Coimbatore, Tamil Nadu** | 113-120 | View Abstract<br>Download PDF |
| 26. | **Study on acoustic properties of natural fiber reinforced light weight concrete**<br>*Nivetha V., M. P. Muthuraj*<br>**Coimbatore Institute of Technology, Coimbatore, Tamil Nadu** | 121-126 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 27. | **Blood bank management system**<br>*Abhishek Raj Nair, Dhanush Krishnan U., Emy Alphonsa Selastin, Tijo B. Gomez, Nitha L. Rozario*<br>**Marian Engineering College, Thiruvananthapuram, Kerala** | 127-130 | View Abstract<br>Download PDF |
| 28. | **Review of the impact of residual stresses on various parameters during a wire-cut EDM cutting process**<br>*Sunil, S. K. S. Yadav*<br>**Harcourt Butler Technical University, Kanpur, Uttar Pradesh** | 131-134 | View Abstract<br>Download PDF |
| 29. | **Kesla Smart Lock**<br>*R. Karthik, R. Venkata chalam, Y. Mohan, M. C. Charanraj, K. Swaroop*<br>**Kuppam Engineering College, Ekarlapalle, Andhra Pradesh** | 135-137 | View Abstract<br>Download PDF |
| 30. | **Development and performance evaluation of interlocking bricks using industrial waste materials**<br>*Vijay Adhithya A., Kalpana V. G., Malavan K.*<br>**Coimbatore Institute of Technology, Coimbatore, Tamil Nadu** | 138-146 | View Abstract<br>Download PDF |
| 31. | **Cartoonify Image using Bilateral Filter and Adaptive Threshold**<br>*Saqib Ahamed Sharief, Sanjay S. V., Sunil H. V., Padmini C.*<br>**Atria Institute of Technology, Bengaluru, Karnataka** | 147-149 | View Abstract<br>Download PDF |
| 32. | **Android dictionary application in Android studio**<br>*Keerthana Mudadla, M. Sion Kumari, Sadasivuni Nikhitha, Padmanjani Darapureddy, Praneetha Meka*<br>**Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh** | 150-156 | View Abstract<br>Download PDF |
| 33. | **Effect of Reinforced Aerocon Block Infill And Double Diagonal RCC Strut RC Frames Under Cyclic Loading**<br>*G. Ajisha Selva Santhi, Dr. S. Arulselvan*<br>**Coimbatore Institute of Technology, Coimbatore, Tamil Nadu** | 157-167 | View Abstract<br>Download PDF |
| 34. | **Effectiveness of online teacher education program- A case study**<br>*Dr. Ritika Dabas, Dr. Geeta*<br>**State Council of Educational Research and Training, New Delhi, Delhi** | 168-176 | View Abstract<br>Download PDF |
| 35. | **Interactive inverter for grid-tied solar power generation**<br>*K. Mohan, Sarah Babu V., T. Dinesh, K. Rahul Raj, V. Pandiyan*<br>**Kuppam Engineering College, Ekarlapalle, Andhra Pradesh** | 177-178 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 36. | **Anterior fractured tooth restoration using fiber-reinforced composite: A case report**<br>*Dr. Pradnya V. Bansode, Dr. Seema D. Pathak, Dr. Madhuri Wavdhane, Dr. Geetam U. Duduskar*<br>**Government Dental College and Hospital, Aurangabad, Maharashtra** | 179-182 | View Abstract<br>Download PDF |
| 37. | **Review of heat exchanger for subcooling of liquid Nitrogen in GM cryocooler**<br>*Krushna D. Koshti, Prajitsen G. Damle*<br>**Shrama Sadhana Bombay Trust's College of Engineering and Technology, Jalgaon, Maharashtra** | 183-186 | View Abstract<br>Download PDF |
| 38. | **5G Network: The Emerging Trend of the Decade**<br>*Aksh Yadav, Harsh Singh, Siddhant Singh, Advay Surve, Poonam Vengurlekar*<br>**Thakur Polytechnic, Mumbai, Maharashtra** | 187-191 | View Abstract<br>Download PDF |
| 39. | **Importance of technology in managing indoor air quality**<br>*Dr. Abhijit Sarkar*<br>**Sharekhan By BNP Paribas, Mumbai, Maharashtra** | 192-195 | View Abstract<br>Download PDF |
| 40. | **DonateEazy: Web application to assist local donations towards NGOs and non-profit organisations**<br>*Suhena Sujay, Viviana Perpetua Aranha, Shivani Kini, Ratna Kumari, Dr. Devi Kannan*<br>**Atria Institute of Technology, Bengaluru, Karnataka** | 196-200 | View Abstract<br>Download PDF |
| 41. | **Web application security – Automating the manual exploitation methods and eliminating false positives**<br>*Jayshish M. Popat, Mohammad Ashar Nawab, Asuri Ritesh Kumar, Nishant Prakash, Manjula M.*<br>**Atria Institute of Technology, Bengaluru, Karnataka** | 201-204 | View Abstract<br>Download PDF |
| 42. | **Advance skin diseases diagnosis and leaveraging using image processing**<br>*Akhil Reddy, Raghupathi Reddy, Shiva Kumar, Dr. K. Sateesh Kumar*<br>**Sreenidhi Institute of Science and Technology (SNIST), Hyderabad, Telangana** | 205-208 | View Abstract<br>Download PDF |
| 43. | **Management of fractured endodontic instruments by file bypass technique: A report of two cases**<br>*Dr. Pradnya V. Bansode, Dr. Seema D. Pathak, Dr. Madhuri B. Wavdhane, Lipsita Priyadarshini*<br>**Government Dental College and Hospital, Aurangabad, Maharashtra** | 209-212 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 44. | **The efficiency of food waste material for the removal of metal and metalloid from a multi-element solution**<br>*Nazrin Riyas, Shabins Basheer, Asna Binu, Arjun T. A., Rashida P. K.*<br>**Ilahia College of Engineering and Technology, Mulavoor, Kerala** | 213-216 | View Abstract<br>Download PDF |
| 45. | **Review on Improving the capacity of black cotton soil by using different materials example bio-enzymes and bagasse ash, etc.**<br>*Shaikh Pirsab Maqbulsab, Ghogare Satyajeet, B. R. Lagad, Dr. S. R. Bhagat*<br>**Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra** | 217-219 | View Abstract<br>Download PDF |
| 46. | **COVID-19 facemask and Social Distancing Detector**<br>*Mansi Jha, Priya G. M., Nisha, Pallavi N.*<br>**Atria Institute of Technology, Bengaluru, Karnataka** | 220-223 | View Abstract<br>Download PDF |
| 47. | **Inductor coupled converter**<br>*R. Kotesh, M. Vignesh, B. Lakshmikanth, A. Raman, M. Seenivasan*<br>**Kuppam Engineering College, Ekarlapalle, Andhra Pradesh** | 224-226 | View Abstract<br>Download PDF |
| 48. | **Aura – Virtual Personal Assistant**<br>*Shubham, Supriya Rani, Sanskar Srivastava, Pallavi T. P.*<br>**Atria Institute of Technology, Bengaluru, Karnataka** | 227-229 | View Abstract<br>Download PDF |
| 49. | **Review paper on industrial wastewater treatment processes**<br>*Gopal Ganesh Rathod, Prafulla Dnyaneshwar Baviskar, Balram Lagad, Dr. S. R. Bhagat*<br>**Dr. Babasaheb Ambedkar Technological University, Nanded, Maharashtra** | 230-235 | View Abstract<br>Download PDF |
| 50. | **Performance evaluation of non-hierarchical routing protocols for healthcare applications**<br>*Suman Shekhar A., Dr. K. Sreelakshmi*<br>**RV College of Engineering, Bengaluru, Karnataka** | 236-241 | View Abstract<br>Download PDF |
| 51. | **Review paper on HMM Model for speech recognition systems**<br>*Abha Anand B., Atul Ranjan Shipu, S. G. Raghavendra Prasad, Sharadadevi Kaganurmath*<br>**RV College of Engineering, Bengaluru, Karnataka** | 242-245 | View Abstract<br>Download PDF |
| 52. | **Planning and estimation of G+1 structure of the residential building**<br>*Tanvi Pawar, Keshar Lawane, Garsha Gaikwad, Roshni Virwani, Sanika Kandalekar*<br>**Vivekanand Education Society Polytechnic, Mumbai, Maharashtra** | 246-249 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 53. | **A review paper on green concrete**<br>*Dhondiram Vijaykumar Waghmare, Rushikesh Vishnu Divte, Dr. S. R. Bhagat, B. R. Lagad*<br>**Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra** | 250-252 | View Abstract<br>Download PDF |
| 54. | **Power backup management system**<br>*Viraj Dnyandeo Utekar*<br>**University of Mumbai, Mumbai, Maharashtra** | 253-253 | View Abstract<br>Download PDF |
| 55. | **Crop yield prediction and alternate crop prediction using ML**<br>*Disha Chiplonker, Arjun A., Pruthvi M., Rakshith V. R., Sunil G. L.*<br>**Sai Vidya Institute of Technology, Rajanukunte, Karnataka** | 254-257 | View Abstract<br>Download PDF |
| 56. | **Design of MMIC phase shifter in Ku Band for Antenna Beam steering applications**<br>*Namrata Marigoudar, Dr. K. Sreelakshmi*<br>**RV College of Engineering, Bengaluru, Karnataka** | 258-260 | View Abstract<br>Download PDF |
| 57. | **Live Care: Virtual healthcare assistant**<br>*Mansi Narwade, Vishakha Arote, Divyansh Swabhawane, Irfan Shaikh, Dr. Chaya Jadhav*<br>**Dr. D. Y. Patil Institute of Technology, Pune, Maharashtra** | 261-264 | View Abstract<br>Download PDF |
| 58. | **Menu-based Penetration Testing and Vulnerability Assessment**<br>*A. N. Anshuman, Abhinandan C., Suraj Upadhya G., Thanushree C., Kishore S. Verma*<br>**Sai Vidya Institute of Technology, Rajanukunte, Karnataka** | 265-268 | View Abstract<br>Download PDF |
| 59. | **Genotypic, phenotypic, and heritability studies in groundnut (Arachis hypogaea)**<br>*Mempal Dhanyan, S. I. Kapadia, K. S. Patel, P. K. Patel, Sunil Sapavadiya, K.N. Patel*<br>**Goldking Biogene Pvt. Ltd, Ahmedabad, Gujarat** | 269-271 | View Abstract<br>Download PDF |
| 60. | **Automated air pollution monitoring and forecasting system using Machine Learning**<br>*Vinayak Pragada, Romil Keniya, Abhijeet Chauhan, Beena Ballal*<br>**Vidyalankar Institute of Technology, Mumbai, Maharashtra** | 272-275 | View Abstract<br>Download PDF |
| 61. | **Mechanical ventilation for COVID- 19 patients**<br>*A. Ramesh Naik, Justin Jose, Umar Fazil M. J., R. Chaithra, P. Kiran Kumar*<br>**Kuppam Engineering College, Ekarlapalle, Andhra Pradesh** | 276-279 | View Abstract<br>Download PDF |
| 62. | **A Wrist drop case study**<br>*Gourab Maji*<br>**South Dum Dum Municipal Hospital, Kolkata, West Bengal** | 280-281 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 63. | **Statistical analysis of the change in accuracy of tabla players with increasing mathematical abilities**<br>*Malank Goel*<br>**Delhi Public School, R.K Puram, New Delhi, Delhi** | 282-286 | View Abstract<br>Download PDF |
| 64. | **Full crowns overrated: save the tooth, salvage the tooth structure with aid of intraoral scanner- A case report**<br>*Dr. Pradnya V., Dr. Seema D. Pathak, Dr. Madhuri B. Wavdhane, Dr. Lipsita Priyadarshini*<br>**Government Dental College and Hospital, Aurangabad, Maharashtra** | 287-292 | View Abstract<br>Download PDF |
| 65. | **A Survey paper on image compression technique**<br>*Nikhil Jagan Mhatre*<br>**Institute of Management and Computer Studies, Thane, Maharashtra** | 293-295 | View Abstract<br>Download PDF |
| 66. | **Reimagine workspace for better productivity during WFH**<br>*Vineet Vijay Bodhe*<br>**MIT ADT University, Loni Kalbhor, Maharashtra** | 296-300 | View Abstract<br>Download PDF |
| 67. | **Arduino based oxygen generation**<br>*S. Ganesh, E. Manikanta, Amal Jyothi, B. Venu Reddy Kumar, Dr. V. Sekhar*<br>**Kuppam Engineering College, Ekarlapalle, Andhra Pradesh** | 301-303 | View Abstract<br>Download PDF |
| 68. | **Need for an Integrated Platform to Bridge the Gaps in Communication of Students & Faculties, at an Intra-College Level – A Survey Analysis**<br>*Akshat Mukhriya, Deep Singh, Achintya Jaiswal, Abhishek Saini*<br>**IMS Engineering College, Ghaziabad, Uttar Pradesh** | 304-307 | View Abstract<br>Download PDF |
| 69. | **Solake – An innovative solution for the sustainable revival of lakes tied together with solar renewable energy generation**<br>*Malank Goel*<br>**Delhi Public School, R.K Puram, New Delhi, Delhi** | 308-316 | View Abstract<br>Download PDF |
| 70. | **Analyzing the energy performance of a building and retrofit it into a net energy efficiency building in a warm humid climate**<br>*Hamilton Shaju, Vidhya Naveen*<br>**M.G.R. University, Chennai, Tamil Nadu** | 317-323 | View Abstract<br>Download PDF |
| 71. | **Determination of Dynamic PCU values at the signalized intersection for mixed traffic conditions**<br>*Safna Salam, Ayesha Shiraz, Muhammed Asifsha, Suhail A. Shahul, Shifana U. N.*<br>**Ilahia College of Engineering and Technology, Mulavoor, Kerala** | 324-328 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 72. | **Multifunctional agricultural machine**<br>*Harsh Yadav, Siddharth Yadav, Sagar Kanadiya, Himanshu Singh, Vishal Kandalgaonkar*<br>**Pravin Patil College of Diploma Engineering and Technology, Mira Bhayandar, Maharashtra** | 329-336 | View Abstract<br>Download PDF |
| 73. | **Weed detection using Machine Learning**<br>*Anupuri Sai Priya, Nadimpalli Lavanya, Pallavi K., G. Nithyasree, Santhosh Reddy P.*<br>**Sai Vidya Institute of Technology, Rajanukunte, Karnataka** | 337-340 | View Abstract<br>Download PDF |
| 74. | **Performance evaluation of GMM super-pixel model-based technique with various bleeding detection techniques in WCE images**<br>*Rathnamala S., Dr. S. Jenicka*<br>**Sethu Institute of Technology, Virudhunagar, Tamil Nadu** | 341-347 | View Abstract<br>Download PDF |
| 75. | **Comparison of readiness for the practice among Bacculerate and Diplomate Pregraduate Nurses – Are there any differences?**<br>*Dinesh Kumar Suganandam, Vinitha Ravindran, Vathsala Sadan*<br>**College of Nursing, Christian Medical College, Vellore, Tamil Nadu** | 348-354 | View Abstract<br>Download PDF |
| 76. | **Calmify: Novel Way to Monitor the Mental Health using IoT**<br>*Harmanjot Singh*<br>**Jodhamal Public School, Jammu, Jammu and Kashmir** | 355-358 | View Abstract<br>Download PDF |
| 77. | **Sentiment and thematic analysis on E-commerce application for user reviews using Machine Learning**<br>*Rutuja Sanjay Mane, Aarti Sanjay Sahib, Prachi Sunil Mulay, Sumesh Santosh Mapara, Sulochana Sonkamble*<br>**JSPM Narhe Technical Campus, Pune, Maharashtra** | 359-361 | View Abstract<br>Download PDF |
| 78. | **Medicines for underprivileged patients using android application**<br>*Vishnu R.*<br>**SNS College of Technology, Coimbatore, Tamil Nadu** | 362-365 | View Abstract<br>Download PDF |
| 79. | **Development of a home security Robot using Deep Learning and IoT**<br>*Shravan Aruljothi, Sharad Dewanand Parate, Harshit S., Nehal Dinesh Andani*<br>**New Horizon College of Engineering, Bengaluru, Karnataka** | 366-377 | View Abstract<br>Download PDF |
| 80. | **Social Cause Marketing (Pink Capitalism) and its impact on consumers' brand preferences**<br>*Saniya Savant*<br>**SVKM NMIMS School of Law, Navi Mumbai, Maharashtra** | 378-384 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 81. | **Helping business owners to find potential competitors**<br>*Suraksha S. S., Darunya B. C., Priya D., Anisha B. S.*<br>**RV College of Engineering, Bengaluru, Karnataka** | 385-389 | View Abstract<br>Download PDF |
| 82. | **Size-specific variation in the rate of oxygen consumption, ammonia excretion, and O: N ratio of freshwater bivalve lamellicorns marginalis during the season of monsoon**<br>*Pritesh Ramanlal Gugale*<br>**Rayat Shikshan Sanstha's Balwant College, Vita, Maharashtra** | 390-395 | View Abstract<br>Download PDF |
| 83. | **AI-based chatbots for providing health-related information**<br>*Dungi Pravalika Reddy, Dadala Shantha Shekinah, Gunisetty Pavani Suvarna Satya, Kolla Hasitha Naidu, Dr. K. Soumya*<br>**Andhra University College of Engineering for Women, Visakhapatnam , Andhra Pradesh** | 396-401 | View Abstract<br>Download PDF |
| 84. | **City cleanliness using geo-tagged images with experimental results**<br>*Krishna Sonawane, Prachi Pingle, Siddhant Lunawat, Trupti Zagade, Dr. Meenakshi Thalor*<br>**AISSMS Institute of Information Technology, Pune, Maharashtra** | 402-406 | View Abstract<br>Download PDF |
| 85. | **Algorithmic Trading with Deep Learning**<br>*Mayank Anuragi, Rakshit Ramnath Naik, Manoj Galanki, Kavitha S. Patil*<br>**Atria Institute of Technology, Bengaluru, Karnataka** | 407-413 | View Abstract<br>Download PDF |
| 86. | **Reducing crude protein level in commercial layer chicken feed by balancing digestible amino acids**<br>*Sakthivel D., Mani K., Kannan D., Vasanthakumar P.*<br>**Veterinary College and Research Institute, Namakkal, Tamil Nadu, College of Poultry Production and Management, Hosur, Tamil Nadu, Veterinary College and Research Institute, Udumelpet, Tamil Nadu** | 414-419 | View Abstract<br>Download PDF |
| 87. | **Traffic rule violation detection and reporting system**<br>*B. G. Vinayak, Rakesh M. R., Santosh Reddy P.*<br>**Sai Vidya Institute of Technology, Bengaluru, Karnataka** | 420-421 | View Abstract<br>Download PDF |
| 88. | **Impact of COVID-19 Lockdown on Air Pollution and Air Quality Index (AQI) in India**<br>*Ankit Kumar*<br>**Indian Institute of Technology, New Delhi, Delhi** | 422-435 | View Abstract<br>Download PDF |
| 89. | **Face recognition based attendance monitoring system**<br>*Keerthi Sree Ganne, B. Prajna, Golagani Naga Kalyani, G. Neha Gagana, Gurugubelli Rajani*<br>**Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh** | 436-440 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 90. | **Planning and designing of G+1 structure of the residential building**<br>*Harshada Satish Pansare, Shivani Kirdat, Sweta Gathe, Esha Palsmabkar, Fatema Trawadi*<br>**Vivekanand Education Society's Polytechnic College, Mumbai, Maharashtra, Vivekanand Education Society's Polytechnic College, Mumbai, Maharashtra1** | 441-443 | View Abstract<br>Download PDF |
| 91. | **Teacher's learning on ICT platforms during Pandemic: Relevance for teacher education with special focus on Zoom, YouTube**<br>*Lalitha Devi B., Madhumathi P.*<br>**National Institute of Technology, Warangal, Telangana** | 444-445 | View Abstract<br>Download PDF |
| 92. | **Review on chalcone (preparation, synthesis of pirazolines ring and biological screening based on chalcones and derivation into pirazolines)**<br>*Milind Chhaburao Nagare*<br>**M.S.G. College, Malegaon, Maharashtra** | 446-451 | View Abstract<br>Download PDF |
| 93. | **Smart system for student placement prediction**<br>*Kavya G., Pranitha Y., Sanjana A., Sirisha D. G., Mamatha A.*<br>**Sai Vidya Institute of Technology, Rajanukunte, Karnataka** | 452-455 | View Abstract<br>Download PDF |
| 94. | **Change Management & the Concept of Common Data Environment in Indian Construction Industry**<br>*Khan Waqar Ahmed Imtiyaz, Dr. Sumedh Mhaske*<br>**Veermata Jijabai Technological Institute, Mumbai, Maharashtra** | 456-461 | View Abstract<br>Download PDF |
| 95. | **Seismic retrofitting and collapse evaluation of irregular bridge with non-linear effects**<br>*Firoz P. Andhru, Remya Raju*<br>**Ilahia College of Engineering and Technology, Mulavoor, Kerala** | 462-466 | View Abstract<br>Download PDF |
| 96. | **Clinical evaluation of Standard Q Rapid Ag TEST vs RT PCR**<br>*Dr. Manjubhashini, Soundaravalli V., Santhiya S., Vidyapoornam N.*<br>**Rao's Path Lab, Salem, Tamil Nadu** | 467-468 | View Abstract<br>Download PDF |
| 97. | **Review paper on improving COVID-19 vaccine distribution in India**<br>*Siddharth Padhiar, Juhi Patel, Gaurav Bhattad*<br>**NMIMS Deemed-to-be-University, Mumbai, Maharashtra** | 469-471 | View Abstract<br>Download PDF |
| 98. | **Remote control tool to test the interfaces of IoT hub**<br>*Shreevidya S., Nagaraju P., Manoj Kumar Podha*<br>**RV College of Engineering, Bengaluru, Karnataka, Philips Innovation Campus, Bengaluru, Karnataka** | 472-476 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 99. | **Enhanced Security implementation in IoT**<br>*Punam Mahendra Lokhande*<br>**Alamuri Ratnamala Institute of Engineering and Technology (ARMIET), Thane, Maharashtra** | 477-482 | View Abstract<br>Download PDF |
| 100. | **Phishing website detection using Machine Learning**<br>*R. Dhatri, N. Shafiyabi, U. Nithish, P. Vamsi, K. Subrahmanya Kousik*<br>**Gudlavalleru Engineering College, Gudlavalleru, Andhra Pradesh** | 483-486 | View Abstract<br>Download PDF |
| 101. | **Effect of COVID-19 on consumer behavior in the corporate sector**<br>*Priya Nair, Anirrban Ghosh, Sanjay Rao*<br>**Narsee Monjee Institute of Management Studies, Mumbai, Maharashtra, Telloquent Solutions Private Limited, Bengaluru, Karnataka** | 487-493 | View Abstract<br>Download PDF |
| 102. | **Glycerol – An alternate energy source for livestock feeding**<br>*Mukesh Sharma, Dr. Manoj Gendley, Dr. Kranti Sharma*<br>**Dau Shree Vasudev Chandrakar Kamdhenu University, Durg, Chhattisgarh** | 494-498 | View Abstract<br>Download PDF |
| 103. | **Antimicrobial textiles based on nanosilver**<br>*Meenal Singh*<br>**Indian Institute of Technology, Delhi** | 499-502 | View Abstract<br>Download PDF |
| 104. | **Stock Sentiment Analysis using News Headlines**<br>*Tavva Sai Prathyusha, Thummapala Mounika, Vemaraju Siri chandana, Vysyaraju priyanka, Seepana Priyanka*<br>**Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh** | 503-505 | View Abstract<br>Download PDF |
| 105. | **Prediction of chronic kidney disease and diet recommendation**<br>*Annapoorna B. A., Nisarga Y. N., Rachana R. Shastry, Sreelatha P. K.*<br>**Sai Vidya Institute of Technology, Bangalore, Karnataka** | 506-509 | View Abstract<br>Download PDF |
| 106. | **A study on effect of emotional attitude on emotional purchase intention**<br>*Namratha, P. Purushotham Rao, Dr. A. Patrick*<br>**Osmania University, Hyderabad, Telangana** | 510-516 | View Abstract<br>Download PDF |
| 107. | **Fetal birth weight estimation in high-risk pregnancies through Machine Learning Techniques**<br>*Meghana S., Y. Sree Rushitha, Susan Syeda, Priyanka M., Dr. Shantakumar B. Patil*<br>**Sai Vidya Institute of Technology, Bangalore, Karnataka** | 517-521 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 108. | **A study on Quality of Life in Indian adults – Outcomes and role of nutrition**<br>*Dr. Madhavi Marathe, Dr. Pushkala Padmanabh*<br>**Danone India (Nutricia International Private Limited), Mumbai, Maharashtra** | 522-530 | View Abstract<br>Download PDF |
| 109. | **Recognition of Handwritten digits using Machine Learning and Deep Learning algorithms**<br>*Sahithi Akundi, B. Prajna, Bathina Lakshmi Rishitha, Balaka Supraja, Arugula Gayathri*<br>**Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh** | 531-535 | View Abstract<br>Download PDF |
| 110. | **Association of social networking addiction and anorexia nervosa (desire for thinness)**<br>*Dr. Khan Zeenat Muzaffar*<br>**Marathwada College of Education, Aurangabad, Maharashtra** | 536-537 | View Abstract<br>Download PDF |
| 111. | **Analysis of business process automation: RPA**<br>*Namrata Manohar Dhuri, Dr. Abhijit N. Banubakode*<br>**MET Institute of Computer Science, Mumbai, Maharashtra** | 538-540 | View Abstract<br>Download PDF |
| 112. | **The Pink City litter survey: Litter investigation of Kardhani Market Malviya Nagar, Jaipur**<br>*Ishfaq Ul Abass, Sanjay Kumar Meena, Sumit Kumar, Satynarayan Chaudhary, Shan Ahmad Mir, Raghvendra Sharma*<br>**Vivekananda Institute of Technology, Jaipur, Rajasthan** | 541-547 | View Abstract<br>Download PDF |
| 113. | **Face Mask Detection**<br>*Bhaskar N. Patel, Siddhant Sipoliya, Shashwat Mishra, Shreyansh, Sreelatha P. K.*<br>**Sai Vidya Institute of Technology, Bengaluru, Karnataka** | 548-551 | View Abstract<br>Download PDF |
| 114. | **Multidrug-resistant Acinetobacter baumanii infections – A dreadful superbug to humans**<br>*Dr. N. A. Fairoz Banu, Dr. Chitralekha Saikumar*<br>**Sree Balaji Medical College and Hospital, Chennai, Tamil Nadu** | 552-556 | View Abstract<br>Download PDF |
| 115. | **Digital health care system for medical report/ certificate sharing**<br>*Komal Suresh Raut*<br>**Sipna College of Engineering and Technology, Amravati, Maharashtra** | 557-562 | View Abstract<br>Download PDF |
| 116. | **Facial Recognition with Expression**<br>*Manoj P., Mahesh N., Shivakumar Vishwakarma R., Alpha Vijayan*<br>**New Horizon College of Engineering, Bengaluru, Karnataka** | 563-566 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 117. | **Melanoma Classification using Convolutional Neural Network Model Integrated with Tabular Model**<br>*Harshkumar Modi, Bhavya Chhabra, Sukkrit*<br>**SRM Institute of Science and Technology** | 567-571 | View Abstract<br>Download PDF |
| 118. | **Development and evaluation of solar photovoltaic driven condensing unit for the solar distillation system**<br>*Supriya Balasaheb Ghule, Dr. A. G. Mohod, Dr. Y. P. Khandetod, Dr. K. G. Dhande, M. B. Patil*<br>**Dr. Balasaheb Sawant Agriculture University, Ahmednagar, Maharashtra** | 572-576 | View Abstract<br>Download PDF |
| 119. | **Voice Based Message System Visually Impaired People**<br>*Nagesh S., S. Sathish Kumar, Latha K., S. Shanmuga Priya*<br>**New Horizon College of Engineering, Bangalore, Karnataka** | 577-580 | View Abstract<br>Download PDF |
| 120. | **An efficient quality-driven of face occlusion detection and recognition**<br>*Shashidhar V., Harshitha B. S., Kavya K., Kaveri K., Rashmi J. B.*<br>**Rajarajeswari College of Engineering, Bengaluru, Karnataka** | 581-585 | View Abstract<br>Download PDF |
| 121. | **Automatic Drain Water Cleaner System**<br>*Kaushik Shet, ASHISH KALEKAR, Amol Yadav, Aniket Bhade, Krushna Ghadale*<br>**Dhole Patil College of Engineering, Pune, Maharashtra** | 586-587 | View Abstract<br>Download PDF |
| 122. | **Simulation of concrete truck mixer transport operation by using Anylogic software**<br>*Arpit Latad, Pravin chaudhari*<br>**Veermata Jijabai Technological Institute, Mumbai, Maharashtra** | 588-593 | View Abstract<br>Download PDF |
| 123. | **Design and analysis of helicopter rotor**<br>*Gokulchith S. S., Aromal V. C., Akhil Rajasekharan Nair, Angush S. T., Manu Mohan*<br>**Marian Engineering College, Thiruvananthapuram, Kerala** | 594-599 | View Abstract<br>Download PDF |
| 124. | **Design and analysis of water jacket in the inline six-cylinder engine**<br>*Anand S. M., Sreeganesh S.V., Akash Prakash, Aswin V. S., Dr. Vishnu B. R.*<br>**Marian Engineering College, Thiruvananthapuram, Kerala** | 600-610 | View Abstract<br>Download PDF |
| 125. | **Prediction of stocks and options in stock market using Machine Learning**<br>*Yathisha T. S., Nirmal Jain C. M., Mithun T. P.*<br>**RV College of Engineering, Bengaluru, Karnataka** | 611-614 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 126. | **AI multi-agent shopping system**<br>*Mushtaq Ahamed K. S., Mahesh N., Prasanna Kumar P., Dr. ThirukkumaranR.*<br>**New Horizon College of Engineering, Bangalore, Karnataka** | 615-617 | View Abstract<br>Download PDF |
| 127. | **Marketing retail analytics using tableau and Knime**<br>*Raghav*<br>**Vellore Institute of Technology (VIT), Chennai, Tamil Nadu** | 618-621 | View Abstract<br>Download PDF |
| 128. | **Electronic Health Records using Blockchain and Cloud computing**<br>*Sonia S. B., Amrutha D., Bhavana C., Ankitha J.*<br>**Atria Institute of Technology, Bengaluru, Karnataka** | 622-624 | View Abstract<br>Download PDF |
| 129. | **Relevance of Dr. Bhimrao Ambedkar in present day**<br>*Dr. Prashant Upadhyay*<br>**Late Ram Raj Verma Mahavidyalaya, Sarangpur, Uttar Pradesh** | 625-627 | View Abstract<br>Download PDF |
| 130. | **An overview on bio battery unveiling potential**<br>*Subhash Kumar Sharma, Sushil Kumar Singh*<br>**Mahatma Gandhi Post Graduate College, Gorakhpur, Uttar Pradesh, MGPG College, Gorakhpur, Uttar Pradesh** | 628-633 | View Abstract<br>Download PDF |
| 131. | **Comparative Study of IS 1893:2002 & 2016 for G+12 Staff Quarter Residential Building**<br>*Rohit Kokane, Prof. P. B. Autade*<br>**Dr. V.V.P. College of Engineering** | 634-637 | View Abstract<br>Download PDF |
| 132. | **Solar Energy for Refrigeration and Air Conditioning**<br>*Vishal Pathak, Shivraj, J. P. Kesari*<br>**Delhi Technological University, Delhi** | 638-641 | View Abstract<br>Download PDF |
| 133. | **Forecasting of the cotton price using an econometric model**<br>*Prapulla S., R. Sushma, Madhusudhan K.*<br>**BMS College of Engineering, Bengaluru, Karnataka, Anand Rathi Share and Stock Brokerage Ltd., Bengaluru, Karnataka** | 642-650 | View Abstract<br>Download PDF |
| 134. | **Objectual understanding of moments of earth and relevant systems**<br>*Yalla Venkata Chalapathi Rao*<br>**Independent Researcher** | 651-653 | View Abstract<br>Download PDF |
| 135. | **implementation and analysis of credit card fraud detection using a Machine Learning Technique**<br>*Sanka Reshmi, Saripalli V. R .Manasa, Siramdas Shyamala, Sreerama Usha Ramya, B. Esther Sunanda, D. Sowjanya*<br>**Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh** | 654-657 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 136. | **Used car price prediction**<br>*Abhishek Jha, Dr. Ramveer Singh, Manish, Imran Saifi, Shipra Srivastava*<br>**Greater Noida Institute of Technology, Greater Noida, Uttar Pradesh** | 658-660 | View Abstract<br>Download PDF |
| 137. | **Credit Card Fraud Prediction**<br>*Yash Rajesh, Thyagaraj Tanjavur*<br>**BMS Institute of Technology and Management, Bengaluru, Karnataka** | 661-664 | View Abstract<br>Download PDF |
| 138. | **Comparative study of industrial steel structure (pre-engineered building) and residential RCC structure**<br>*Mahesh Nivrutti Ghumare, S. N. Daule*<br>**Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar, Maharashtra** | 665-668 | View Abstract<br>Download PDF |
| 139. | **Characteristic study in optimization of Biomethanation process for high TDS spent wash from Distilleries**<br>*Lalitha Devaraju, Dr. Manju B., Dr. Sathisha N. S., Dr. Kiran B. M.*<br>**Government Engineering College, K. R. Pete, Krishnarajpete, Karnataka, Maharaja Institute of Technology, Mysore, Karnataka, Adichunchanagiri Institute of Technology, Chikmagalur, Karnataka** | 672-674 | View Abstract<br>Download PDF |
| 140. | **Seed Vigor Testing in Cotton: A Review**<br>*Dr. Vaibhav V. Ujjainkar, Dr. Manoj W. Marawar*<br>**Dr. Panjabrao Deshmukh Krishi Vidyapeeth Akola, Maharashtra** | 675-679 | View Abstract<br>Download PDF |
| 141. | **Facial emotion recognition and detection**<br>*Pranav S., Praveen C., Niveditha C. B., Asha Rani Borah*<br>**New Horizon College of Engineering, Bengaluru, Karnataka** | 680-684 | View Abstract<br>Download PDF |
| 142. | **CARKART: A Machine Learning and Augmented Reality application to ease car retailing**<br>*Mrunalini M., Kasthuri C. M., Pranjal Sharma, Gururaj S. P.*<br>**Siddaganga Institute of Technology, Tumkur, Karnataka** | 685-690 | View Abstract<br>Download PDF |
| 143. | **Study showing the relationship between online food delivery platforms and revenue earned by restaurants in Mumbai.**<br>*Prachi Malgaonkar, Ayudha Raul*<br>**M. L. Dahanukar College of Commerce, Mumbai, Maharashtra** | 691-695 | View Abstract<br>Download PDF |
| 144. | **Cost-effective social distance maintenance in primary schools**<br>*Joicy Castilino, Vandana C. P., Harshitha Sundarvelu, Helen Hephzibah, Simran Fathima*<br>**New Horizon College of Engineering (Affiliated to VTU), Bangalore, Karnataka** | 696-699 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 145. | **Automatic solar tracking and cleaning system**<br>*Rishikesh Sahebrao Dawange, Pavan Rajendra Shelar, Hemant Shamnath Khare, Vishal Kisan Deore*<br>**S.N.D College of Engineering, Yeola, Maharashtra** | 700-705 | View Abstract<br>Download PDF |
| 146. | **Automatic classification of diabetic retinopathy using Convolution Neural Network**<br>*Pooja Pimpalshende, Rahul Bhandekar*<br>**Wainganga College of Engineering and Management, Nagpur, Maharashtra** | 706-710 | View Abstract<br>Download PDF |
| 147. | **Remote administration of speed of an induction motor**<br>*S. Bala Sai, G. Sharath Kumar, L. Sai Vivek, Baira Raviteja*<br>**Sreenidhi Institute of Science and Technology, Hyderabad, Telangana** | 711-716 | View Abstract<br>Download PDF |
| 148. | **A study to assess the effectiveness of structured teaching program on knowledge regarding revised immunization schedule among mothers of under-five age children in selected hospital at the selected city.**<br>*Fulwanti Natwar Padvi, Sandhya Bhimrao Wagh*<br>**Aurangabad Nursing College, Aurangabad, Maharashtra** | 717-721 | View Abstract<br>Download PDF |
| 149. | **Adaptive traffic management system using traffic API**<br>*Soham Bhure, Ritvik Patil, Sanket Umredkar*<br>**Vishwakarma Institute of Technology, Pune, Maharashtra** | 722-725 | View Abstract<br>Download PDF |
| 150. | **A study on various optimization algorithms for task scheduling in cloud computing**<br>*Gujjala Sai Lakshmi Namitha, Bindu Madhavi Siraparapu*<br>**SRM Institute of Science and Technology, Chennai, Tamil Nadu** | 726-731 | View Abstract<br>Download PDF |
| 151. | **A study of Wireless Sensor Network security attacks and Intrusion Detection Techniques**<br>*Nitu Singh Gahlawat, Praveen Kantha*<br>**BRCM College of Engineering and Technology, Bahal, Haryana** | 732-740 | View Abstract<br>Download PDF |
| 152. | **Application for Donation Centers**<br>*Atul Satam, Ninad Gavli, Bhavna Arora*<br>**Atharva College of Engineering, Mumbai, Maharashtra** | 741-744 | View Abstract<br>Download PDF |
| 153. | **Plague and death in the play Romeo and Juliet**<br>*K. Athira, Dr. Sowmiya L. M.*<br>**Sathyabama Insititute of Science and Technology, Chennai, Tamil Nadu** | 745-747 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 154. | **Sigmund Freud's Journey from 'Libido' Theory to the 'Unconscious' Theory in Art**<br>*Ridhi Sarraf Riddhima*<br>**Raja Man Singh University, Gwalior, Madhya Pradesh** | 748-751 | View Abstract<br>Download PDF |
| 155. | **Fault Detection and Diagnosis in PV System Array**<br>*Vinit Koli, Abhijit Shankar Iyer, Aniket Kedare, Vinayak More, Milind Paraye*<br>**Sardar Patel Institute of Technology, Mumbai, Maharashtra** | 752-755 | View Abstract<br>Download PDF |
| 156. | **Comparison of the presence of Comorbidities in Recovered and Expired patients with COVID-19 infection**<br>*Dr. Anjali Goyal, Dr. Heta Patel, Dr. Chandni Gadara, Dr. Shachi Shah, Dr. Misha Antani*<br>**Smt. NHL Municipal Medical College, Ahmedabad, Gujarat** | 756-759 | View Abstract<br>Download PDF |
| 157. | **Detection of macro based attacks in office documents using Machine Learning**<br>*Aishwarya, Bhumica B., Sumit Suman, Ravi V.*<br>**Siddaganga Institute of Technology, Tumkur, Karnataka** | 760-764 | View Abstract<br>Download PDF |
| 158. | **College Kendra**<br>*Pranav Kongara*<br>**Andhra University College of Engineering, Visakhapatnam, Andhra Pradesh** | 765-772 | View Abstract<br>Download PDF |
| 159. | **Importance of Feature Selection in Model Accuracy**<br>*Pranjal Rawat, Nitin, Sameer Dev Sharma*<br>**Uttaranchal University, Dehradun, Uttarakhand** | 773-775 | View Abstract<br>Download PDF |
| 160. | **Clustering of JSON document using Derived X-Path Method**<br>*Kaushik I.*<br>**National Institute of Technology Karnataka (NITK), Mangalore, Karnataka** | 776-779 | View Abstract<br>Download PDF |
| 161. | **Application of AI in drug discovery**<br>*Mohit Singh Negi, Anosh Singh*<br>**Uttaranchal Institute of Management, Dehradun, Uttarakhand** | 780-782 | View Abstract<br>Download PDF |
| 162. | **AI-based hexapod military robot**<br>*Srividya C. R., Shreya Adiga H., Vaishnavi J. M., Harshitha H. R., Dipak Cumar V. C.*<br>**Global Academy of Technology, Bengaluru, Karnataka** | 783-785 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 163. | **Evolution of research collaboration in Indian automobile industry– A Scientometric Analysis with Reference to SIAT during 2001 to 2017**<br>*Joshi Ashutosh Gopal, S. Santhosh, E. Priyan*<br>**Mahindra Research Valley, Chengalpattu, Tamil Nadu** | 786-791 | View Abstract<br>Download PDF |
| 164. | **Discovery of Acoustify**<br>*Babitha Shetty K., Dr. Surendra Shetty*<br>**N. M. A. M. Institute of Technology, Nitte, Karnataka** | 792-794 | View Abstract<br>Download PDF |
| 165. | **Car resale value prediction**<br>*Navaneeth M., I. S. Manoj Kumar, Dharshan N., Gavini Hitesh, H. K. Vedamurthy*<br>**Siddaganga Institute of Technology,Tumkur, Karnataka** | 795-797 | View Abstract<br>Download PDF |
| 166. | **<I>Lantana camara</I>: Conversion from soil destructor to constructive approach with green nanoparticles**<br>*Anmol Sidana, Mamta Gokhale*<br>**St. Aloysius College, Jabalpur, Madhya Pradesh** | 798-806 | View Abstract<br>Download PDF |
| 167. | **Fabrication of flexography machine with heterogeneous operating modes**<br>*B. N. Durga, D. Sowjanya, R. Abitha, N. Alagu Sundari, R. Viveka*<br>**Avinashilingam University, Coimbatore, Tamil Nadu** | 807-812 | View Abstract<br>Download PDF |
| 168. | **What happens in the top athletes mind? a review study**<br>*Sayed Abulqasem Baqeri, Parastou Kordestani-Moghadam, Henk Koppelaar, Abbas Ali Ramuzi, Gijs Segers, Sayed Mohammad Baqeri*<br>**Kateb University, Kabul, Afghanistan, Lorestan University of Medical Sciences, Khorramabad, Iran, University of Delft, Delft, Netherlands, Visual Performance Center, Oosterhout, Netherlands, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran** | 813-820 | View Abstract<br>Download PDF |
| 169. | **Analysis of bank telemarketing data using Microsoft Azure machine learning**<br>*Jaswanth Kankanala, Sravya Sri V., Venkatesh narahari*<br>**MODAK, Analytics, Gachibowli, Telangana, Caterpillar, KPMG** | 821-825 | View Abstract<br>Download PDF |
| 170. | **Design and fabrication of jig for angular drilling**<br>*Atharv Ajay Chikurdekar, Swaraj Suraj Pawar, Yash Sanjay Khulkarni, Shubham Dattatraya Mali, Kalyani Sudhir Kulkarni*<br>**Rajarambapu Institute of Technology, Islampur, Maharashtra** | 826-831 | View Abstract<br>Download PDF |
| 171. | **Campus Buddy**<br>*Biswajit Sahoo, Bhagat Singh, Mishra Anupam Mukundkumar, Atul Singh, Abhijit Das*<br>**Sai Vidya Institute of Technology** | 832-834 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 172. | **House Price Prediction using Machine Learning**<br>*Mayur Manohar Patil, Bhushan Ramkrushna Upasani, Anup Sanjay Patil, Janhavi Kailas Chaudhari, Priti R. Sharma*<br>**Shrama Sadhana Bombay Trust's College of Engineering and Technology, Jalgaon, Maharashtra** | 835-837 | View Abstract<br>Download PDF |
| 173. | **COVID-19 cases detection using deep neural networks with X-Ray images**<br>*Dr. S. Usha, Anjali Rani, Aparna Singh, Khushi Mathur*<br>**Rajarajeswari College of Engineering, Bengaluru, Karnataka** | 838-841 | View Abstract<br>Download PDF |
| 174. | **Robotic arm to pick and place**<br>*Sai Krishna Aitha, Y. Deepthi Reddy, P. Mani Kumar*<br>**Sreenidhi Institution of Science and Technology, Hyderabad, Telangana** | 842-845 | View Abstract<br>Download PDF |
| 175. | **GEOGRAPHICAL POSITIONAL AND PREDICTIVE ACCURACY OF A SHOVEL BUCKET**<br>*Arko Banerjee, Sahil Yadav*<br>**TECHANALOGY, Mumbai, Maharashtra** | 846-852 | View Abstract<br>Download PDF |
| 176. | **Design and Development of Gas detection alert with SMS using Arduino**<br>*Pooja Dnyaneshwar Lambatkar, Kajal Ravikant Chavan, Tejashwini Atmaram Salunkhe, Dipali Maruti Pachangane, Vaishnavi Sunil Mohite*<br>**Yashoda Technical Campus, Satara, Maharashtra** | 853-855 | View Abstract<br>Download PDF |
| 177. | **Bikers Portal**<br>*Ankit Bougal, Abhishek S. K., Lakshminarayan, Chempavathy B.*<br>**New Horizon College of Engineering, Bengaluru, Karnataka** | 856-859 | View Abstract<br>Download PDF |
| 178. | **Imperatives of AI in the classroom**<br>*Tanuja Anna, Deepansh Pandey*<br>**Uttaranchal University, Dehradun, Uttarakhand** | 860-864 | View Abstract<br>Download PDF |
| 179. | **Design and implementation of All-Optical T-flip-flop using Photonic Crystals Waveguides**<br>*D. Gowri Sankar Rao, P. Rupa Anjali, M. V. V. Satya Sai, Haridasu Ankarao*<br>**Godavari Institute of Engineering and Technology, Rajahmundry, Andhra Pradesh** | 865-870 | View Abstract<br>Download PDF |
| 180. | **Laboratory investigation on bituminous concrete mixture properties by modifying bitumen using waste plastic flakes**<br>*Supriya C. B., Prakash J., B. H. Manjunath, T. V. Mallesh*<br>**Sri Siddhartha Institute of Technology, SSAHE University, Tumkur, Karnataka** | 871-876 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 181. | **Network packet sniffing**<br>*Md Haroon, Dr. Ramveer Singh, Vishant Sharma, Lakshya Kaushik, Alok Kumar Mishra*<br>**GNIOT Group of Institutions, Greater Noida, Uttar Pradesh** | 877-881 | View Abstract<br>Download PDF |
| 182. | **Breast Cancer Prediction using Machine Learning model**<br>*Sanath Kumar A.*<br>**N. M. A. M. Institute of Technology, Nitte, Karkala, Karnataka** | 882-885 | View Abstract<br>Download PDF |
| 183. | **Imbalanced data handling using Machine Learning**<br>*Kamal Raj T., Bhavana K., Chandana M. R.*<br>**Rajarajeswari College of Engineering, Bengaluru, Karnataka** | 886-889 | View Abstract<br>Download PDF |
| 184. | **Design of wheel rim by using design of experiments**<br>*Mauli Vasant Jadhav, V.C.MALI*<br>**Padmabhooshan Vasantdada Patil Institute of Technology (PVPIT), Pune, Maharashtra** | 890-896 | View Abstract<br>Download PDF |
| 185. | **Soil quality monitoring, automated irrigation system using machine learning and Blynk**<br>*Kamal Raj T., Kavya G. S., Firdose Tabassum, Reddy Nagadurga, Keerthana Prakash Nayak*<br>**RajaRajeswari College of Engineering, Bengaluru, Karnataka** | 897-902 | View Abstract<br>Download PDF |
| 186. | **Online interview based on facial expression**<br>*Kamal Raj T., Sourav P Kachwahe, Tejas S., Shashank C., Sanjay H. S.*<br>**Rajarajeswari College of Engineering, Bengaluru, Karnataka** | 903-907 | View Abstract<br>Download PDF |
| 187. | **Computational Identification of Promoter Regions in Fungal Genomes**<br>*Sudheer Menon, Shanmughavel Piramanagakam, Gopal Agarwal*<br>**Bharathiar University, Coimbatore, Tamil Nadu, Indian Institute of Technology, Delhi** | 908-914 | View Abstract<br>Download PDF |
| 188. | **A scholastic review of procedural methods undertaking in piloting qualitative interviews**<br>*Chow Sak Chin*<br>**University Pendidikan Sultan Idris, Perak, Malaysia** | 915-919 | View Abstract<br>Download PDF |
| 189. | **Advanced facial recognition attendance and behavioral feedback system**<br>*Shashidhar V., Amandeep Singh, Satyam Sahay, Shah Minhal Fida, Vishveshwar Hiremath*<br>**Rajarajeswari College of Engineering, Bengaluru, Karnataka** | 920-925 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 190. | **IoT based smart home Automation System using ARM7 LPC2148 & GSM/GPRS**<br>*Priya Khillare, Dr. L. K. Ragha*<br>**Terna Engineering College, Navi Mumbai, Maharashtra** | 926-929 | View Abstract<br>Download PDF |
| 191. | **Real-Time Voice Command/Alert Warning System**<br>*Sachin B. C., Dr. Srinidhi R.*<br>**JSS Science and Technology University, Mysuru, Karnataka** | 930-934 | View Abstract<br>Download PDF |
| 192. | **Bitcoin Price Prediction**<br>*N. M. Abhishek, Thimmana Gowda M. U., Vidyananda Alur, Dr. Vinodha K*<br>**New Horizon College of Engineering, Bengaluru, Karnataka** | 935-936 | View Abstract<br>Download PDF |
| 193. | **Home Automation with Arduino Uno**<br>*Prakruthi S. H., Pooja S., Sheetal N. Gowda*<br>**Independent Researcher** | 937-939 | View Abstract<br>Download PDF |
| 194. | **Demand assessment of electric vehicles in public transport: A case of NDMC Area**<br>*Vartika*<br>**AECOM India Private Limited, Gurugram, Haryana** | 940-945 | View Abstract<br>Download PDF |
| 195. | **YOUCHAT: An End-to-End Secure Chat Application**<br>*Prakash Kumar, Manoj Kumar Chaurasiya, Neelmani Keshav, Vikas Kumar, Vishwajeet Jaiswal*<br>**Greater Noida Institute of Technology, Greater Noida, Uttar Pradesh** | 946-948 | View Abstract<br>Download PDF |
| 196. | **Building information modeling in green buildings**<br>*Omar Ahmed Khan*<br>**Heriot-Watt University, Edinburgh, Scotland** | 949-955 | View Abstract<br>Download PDF |
| 197. | **A systematic study of building information modeling and its associated concepts.**<br>*Omar Ahmed Khan*<br>**R.V. College of Engineering, India** | 956-961 | View Abstract<br>Download PDF |
| 198. | **Building information modeling and data generation**<br>*Omar Ahmed Khan*<br>**Heriot-Watt University, Edinburgh, Scotland** | 962-968 | View Abstract<br>Download PDF |
| 199. | **Software for implementing different dimensions of BIM in the construction project**<br>*Omar Ahmed Khan*<br>**Heriot-Watt University, Edinburgh, Scotland** | 969-974 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 200. | **Coalitions politics in India: Challenges and its impacts on society**<br>*Dr. Ashok Kumar V. Paled*<br>**Davanagere University, Tholahunase, Karnataka** | 975-977 | View Abstract<br>Download PDF |
| 201. | **Study of seismic response between fixed and isolated bases in RC structure having plan irregularity**<br>*Rahul B. M., B. Suguna Rao*<br>**Ramaiah Institute of Technology, Bengaluru, Karnataka** | 978-984 | View Abstract<br>Download PDF |
| 202. | **Browsing Issues in Large Displays**<br>*Alipta Ballav*<br>**Independent Researcher** | 985-991 | View Abstract<br>Download PDF |
| 203. | **Correlation of neck pain and low back pain with Physical activity among dentists in Latur City**<br>*Dr. Pallavi Dangat, Dr. Rafi Mohammed, Dr. Shyam Jungade*<br>**MIP College of Physiotherapy, Latur, Maharashtra** | 992-995 | View Abstract<br>Download PDF |
| 204. | **Knowledge and perception on COVID vaccination among adults**<br>*Starina Flower V. M., Dr. Reena Evency A.*<br>**St. Xavier's Catholic College of Nursing, Nagercoil, Tamil Nadu** | 996-999 | View Abstract<br>Download PDF |
| 205. | **Study on dimensional stones available in Southern Asia with specific reference to granite waste**<br>*Mayur Mewara, Mansi Agarwalla, Madhu Yadav, Dr. Harshwardan Singh Chouhan*<br>**Poornima College of Engineering, Jaipur, Rajasthan** | 1000-1007 | View Abstract<br>Download PDF |
| 206. | **A lightweight Remote user Authentication Scheme for IoT communication using Elliptic Curve Cryptography**<br>*Gudiwada Rajeswari, Pilla Anuradha, Suma Varada, Sireesha Mallula, Dr. Esther Sunanda Bandaru, D. Sowjanya*<br>**Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh** | 1008-1013 | View Abstract<br>Download PDF |
| 207. | **BIM applications in risk management**<br>*Omar Ahmed Khan*<br>**Heriot-Watt University, Edinburgh, Scotland** | 1014-1022 | View Abstract<br>Download PDF |
| 208. | **A State-of-the-Art Review on Differential Evolution (DE)**<br>*Sanchari Majumdar, Sangita Roy*<br>**Narula Institute of Technology, Kolkata, West Bengal** | 1023-1028 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 209. | **Traumatic brain injury during covid lockdown andrelaxation of lockdown comparative study**<br>*Raj Kumar R.*<br>**Madras Medical College, Chennai, Tamil Nadu** | 1029-1031 | View Abstract<br>Download PDF |
| 210. | **Multiplier and dual multiplier on BCC/weak BCC algebras**<br>*Arbind Prakash, Dr. Ram Lakhan Prasad*<br>**Magadh University , Bodhgaya , Gaya (Bihar), Retd. University Prof. and Head , Department of Mathematics Magadh University, Bodh Gaya** | 1032-1035 | View Abstract<br>Download PDF |
| 211. | **Microfinance -Succeed in influencing unbanked area**<br>*Kumaraswamy Manepalli, Dr. M. Ram Kumar*<br>**Annamalai University, Chidambaram, Tamil Nadu** | 1036-1038 | View Abstract<br>Download PDF |
| 212. | **A study on the present status and performance of micro, small and medium enterprises in India**<br>*Vishwanath S. Pujari, Jyoti Savanur, Rashmi Mahendrakar*<br>**People tree Education Society's, Belagavi, Karnataka** | 1039-1046 | View Abstract<br>Download PDF |
| 213. | **Designing, deploying and managing cloud-native applications effectively using Docker, Jenkins, and Kubernetes.**<br>*Jyothi Koushik Paladugu*<br>**Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, Telangana.** | 1047-1058 | View Abstract<br>Download PDF |
| 214. | **Influence of social media marketing on sales revenue**<br>*Vaddi Jahnavitha, Nalla Aryan Reddy, Kanikapati Himakar*<br>**Christ University, Bengaluru, Karnataka** | 1059-1063 | View Abstract<br>Download PDF |
| 215. | **Forecasting air quality using Machine Learning techniques**<br>*Rajeena R. R., Dr. Usha S, Shalini.G, Sharanya B, Rekha S*<br>**Rajarajeswari College of Engineering, Bengaluru, Karnataka** | 1064-1066 | View Abstract<br>Download PDF |
| 216. | **The Grand Mosque of Herat, a symbol of Islamic art and architecture**<br>*Zalmai Hotak*<br>**Kabul University, Kabul, Afghanistan** | 1067-1070 | View Abstract<br>Download PDF |
| 217. | **Tamper Detection of Social Media Images using CNN**<br>*Gaurav Shetty, G. S. Shrijitha, Shravika Nempe, Nandan N. K., Shwetha S. Shetty*<br>**Sahyadri College of Engineering and Management, Mangalore, Karnataka** | 1071-1073 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 218. | **Seismic activity of overhead storage tank by fem analysis**<br>*Pooja Khairnar, P. J. Salunke, N. G. Gore*<br>**Mahatma Gandhi Mission's College of Engineering and Technology, Navi Mumbai, Maharashtra** | 1074-1079 | View Abstract<br>Download PDF |
| 219. | **Investigation of ferrocement composite beam**<br>*Akash Bholenath Mune, Pallavi K. Pasnur*<br>**JSPM's Imperial College of Engineering and Research, Pune, Maharashtra** | 1080-1085 | View Abstract<br>Download PDF |
| 220. | **An analysis of usage of Integrated Marketing Communications by Political parties to Influence Voters in Tamil Nadu and Kerala in assembly elections 2021**<br>*Sunitha B. K., Dr. Sandeep Shashtri*<br>**Jain (Deemed to be) University, Bengaluru, Karnataka, Jagran Lakecity University, Bhopal, Madhya Pradesh** | 1086-1091 | View Abstract<br>Download PDF |
| 221. | **Optimization of Sinter FeO at Sinter Plant, Tata Steel Kalinga Nagar**<br>*Srijith Mohanan, Prajna Mohapatra, Arun Kumar C, Vipul Mohan Koranne, Sabuj Halder, A.S. Reddy, R.V. Ramna*<br>**Tata Steel Limited, Duburi, Odisha, Tata Steel Limited, Jamshedpur, Jharkhand** | 1092-1096 | View Abstract<br>Download PDF |
| 222. | **COVI SCAN (Face mask detection and social distancing violation detection)**<br>*Shaikh Muskaan, Poojashree, Preksha, Rakshitha R., Manjunatha A. S.*<br>**Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal, Karnataka** | 1097-1100 | View Abstract<br>Download PDF |
| 223. | **Real driving emissions strategies in heavy-duty vehicles**<br>*R. S. Shingnad, Dr S. J. Navale*<br>**AISSMS College of Engineering, Pune, Maharashtra** | 1101-1107 | View Abstract<br>Download PDF |
| 224. | **Air pollution monitoring using IoT**<br>*Ajay Suri, Siddhant Sahu, Shivam Sharma, Shalu Rawat, Rishi Yadav*<br>**ABES Engineering College, Ghaziabad, Uttar Pradesh** | 1108-1110 | View Abstract<br>Download PDF |
| 225. | **Antibacterial activity of filter material based on garnet and silver vein graphite composite**<br>*V. M. Rajindra Swarnamali, A. Sivapaln, K.P.S. Sudumenike, T.H.N.G. Amaraweera, Y.M.S.S. Yapa*<br>**Uva Wellassa University, Badulla, Sri Lanka, Postgraduate Institute of Medicine, Unversity of Colombo** | 1111-1116 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 226. | **Customer segmentation and prediction analytics in ERP for jewelry domain**<br>*Mohammed Mafaz*<br>**Loyola College, Chennai, Tamil Nadu** | 1117-1130 | View Abstract<br>Download PDF |
| 227. | **Indian Online Art Athenaeum**<br>*Yazhini Gopalakrishnan*<br>**Vellore Institute of Technology, Vellore, Tamil Nadu** | 1131-1133 | View Abstract<br>Download PDF |
| 228. | **Surveillance Bot with real time object detection**<br>*Aman Agrawal, Ajay Suri, Akshay Goel, Aman Varshney*<br>**ABES Engineering College, Ghaziabad, Uttar Pradesh** | 1134-1137 | View Abstract<br>Download PDF |
| 229. | **Survival analysis of heart failure patients using Machine Learning on an imbalanced dataset**<br>*Mohammed Mafaz*<br>**Loyola College, Chennai, Tamil Nadu** | 1138-1141 | View Abstract<br>Download PDF |
| 230. | **Identifying defects during semiconductor manufacturing using Machine Learning**<br>*Nandini G., K. G. Ashwin Krishnan, Harshith R., Dileep Kumar Simhadri, Gummalla Akhil Kumar Reddy*<br>**Rajarajeswari College of Engineering, Bengaluru, Karnataka** | 1142-1144 | View Abstract<br>Download PDF |
| 231. | **Detection and estimation of heavy mineral accumulation in coastal areas**<br>*Yaswanth Reddy Putta, Reventh M. S., Sanjay S., B. S. Sreeja*<br>**Sri Sivasubramaniya Nadar College of Engineering, Chennai, Tamil Nadu** | 1145-1149 | View Abstract<br>Download PDF |
| 232. | **Identification of Jewelry Article using Transfer Learning and Image Repository**<br>*Mohammed Mafaz*<br>**Loyola College, Chennai, Tamil Nadu** | 1150-1160 | View Abstract<br>Download PDF |
| 233. | **Treatment of landfill leachate by using membrane filtration**<br>*Vidyashree G. Walikar, M.Y.Ganiger*<br>**Basaveshwar Engineering College Bagalkot, Bagalkot, Karnataka** | 1161-1163 | View Abstract<br>Download PDF |
| 234. | **Analyzing tweets to classify the opinions of people living in Chennai with respect to the city**<br>*Mohammed Mafaz*<br>**Loyola College, Chennai, Tamil Nadu** | 1164-1171 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 235. | **Automatic Alphanumeric recognition using Python and OpenCV- A new approach of ANPR**<br>*Syed Shafat Adil, Shiv Shankar Pal, Prashant Kumar, Mehul Anand, Sumit Gaurav*<br>**GNIOT Group of Institutions Greater Noida, Uttar Pradesh** | 1172-1174 | View Abstract<br>Download PDF |
| 236. | **Fast fashion – Consumer perception and buying practices**<br>*Nikita Daniel, Jinny Maria Sebastian, Jyoti Rawal, Nishtha Verma*<br>**National Institute of Fashion Technology, Kangra, Himachal Pradesh** | 1175-1178 | View Abstract<br>Download PDF |
| 237. | **A study of micro-teaching approach and its effect on behavior modification of pupil teachers of teachers training institutions of west Bengal**<br>*Md Towhid Islam, Bejarul Karim*<br>**Department of Education, Aligarh Muslim University, Aligarh, Uttar Pradesh, Atal Bihari Bajpayee Viswa Vidyalaya, Bilaspur, Chhattisgarh** | 1179-1186 | View Abstract<br>Download PDF |
| 238. | **Minimart a marketplace using dapp on the ethereum blockchain**<br>*Archana A., Harshitha Raj, Yashaswini R., Ashwini C.*<br>**Global Academy of Technology, Bengaluru, Karnataka** | 1187-1191 | View Abstract<br>Download PDF |
| 239. | **Drug and Cosmetics Act, 1940**<br>*Varatha Ravindra Menon*<br>**Symbiosis Law School, Nagpur, Maharashtra** | 1192-1194 | View Abstract<br>Download PDF |
| 240. | **PV-Based MPPT for standalone DC Micro Grids using Fuzzy Logic**<br>*Ram Kumar, Harkamal Deep Singh*<br>**GGS College of Modern Technology, Mohali, Punjab** | 1195-1201 | View Abstract<br>Download PDF |
| 241. | **Kidney stone detection using Machine Learning techniques**<br>*Lepakshi T. V., Dhamini C. L., M. V. Ramya, Rachana C. Hulikatti, Aneesh Jain M V*<br>**Alvas Institute of Engineering and Technology, Tenkamijar, Karnataka** | 1202-1204 | View Abstract<br>Download PDF |
| 242. | **Law of torts and sports litigation**<br>*Avinash Pandey*<br>**Kirit P. Mehta School of Law, Mumbai, Maharashtra** | 1205-1226 | View Abstract<br>Download PDF |
| 243. | **Gauging the proportion and impact of drug-drug interactions in the prescriptions of geriatric patients on medications affecting the cardiovascular system**<br>*Dr. Manoj Kumar A S, Dr. Srihari G. Kulkarni, Dr. N. Bhaktavatchalam*<br>**Dr. B. R. Ambedkar Medical College and Hospital, Bangalore, Karnataka** | 1227-1230 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 244. | **Student evaluation and stress detection system using Machine Learning**<br>*Srinivasa R., T. J. Shashank Uthkarsh, Ravindranath, Tejashwini K, Chidan*<br>**Rajarajeswari College of Engineering, Bengaluru, Karnataka** | 1231-1234 | View Abstract<br>Download PDF |
| 245. | **Modeling and simulation of the electric vehicle coupled with battery and ultracapacitor**<br>*Yeshas Raghu Gowda*<br>**JSS Science and Technology University, Mysore, Karnataka** | 1235-1237 | View Abstract<br>Download PDF |
| 246. | **Review on the effect of preparative parameters of spray pyrolysis technique on optical and electrical properties of Zinc Oxide thin film**<br>*Nikam S. V., B .T. Jadhav*<br>**Yashavantrao Chavan Institute of Science, Satara, Maharashtra, Rayat Institute of Research and Development, Satara, Maharashtra** | 1238-1244 | View Abstract<br>Download PDF |
| 247. | **Electronic Voting Machine Based on IRIS Authentication**<br>*M. K. Sivaranjani, S.Santhiya, S.Swathika, P.Ramya, G.Mohanavel*<br>**VSB Engineering College, Karudayampalayam, Tamil Nadu** | 1245-1249 | View Abstract<br>Download PDF |
| 248. | **Asthma prediction using Machine Learning**<br>*Manasa G. V. Kumar, Yogesh R, Soumya ranjan nayak, Vinod R, Shreyas M S*<br>**Rajarajeswari College of Engineering, Bengaluru, Karnataka** | 1250-1253 | View Abstract<br>Download PDF |
| 249. | **Anomaly detection in pharmaceutical pills using image processing**<br>*Kaushik T. S., Chandan Prasad, Prajwal V., Dr. Manjula A. V.*<br>**NIE Institute of Technology, Anagahalli, Karnataka** | 1254-1257 | View Abstract<br>Download PDF |
| 250. | **A speculation technique for the stock market using time series**<br>*Rajesh K. S., B. S. Darshith, Amaresh A. Channad, Amaresh R. Vasisth, G. Jayavardhan*<br>**Rajarajeswari College of Engineering, Bengaluru, Karnataka** | 1258-1261 | View Abstract<br>Download PDF |
| 251. | **Forensic podiatry evidence and admissibility in court**<br>*Harendra Nath Singh*<br>**Forensic Science Laboratory, Kolkata, West Bengal** | 1262-1269 | View Abstract<br>Download PDF |
| 252. | **Advancement in filtration techniques of air purifier**<br>*Rima Nandurkar, Pallav Kumar Gopal*<br>**Smith Pharmaceuticals, Nagpur, Maharashtra** | 1270-1273 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 253. | **Smart crop protection system from wild animals and birds using IoT**<br>*Sumana P. B., Sanjana.R, Sharanya.M, Harish.N.J*<br>**Global Academy of Technology, Bengaluru, Karnataka** | 1274-1276 | View Abstract<br>Download PDF |
| 254. | **Web-based system for face mask detection and face recognition**<br>*Pranjal Rane, Ritvik Patil, Ojas Natu, Prahlad Pore, Pranay Shridhar*<br>**Vishwakarma Institute of Technology, Pune, Maharashtra** | 1277-1281 | View Abstract<br>Download PDF |
| 255. | **Study on heat transfer analysis of AC condenser by varying materials and refrigerants**<br>*Vemula Nagarjuna, Vasili Srinivas*<br>**Malla Reddy Engineering College(Autonomous), Hyderabad, Telangana** | 1282-1291 | View Abstract<br>Download PDF |
| 256. | **Fundamental Frequency estimation and analysis of speech signal**<br>*Mahesh M. Kamble, Tejal S.Bandgar*<br>**PVPIT, Budhgaon, Sangli (affiliated to Dr. Babasaheb Ambedkar Technological University) Maharashtra** | 1292-1294 | View Abstract<br>Download PDF |
| 257. | **Social distancing monitoring system using computer vision and YOLOv3**<br>*Devanshi Gupta, Saumya Srivastava, Sonali P. Dash*<br>**Bharati Vidyapeeth Deemed University College of Engineering, Pune, Maharashtra** | 1295-1298 | View Abstract<br>Download PDF |
| 258. | **Production, assay, and optimization of Chitinase enzyme produce by bacterial isolates from fish waste dumped soil**<br>*K. Shameem Rani, S. Kulandaivel*<br>**MSS Wakf Board College, KK Nagar, Tamil Nadu, VPMM College of arts and Science, Krishnankoil, Tamil Nadu** | 1299-1315 | View Abstract<br>Download PDF |
| 259. | **Prediction of the stock price using Machine Learning techniques**<br>*Apoorva Y.*<br>**Rajarajeswari College of Engineering, Bengaluru, Karnataka** | 1316-1318 | View Abstract<br>Download PDF |
| 260. | **A SEARCH FOR THE SOURCE AND ORIGIN OF WHITE PEBBLES/SILICA PEBBLES FOUND AT LONAR CRATER, BULDHANA DISTRICT, MAHARASHTRA, INDIA.**<br>*Harishchandra Bala Mali, Raju D. Jadhav*<br>**Independent Researcher** | 1319-1324 | View Abstract<br>Download PDF |
| 261. | **Object segregation using R-CNN**<br>*Nihal Kumar Singh, Aakash Singh, Ashish Prasad, S. Usha*<br>**RajaRajeswari College of Engineering, Bengaluru, Karnataka** | 1325-1328 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 262. | **A novel approach to acquiring communication through 'LSRW' skills**<br>*Dr. S. R. Kannan*<br>**Kathir College of Engineering, Coimbatore, Tamil Nadu** | 1329-1330 | View Abstract<br>Download PDF |
| 263. | **Progressive collapse analysis of steel frame structure in different earthquake zones**<br>*Mohammed Aamair Ameen, Jitesh Jagannath Dhule*<br>**Trinity College of Engineering and Research, Pune, Maharashtra** | 1331-1344 | View Abstract<br>Download PDF |
| 264. | **Psoriasis stages detection through image processing**<br>*Prabaharan J, Srihari U., Sharath C, ThanujKumar V, Vishal S*<br>**Rajarajeswari College of Engineering, Bengaluru, Karnataka** | 1345-1348 | View Abstract<br>Download PDF |
| 265. | **Smart waste management system**<br>*Ankitha A., Ramya S M, Geetha B V, Supriya K V*<br>**Vemana Institute of Technology, Bengaluru, Karnataka** | 1349-1354 | View Abstract<br>Download PDF |
| 266. | **Emotion-based media player**<br>*Dr. Rajesh K. S., Heba Farheen B., Hemalatha K., Indhu V. S., Sadiya Banu*<br>**Rajarajeswari College of Engineering, Bengaluru, Karnataka** | 1355-1360 | View Abstract<br>Download PDF |
| 267. | **Analysis on cost-effective cloud server provisioning for the predictable performance of big data analytics**<br>*R. Sumathi, U. Dhanunjaya*<br>**S. K. University, Anantapur, Andhra Pradesh** | 1361-1364 | View Abstract<br>Download PDF |
| 268. | **Crime Prediction using Naïve Bayes Algorithm**<br>*Mohammad Tahir, Md Asif Anwar, Ruma Afsha Sultana, Manjunath S. R., Fardeen Khan*<br>**Raja Rajeswari College of Engineering, Bengaluru, Karnataka** | 1365-1370 | View Abstract<br>Download PDF |
| 269. | **Modeling and CFD simulation of double pipe heat exchanger with different mass flow rates**<br>*Koduri Nithesh, Vasili Srinivas*<br>**Malla Reddy Engineering College, Hyderabad, Telangana** | 1371-1380 | View Abstract<br>Download PDF |
| 270. | **Heart disease clustering using K-Mean analysis**<br>*Gomanth D Reddy*<br>**SRM University, Chennai, Tamil Nadu** | 1381-1383 | View Abstract<br>Download PDF |
| 271. | **Measurement of service quality in the banking system -A case study of State Bank of India (SBI)**<br>*Levi Ptang Uny Cheworei*<br>**Andhra University, Visakhapatnam, Andhra Pradesh** | 1384-1393 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 272. | **The Current Status of Folk Theatre and Traditional Folk Theatre forms of Odisha**<br>*Ajita Kumar Muni*<br>**Utkal University of Culture, Bhubaneswar, Odisha** | 1394-1400 | View Abstract<br>Download PDF |
| 273. | **Development in pervious concrete by using the green concept**<br>*Amruta Banne, Pratiksha Patil, Harshali Jadhav, Priti Salunke, Rohini Jamadar, Vaibhavi Khatake, Ankita Bura, Ameer Husain Jamdar*<br>**Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra** | 1401-1404 | View Abstract<br>Download PDF |
| 274. | **Remote locking system for secure examination using MQTT protocol**<br>*Kavya R., Sahana B. R., Geethashri K. V.*<br>**Vidya Vikas Institute of Engineering and Technology, Nadanahalli, Karnataka** | 1405-1407 | View Abstract<br>Download PDF |
| 275. | **Inappropriate construction equipment delay factors a Structural Equation Modelling (SEM) approach**<br>*Salih Mahdi*<br>**Andhra University, Visakhapatnam, Andhra Pradesh** | 1408-1417 | View Abstract<br>Download PDF |
| 276. | **Prediction of future terrorist activities using Machine Learning algorithm**<br>*Santhosh Kumar S., Akshatha M. N., Arun Malle, Aishwarya Bhat, H. Sai Rohit*<br>**KS School of Engineering and Management, Bengaluru, Karnataka** | 1418-1422 | View Abstract<br>Download PDF |
| 277. | **Effect of honey mixture therapy on obesity among adolescent girls residing in selected hostels**<br>*Sini Neeruzhi, Surumi K. A.*<br>**Al Shifa College of Nursing, Perintalmanna, Kerala** | 1423-1426 | View Abstract<br>Download PDF |
| 278. | **Domain-agnostic Customer Sentiment Analysis Platform for MSMEs in E-Commerce**<br>*Veer Kejriwal, Aqsa Temrikar*<br>**Jamnabai Narsee International School, Mumbai, Maharashtra, JBCN International School, Mumbai, Maharashtra** | 1427-1434 | View Abstract<br>Download PDF |
| 279. | **Does Anganwadi make a difference in the nutritional status of children?**<br>*Kamalakanta Tripathy*<br>**Fakir Mohan University, Balasore, Odisha** | 1435-1438 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 280. | **IoT based string failure detection and monitoring system**<br>*Srijeyanthi P., Sivakumar R., Cebu A., Karthick C., Rajeshwaran M., Subhash S.*<br>**V. S. B Engineering College, Karur, Tamil Nadu** | 1439-1440 | View Abstract<br>Download PDF |
| 281. | **Insights of IPL: 2008 to 2020 and why it is interesting**<br>*Rakshit Patel, Mihir Brahmbhatt*<br>**G H Patel College of Engineering and Technology, Anand, Gujarat, Navrachana University, Vadodara, Gujarat** | 1441-1445 | View Abstract<br>Download PDF |
| 282. | **Light Fidelity Trident**<br>*Keerthan Gowda B. M.*<br>**Jain Pre-University College, V V Puram, Bengaluru, Karnataka** | 1446-1448 | View Abstract<br>Download PDF |
| 283. | **The phenomenal growth and mastering the tradition of Bharatanatyam**<br>*S. Sophia, Dr. S. Subbulakshmi*<br>**Vels Institute of Science, Technology and Advanced Studies (VISTAS), Chennai, Tamil Nadu** | 1449-1451 | View Abstract<br>Download PDF |
| 284. | **Child malnutrition: Rural-urban disparities in Jabalpur district**<br>*Samiha Tiwari, Dr. Nandita Sarkar, Dr. Meera Viadya*<br>**Govt. M.H. College of Home-Science and Science for Women (Autonomous.), Jabalpur, Madhya Pradesh** | 1452-1453 | View Abstract<br>Download PDF |
| 285. | **Casestudy of drainage line improvement at Kumar chowk, Solapur**<br>*Shubham Devidas Hibare, Ashwini Shrirang Bhosale, Viresh Rajshekar Swami, Lalita Sudarshan Dussa, Bhavana Satish Burla, VIJAYRAJ KURMADAS PATIL, Rajeshwari Ambadas Bidave, Sanjay R. Bugade*<br>**Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra** | 1454-1457 | View Abstract<br>Download PDF |
| 286. | **Effect of rebar coating in the prevention of corrosion in RC structure**<br>*Thejus H. R., Sanjay B. N., Ravikumar R., Santhosha G., Shalini G. V.*<br>**RajaRajeshwari College of Engineering, Bengaluru, Karnataka** | 1458-1461 | View Abstract<br>Download PDF |
| 287. | **S-Pay (Secure Payment system for students)**<br>*Vaishnav G., Megha M. S., Sandra Sivaprasad, Nishley Elizabeth Joseph*<br>**Marian Engineering College, Kazhakkoottam, Kerala** | 1462-1465 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 288. | **Studies on diversity of medicinal plants in Dnyanganga wild life sanctuary of Buldhana district (Maharashtra)with reference to animal uses**<br>*Dr. Rasika N. Patil*<br>**Shri Shivaji College of Arts, Commerce, and Science, Akola, Maharashtra** | 1466-1469 | View Abstract<br>Download PDF |
| 289. | **Role of rural credit in the socio-economic development of Himachal Pradesh**<br>*Shilpa Chauhan, Usha Sharma*<br>**Himachal Pradesh University, Shimla, Himachal Pradesh** | 1470-1476 | View Abstract<br>Download PDF |
| 290. | **An ekistical approach towards impact of water on human settlements**<br>*Abdul Razzaq*<br>**Faculty of Architecture and Ekistics, New Delhi, Delhi** | 1477-1479 | View Abstract<br>Download PDF |
| 291. | **Prevalence and risk factors of urinary incontinence among geriatrics residing in old age home in Kanyakumari district, India**<br>*P. C. Christal Joyce, Dr. S. S. Sharmila Jansi Rani, Dr. Vijayalakshmi K.*<br>**Apollo College of Nursing, Chennai, Tamil Nadu, Christian College of Nursing, Neyyoor, Tamil Nadu** | 1480-1484 | View Abstract<br>Download PDF |
| 292. | **Water turbidity assessment in parts of Ganga River in Allahabad Region (Prayag) during Kumbh Festival**<br>*Anju Bajpai, Dr. G. Sreenivasan, Dr. C. S. Jha*<br>**Regional Remote Sensing Centre-Central, Nagpur, Maharashtra, National Remote Sensing Centre, Hyderabad, Telangana** | 1485-1488 | View Abstract<br>Download PDF |
| 293. | **A modified approach in shortest path algorithm**<br>*Dr. Siva Prasad Behera, Dr. Debdas Mishra, Dr. Subarna Bhattacharjee, Prasanta Kumar Raut*<br>**C.V. Raman Global University, Bhubaneswar, Odisha, Ravenshaw University, Cuttack** | 1489-1493 | View Abstract<br>Download PDF |
| 294. | **Indus Civilization**<br>*Bishal Kumar Bhuyan*<br>**Dibrugarh University, Dibrugarh, Assam** | 1494-1495 | View Abstract<br>Download PDF |
| 295. | **Reasons for the success and failure of airlines in India and abroad**<br>*Krisha Shah, Madhav Abrol, Kartikay Sharma, Madhav Khandelwal, Keertiman Garodia*<br>**Narsee Monjee Institute of Management Studies, Mumbai, Maharashtra** | 1496-1502 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 296. | **Effect of positive self talk training on competitive anxiety: an intervention study on male and female**<br>*Dr. Sonia Kapur, Jyoti Devi*<br>**Guru Nanak Dev University, Amritsar, Punjab** | 1503-1510 | View Abstract<br>Download PDF |
| 297. | **Detecting DDoS attack with AI/ML models**<br>*Arun Narayanan N., Dhruv Kalaan*<br>**REVA University, Bengaluru, Karnataka, OLX India Pvt Ltd , Gurgaon, Haryana** | 1511-1516 | View Abstract<br>Download PDF |
| 298. | **Implementation of google firebase in Android app development**<br>*Rahul Kumar, Rajendra Singh*<br>**Raffles University, Neemrana, Rajasthan** | 1517-1520 | View Abstract<br>Download PDF |
| 299. | **Evolution of MTP act and ambiguous women's rights in India: A critical review**<br>*Dr. Jaya Bhargavi Paladugu*<br>**University of Hyderabad, Hyderabad, Telangana** | 1521-1525 | View Abstract<br>Download PDF |
| 300. | **Evolution and growth of rural credit in India: A review**<br>*Shilpa Chauhan, Dr. Usha Sharma*<br>**Himachal Pradesh University, Shimla, Himachal Pradesh** | 1526-1532 | View Abstract<br>Download PDF |
| 301. | **Studies on a new species of Genus Senga (Dollfus, 1934) Cestoda: Ptychobothridae, from freshwater fish Mastacembelus armatus at. Wakadi Dam, Dist. Parbhani (M.S.) India**<br>*R. G. Pradhan, R. R. Dandawate*<br>**Lal Bahadur Shastri Junior and Senior College, Partur, Maharashtra, Arts Commerce and Science College, Ahmadnagar, Maharashtra** | 1533-1538 | View Abstract<br>Download PDF |
| 302. | **Cellular agriculture: The way ahead for food, textile, and cosmetic industries**<br>*Poorvi Kamble, Rujul Tamhane, Ishita Tarnekar, Shikhaa Sushil, Swarangi Samant, Sruthi Menon*<br>**Thadomal Shahani Engineering College, Mumbai, Maharashtra** | 1539-1546 | View Abstract<br>Download PDF |
| 303. | **Effects of different circuit training methods on agility and speed ability: A comparative study**<br>*Sk Saha Alam, Dr. Sudip Sundar Das*<br>**Jadavpur University, Kolkata, West Bengal** | 1547-1551 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 304. | **Sustainable Municipal Solid Waste Management through 3R Initiatives in India: Lessons to be learned from the success stories**<br>*Priyamvada Singh*<br>**Jamia Millia Islamia, New Delhi, Delhi** | 1552-1557 | View Abstract<br>Download PDF |
| 305. | **Improved corpus base English to Hindi language translation sequence-based deep learning approach**<br>*Manmeet Kaur, Charanjiv Singh Saroa*<br>**Punjabi University, Patiala, Punjab** | 1558-1564 | View Abstract<br>Download PDF |
| 306. | **Internet of Things for personal healthcare**<br>*Tabeena Reyaz, Dr. Rajat joshi*<br>**Adesh Institute of Technology, Gharuan, Punjab** | 1565-1570 | View Abstract<br>Download PDF |
| 307. | **Literature survey of black nightshade (Solanum Nigrum Linn)**<br>*S. Nithya*<br>**Nandha College of Pharmacy, Erode, Tamil Nadu** | 1571-1573 | View Abstract<br>Download PDF |
| 308. | **Ideas and suggestions for integrating future urban areas with roads & highways development for economic prosperity**<br>*Dinesh Bhaskar Bandivdekar*<br>**The Engineers Forum, Thane, Maharashtra** | 1574-1578 | View Abstract<br>Download PDF |
| 309. | **Credit card fraud detection using Machine Learning**<br>*Sree Maurya Eluri, K. Madhu Kiran*<br>**Chalapathi Institute of Engineering and Technology, Lam, Andhra Pradesh** | 1579-1584 | View Abstract<br>Download PDF |
| 310. | **Online reservation system**<br>*Navin, Rajendra Singh Khatana*<br>**Raffles University, Neemrana, Rajasthan** | 1585-1586 | View Abstract<br>Download PDF |
| 311. | **Hybrid Cryptography for Secured Cloud Computing**<br>*Sanjana Krishnamsetty, B.Ravindra babu*<br>**Chalapathi Institute of Engineering and Technology, Lam, Andhra Pradesh** | 1587-1593 | View Abstract<br>Download PDF |
| 312. | **Anti-malarial drug therapy employing falcipain2 inhibitors**<br>*Swarnali Sarkar*<br>**Vellore Institute of Technology, Vellore, Tamil Nadu** | 1594-1597 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 313. | **Estimation of public building (office building) in Google spreadsheet**<br>*Sufiyan Hidayat Khan, Rohit Vasudev Lassi, Om Rajesh Dhonnar, Bhushan Umesh Alhat, Nyra Hiren Narang*<br>**Vivekanand Education Society's Polytechnic College, Mumbai, Maharashtra** | 1598-1600 | View Abstract<br>Download PDF |
| 314. | **A research study on the rise of crude oil prices with global context**<br>*Arhant Bubna*<br>**The Cathedral and John Connon School, Mumbai, Maharashtra** | 1601-1609 | View Abstract<br>Download PDF |
| 315. | **Flexible manufacturing technology – A review of facility design and the scheduling**<br>*Ershad Jahagirdar, Harish*<br>**Independent Researcher** | 1610-1615 | View Abstract<br>Download PDF |
| 316. | **Direct Control of Instantaneous Torque of Switched Reluctance Motor using ANFIS Controller in Generating mode and Motoring mode**<br>*Bagyalakshmi B., D. Bhanu Murthy*<br>**CMR College of Engineering and Technology, Hyderabad, Telangana** | 1616-1637 | View Abstract<br>Download PDF |
| 317. | **Rape: Legal changes towards justice for rape**<br>*Isha Pandey*<br>**Symbiosis Law School, Nagpur, Maharashtra** | 1638-1641 | View Abstract<br>Download PDF |
| 318. | **The impacts of COVID-19 on the investment behavior of entrepreneurs in India**<br>*Dr. Varsha Agarwal, Findoliya Vidhiben Ashwin Bhai, Neha Suresh*<br>**Jain (Deemed-to-be University), Bengaluru, Karnataka** | 1642-1648 | View Abstract<br>Download PDF |
| 319. | **Identification of novel compounds to treat Alzheimer's disease**<br>*Swarnali Sarkar*<br>**Vellore Institute of Technology, Vellore, Tamil Nadu** | 1652-1655 | View Abstract<br>Download PDF |
| 320. | **Experimental Stress Analysis of Worm Gear using 3D Photo Elasticity and its Validation through Finite Element Analysis**<br>*Kolase Sachin A., Randhavan B. M.*<br>**Sahyadri Valley College of Engineering and Technology, Rajuri, Maharashtra** | 1656-1660 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 321. | **Design and performance analysis of 1 mw solarphotovoltaic energy system in iraqi using PVsyst software**<br>*Bahaa Mohammed Najm, G.V. Siva Krishna Rao*<br>**Andhra University College of Engineering, Visakhapatnam, Andhra Pradesh** | 1661-1666 | View Abstract<br>Download PDF |
| 322. | **Chronic kidney disease prediction using Machine Learning**<br>*Dr. K. V. Sambasiva Rao, J. Bhagya Lakshmi, E. Likhitha, Ch. Lakshmi Kalyani*<br>**NRI Institute of Technology, Vijayawada, Andhra Pradesh** | 1667-1670 | View Abstract<br>Download PDF |
| 323. | **Effect of gamma irradiation on the kinetics of ion exchange of Mg (ii), Zn (ii), Co (ii), Pb (ii) on DOWEX 50 wx8 (NH4+) in aqueous acetone – ammonium propionate media.**<br>*Kamble Rajan S.*<br>**Bhogawati Mahavidyalaya Kurukali, Maharashtra** | 1671-1674 | View Abstract<br>Download PDF |
| 324. | **Performance and emission level studies of Simarouba Glauca biodiesel as an alternative fuel for diesel engine**<br>*Dr. Shripad Diwakar*<br>**BMS Institute of Technology and Management, Bengaluru, Karnataka** | 1675-1680 | View Abstract<br>Download PDF |
| 325. | **Line follower & obstacle avoider robot**<br>*Yuvaraj Ganesha, Maninder Singh Balbir Singh, Arumugam Ganesan*<br>**Al Shabaka Technical Institute, Dubai, UAE** | 1681-1683 | View Abstract<br>Download PDF |
| 326. | **Camel model analysis of select public and private sector banks in India**<br>*Shariqua Nishat*<br>**Osmania University, Hyderabad, Telangana** | 1684-1688 | View Abstract<br>Download PDF |
| 327. | **Segmentation approach for brain tumor detection**<br>*Shreyash Gupta, Shreyas S., Lalitha V. P.*<br>**RV College of Engineering, Bengaluru, Karnataka** | 1689-1693 | View Abstract<br>Download PDF |
| 328. | **Effect of rebar coating in prevention of corrosion in RC structure**<br>*Thejus H. R., Sanjay B. N., Ravikumar R., Santhosh G., Shalini G. V.*<br>**Raja Rajeshwari College of Engineering, Bangalore, Karnataka** | 1694-1697 | View Abstract<br>Download PDF |
| 329. | **Lane detection and object detection system steering advisory for driver**<br>*Vinutha H., Shivam Zagade, Saima Sharieff, Saniya Taj*<br>**RajaRajeswari College of Engineering, Bengaluru, Karnataka** | 1702-1705 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 330. | **Role of Information Technology in mass customization ofthe manufacturing process**<br>*Uday Bapuji Joshi, Dr. G. T. Thampi*<br>**Thadomal Shahani Engineering College Mumbai, Maharashtra** | 1706-1712 | View Abstract<br>Download PDF |
| 331. | **Branding Women as Pseudo- Feminists: Taking Away Women's Rights to be Angry Against Injustice**<br>*Fiona Cyril Creado*<br>**University of Mumbai, Mumbai, Maharashtra** | 1713-1716 | View Abstract<br>Download PDF |
| 332. | **Effect of social media-based counseling on study habits of distance learners**<br>*Dr. Srutirupa Panda*<br>**Nabakrushna Choudhury College of Teacher Education, Angul, Odisha** | 1717-1722 | View Abstract<br>Download PDF |
| 333. | **Warehouse Security System**<br>*Lohith M., Dr. Aravinda T V*<br>**SJM Institute of Technology, Chitradurga, Karnataka** | 1723-1726 | View Abstract<br>Download PDF |
| 334. | **Are we doing justice to our citizens? Public financing of healthcare in developing countries with special reference to India**<br>*Godwin S. K.*<br>**Government College for Women, Thiruvananthapuram, Kerala** | 1727-1735 | View Abstract<br>Download PDF |
| 335. | **A research study to find out the changing role of the International Monetary Fund (IMF)**<br>*Ryka Mehra*<br>**B.D. Somani International School, Mumbai, Maharashtra** | 1736-1744 | View Abstract<br>Download PDF |
| 336. | **A study on micro-units' Development and Refinance Agency Limited in India – (Mudra)**<br>*Dr. R. Angamuthu*<br>**Government Arts College, Thiruvannamalai, Tamil Nadu** | 1745-1749 | View Abstract<br>Download PDF |
| 337. | **Longevity of the antimicrobial effect of Silver Diamond Fluoride on cariogenic bacteria in children- A Systematic review**<br>*Deepika U., Kanika Chopra, Susmita Murmu, Prasanna Kumar Sahoo, Prayas Ray*<br>**SCB Dental College and Hospital, Cuttack, Odisha** | 1750-1756 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 338. | **Redesigning rice cultivar (<I>Oryza Sativa</I> L.) Uma as saline tolerant cultivar through marker-assisted precision breeding**<br>*Gincy Devasia, Dr. Shylaraj K. S.*<br>**Kerala Agricultural University, Thrissur, Kerala** | 1757-1763 | View Abstract<br>Download PDF |
| 339. | **ph-metric studies of formation constants of the complexes of substituted thiazolyl Schiff's bases with some lanthanide metal ions in 70% ethanol-water mixture**<br>*Dr. Rupali S. Talegaonkar*<br>**Mahatma Fule Arts, Commerce and Sitaramji Chaudhari Science Mahavidyalaya, Warud, Maharashtra** | 1764-1767 | View Abstract<br>Download PDF |
| 340. | **Training of a robot manipulator model by three reinforcement learning algorithms (TRPO, PPO2, and ACKTR), use cases, and comparative studies**<br>*Narilala Daniel Ranaivoson, Soloniaina Rakotomiraho, Rivo Randriamaroson*<br>**ED-STII, Antananarivo, Madagascar** | 1768-1778 | View Abstract<br>Download PDF |
| 341. | **Sri Lankan hybrid cultural remarks, revivals, and colonialism: based on Sri Lankan southern province temples' murals**<br>*Wasantha Mendis*<br>**The University of Sri Jayawardenapura, Nugegoda, Sri Lanka** | 1779-1781 | View Abstract<br>Download PDF |
| 342. | **Image classification**<br>*Guru S. S., Giridharan K., Mohammed Fahad, Fahid Akthar A.*<br>**Prathyusha Engineering College, Thiruvallur, Tamil Nadu** | 1782-1829 | View Abstract<br>Download PDF |
| 343. | **Consumerism**<br>*Baikunt Sachdeva*<br>**Independent Researcher** | 1830-1833 | View Abstract<br>Download PDF |
| 344. | **Study of relationship between Anemia and Hypertension**<br>*Dr. Hemangini Chaudhari, Dr. Vidhya Rathwa, Dr. Payal Danger*<br>**Government Medical College, Surat, Gujarat** | 1834-1836 | View Abstract<br>Download PDF |
| 345. | **Rainfall threshold intensity & other associated factors triggering debris flow in the Himalayan region – A literature review**<br>*Arghadeep Dasgupta*<br>**Road Building International (India) Pvt. Ltd., New Delhi, Delhi** | 1837-1842 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 346. | **Content-based image retrieval using combined features of color descriptors, GLCM-SFTA, and Hu's moments**<br>*Sujatha H., Dr. A. Sreenivasa Murthy*<br>**Government Polytechnic, Nagamangala, Karnataka, University Visvesvaraya College of Engineering, Bangalore, Karnataka** | 1843-1849 | View Abstract<br>Download PDF |
| 347. | **An intrusion detection system in network traffic with the performance of snort in Wireshark to capture detailed information of data packets**<br>*Isiaka O. S., Bolaji-Adetoro D. F.*<br>**Kwara State Polytechnic, Ilorin, Nigeria** | 1850-1855 | View Abstract<br>Download PDF |
| 348. | **Harmonics prediction of power system network in the presence of FACTS devices**<br>*Dr. G. Nageswara Reddy, B. Jayababu*<br>**Y. S. R Engineering College of Yogi Vemana University, Proddatur, Andhra Pradesh, Vignan's Lara Institute of Technology and Science, Guntur, Andhra Pradesh** | 1856-1860 | View Abstract<br>Download PDF |
| 349. | **Challenges and recommendations of Bangalore University library in COVID pandemic**<br>*Ravikumar C. V., Sateesha H., Sudhakara N.*<br>**Bangalore University, Bengaluru, Karnataka** | 1861-1863 | View Abstract<br>Download PDF |
| 350. | **Automatic dual-axis solar tracker system using Image Processing**<br>*Adnan M., Ashiq Ali Abdul Lathief, Sivadeep P. R., Akshay Ganga, Simi Raj*<br>**Government Engineering College Barton Hill, Thiruvananthapuram, Kerala** | 1864-1870 | View Abstract<br>Download PDF |
| 351. | **Adsorption Behavior of Thorium and some Metal Ions on Cation Exchange Resin Dowex 50 WX<sub>8</sub> (Nh<sub>4</sub><sup>+</sup>Form) from Aqueous Acetone-Ammonium Propionate Media**<br>*Rajan Kamble*<br>**Bhogawati Mahavidyalaya, Kurukali, Maharashtra** | 1871-1876 | View Abstract<br>Download PDF |
| 352. | **Banana marketing challenges during Covid-19**<br>*Nalla Sridevi Parvathi, Dr. Nagaraja*<br>**Andhra University, Visakhapatnam, Andhra Pradesh** | 1877-1882 | View Abstract<br>Download PDF |
| 353. | **A critical study of issues faced by farmers**<br>*Dr. Anuradha Sarkar, Sai Badhe, Advait Syamsunder, Akshay Kadam, Himanshu Niwal, Shubham Lohakare, Kaustubh Naikwad*<br>**Neville Wadia Institute of Management Studies and Research, Pune, Maharashtra** | 1883-1889 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

| S.No | Title | Page Number | Links |
|---|---|---|---|
| 354. | **Design and performance analysis of Interior Permanent Magnet Motor (IPMSM) using RMXPRT – ANSYS MAXWELL**<br>*Nithyanandam R., Parveen Kumar N*<br>**Amrita Vishwa Vidyapeetham University, Coimbatore, Tamil Nadu** | 1890-1893 | View Abstract<br>Download PDF |
| 355. | **How the COVID-19 pandemic affected mother-daughter relationships**<br>*Lavanya Maheshwari*<br>**Neerja Modi School, Jaipur, Rajasthan** | 1894-1901 | View Abstract<br>Download PDF |
| 356. | **Open Pyramid Graph and Euler Circuit**<br>*Puja, Shree Nath Sharma, Ram Lakhan Prasad*<br>**Magadh University, Bodh Gaya, Bihar, S.S. College, Jehanabad, Bihar** | 1902-1904 | View Abstract<br>Download PDF |
| 357. | **Pareto-optimal phylogenetic tree reconciliation considering duplications, transfers, losses, and incomplete lineage sorting**<br>*Rahnuma Tasmin, Dr. Md. Abul Kashem Mia*<br>**Military Institute of Science and Technology (MIST), Dhaka, Bangladesh, Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh** | 1905-1910 | View Abstract<br>Download PDF |
| 358. | **Landfill site selection with spatial suitability analysis and multi-criteria decision making in Devchuli municipality**<br>*Asmita Paudel, Bikash Sherchan, Aashish Adhikari*<br>**Tribhuvan University, Kirtipur, Nepal** | 1911-1916 | View Abstract<br>Download PDF |


© 2021, IJARIIT.COM All Rights Reserved

# ABSTRACTS

## 1 Sign Language recognition system using Convolutional Neural Networks

Paper ID V7I4-1141 · Pages 1-4 · Deep Learning

**Puramshetty Srinidhi Rao**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Potladurthy Sindhu Sri Vatsalya**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Ruttala Bhanu Sree Sai**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Polavarapu Janshi**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Koda Indu**, Lecturer, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh

Communication is key to share and express ideas and thoughts. And not every person has the natural ability to communicate. Mute people communicate with each other and with rest of the people through sign language. Sign language is the way of communication using gestures with hands where each gesture corresponds to particular letter in an alphabet or a word. But to use this every person must have the knowledge of it. But in the real world, it is not the case. With the advancement in the field of deep learning it is possible to solve this problem with low cost. So, this project aims at making it easier for mute people to communicate to the rest of the world. In this project, image of the hand gesture made by the person is captured and is translated to its corresponding meaning in the American sign language system. Equipment such as hand gloves sensor is one of the methods used for sign language detection. But it is expensive and not all of the people in need of it would be able to afford it. A deep learning algorithm called convolutional neural network is used for identifying the gestures and giving the actual letter or word.

**Keywords:** Sign language Detection, Image Processing, Convolutional Neural Network

Read Full Paper · Download PDF · Back to index

---

## 2 Face mask detection system

Paper ID V7I4-1137 · Pages 5-8 · Machine Learning

**Korakam Mrudula**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**M. Sion Kumari**, Assistant Professor, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Landa Jayashree**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Madala Meghana**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Meesala Gnana Deepika**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh

Face masks have become an increasingly important part of the human lifestyle. Ever since the pandemic began, people have been encouraged to wear face masks to curb the spread of Covid-19. The aim of this project is to replicate on a computer what human beings are able to do so effortlessly - detect the presence of

© 2021, IJARIIT.COM All Rights Reserved

faces in their field of vision. This project aims at using a camera placed in different places around the area, to capture images and detect the presence of a facemask in real-time. The proposed Face Detection System is an application that automates the detection of frontal human faces in a given image. The existence of a mask is indicated by a green square around the person's face along with the percentage of accuracy of the positioning of the mask. The absence of the mask, however, is indicated by a red square around the person's face, and its related percentage is also displayed to be accurately used for detecting whether a person is wearing a mask properly or not.

**Keywords:** Face Recognition, Face Localisation, Tensorflow, Normalisation, Real-Time Monitoring

Read Full Paper · Download PDF · Back to index

---

## 3 Automatic number plate recognition using contours and Convolution Neural Networks

Paper ID V7I4-1139 · Pages 9-13 · Computer Science Engineering

**Adithya M.**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Sumitha B. S.**, Research Scholar & Assistant Professor, Atria Institute of Technology, Bengaluru, Karnataka
**Rahul K.**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Nitish Kumar P.**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Pramod G. N.**, Student, Atria Institute of Technology, Bengaluru, Karnataka

Image processing technology is used in Automatic Number Plate Recognition (ANPR). Automatic Number Plate Recognition (ANPR) is useful for identifying stolen vehicles, smart parking systems, and the use of automobiles in unlawful operations. Character recognition is the first step of ANPR, followed by character segmentation and localization. The technique uses contours and morphological processes to locate the number plate initially. We execute character segmentation after localization. Convolution neural networks (CNN) are used by a segmented character to recognize things because they are known to be good at it. The trained CNN model has an 85.31% accuracy rate.

**Keywords:** Contours, Morphological Operations, Character segmentation, Convolutional Neural Network, Character recognition, Image processing

Read Full Paper · Download PDF · Back to index

---

## 4 Driver Fatigue Detection using Deep Learning

Paper ID V7I4-1151 · Pages 14-16 · Information Science And Engineering

**Sujay S.**, Student, RV College of Engineering, Bengaluru, Karnataka
**Aditya Ashok Illur**, Student, RV College of Engineering, Bengaluru, Karnataka
**Poornima Kulkarni**, Assistant Professor, RV College of Engineering, Bengaluru, Karnataka
**Rekha B. S.**, Assistant Professor, RV College of Engineering, Bengaluru, Karnataka

Fatigued driving is becoming a dangerous and widespread occurrence for drivers, and it is a key contributor to deadly car accidents. To detect tiredness in drivers, machine learning researchers used a variety of sources of data. The morphological features of both the eye and mouth regions were combined in this work, which looked at the fatigue detection problem in terms of feature quantities, classifiers, and modelling parameters. This

© 2021, IJARIIT.COM All Rights Reserved

particular YOLO model is trained to detect two classes. They are “eyes_open” and “eyes_closed”. As soon as the model detects that a person is closing his/her eyes it rings an alarm to alert the driver and passengers.

**Keywords:** YOLO, CNN, FCN, Filter, Bounding Box

Read Full Paper · Download PDF · Back to index

---

## 5 Reimagining the city’s identity by strengthening the inner core – A research enquiry for design intervention

Paper ID V7I4-1153 · Pages 17-20 · Architecture

**Kapil Gujarathi**, Student, Marathwada Institute of Technology, Aurangabad, Maharashtra
**Kuldeep Bhatia**, Associate Professor, Marathwada Institute of Technology, Aurangabad, Maharashtra
**Tushar Paithankar**, Assistant Professor, Marathwada Institute of Technology, Aurangabad, Maharashtra

A city is its’ past legacy and its present identity. While each city must strive to keep marching forward and upgrade to suit the latest demands of its’ residents, it is important to strike a balance between the past and the present. Flowing towards future ambitions as an urban setting doesn’t necessarily imply a disconnect from its past legacy. The legacy lends the city's identity and gives the citizens a sense of familiarity. Therefore, modern urban planning must not only work towards embracing transition and change of modernity but also strike a balanced relationship between the urban and natural environment. This all-inclusive approach is the soul and crux of cultural heritage management as well. As modernization, commercialization, and urbanization continue to threaten a multitude of historical precincts and buildings, recording and celebrating their existence, acknowledging their contribution to national identity, preserving their associations with the city’s identity today, and protecting them from extinction becomes chiefly important, the corresponding benefit of which is promoting tourism as well. The heritage precincts of Aurangabad city encompass areas surrounding the multitude of the city’s gates of historical significance.

**Keywords:** Architecture, Heritage, Precinct Development, Urban Planning, Heritage and Conservation

Read Full Paper · Download PDF · Back to index

---

## 6 Handwritten Digit Recognition using Deep Learning

Paper ID V7I4-1140 · Pages 21-23 · Machine Learning

**Sanjeeva Kumar**, Student, Atria Institute of Technology, Bangalore, Karnataka
**Seenakula Ravi Shankar**, Student, Atria Institute of Technology, Bangalore, Karnataka
**Shashank M. V.**, student, Atria Institute of Technology, Bangalore, Karnataka
**Vandana K. C.**, student, Atria Institute of Technology, Bangalore, Karnataka
**Farhana Kausar**, Assistant Professor, Atria Institute of Technology, Bangalore, Karnataka

Deep learning is powerful technique in current generation. This Paper presents the results of handwritten digit recognition on well-known image database using Convolution neural network. Deep learning increases accuracy and reduces computation time as was caused by simple artificial neural network. The applications of digit recognition includes in postal mail sorting, bank check processing, form data entry, etc. The heart of problem lies within the ability to develop an efficient algorithm that can recognize hand written digits and which is

© 2021, IJARIIT.COM All Rights Reserved

submitted by users by the way of a scanner, tablet, and other digital devices. The main objective of this paper is to ensure effective and reliable approaches for recognition of handwritten digits.

**Keywords:** Deep learning, Convolution neural network, Artificial neural network

Read Full Paper · Download PDF · Back to index

---

## 7 Analysis of Dropout in ANN using MNIST Dataset

Paper ID V7I4-1145 · Pages 24-27 · Artificial Neural Networks

**Swathi N.**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Shreeraksha**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Shruti A. P.**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Sparsha S. G.**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Farhana Kausar**, Assistant Professor, Atria Institute of Technology, Bengaluru, Karnataka

The concept of Neural Networks is propelled by the neurons within the human brain and researchers needed a machine to imitate the same process. A Neural Network (NN) is a circuit of connected neurons, or in a present-day sense, an artificial neural network, composed of artificial neurons constructed for solving artificial intelligence problems. In the deep neural network, Overfitting is a severe issue. This issue could be caused by unbalanced datasets and incorrect model parameter initialization, which causes the model to adhere too closely to the training data and reduces the model's generalization performance for unknown data. To overcome such problems, Regularization techniques are used. This technique modifies the learning algorithm in a way that increases the model's generalization and performance. Dropout is one such regularization technique for addressing the overfitting problem. During the training, it randomly drops the hidden units or neurons to prevent the units or neurons from co-adaption. This method significantly reduces the overfitting and improves the performance of the neural network model. Dropout is preferred for large neural networks in order to have more randomness.

**Keywords:** Neural Network, Overfitting, Regularization, Dropout

Read Full Paper · Download PDF · Back to index

---

## 8 Impact of social media on societal perception of youngsters: Empirical evidence from graduates in Bangalore City

Paper ID V7I4-1162 · Pages 28-32 · Journalism

**Dr. Jaya Patil**, HOD & Associate Professor, IFIM College, Bengaluru, Karnataka
**Dr. Lakshmi P.**, Assistant Professor, IFIM College, Bengaluru, Karnataka

Today, young people in India use internet and social network more than any middle-aged person. Now days, students are easily getting diverted from the studies because of social networking sites like Orkut, Twitter, Facebook, etc. more time is spending in these kinds of social sites by the youth. Though there is a risk of losing privacy and safety, the youngsters give more importance to such sites as they give chance for getting in contact with classmates, friends and people with common likes and dislikes. Social media has been an important factor in the lives of the people all over the world and providing people a much easy needed connect

© 2021, IJARIIT.COM All Rights Reserved

from shopping to electronic mails, education and business tool. The Social networking sites are giving a window of opportunity for people to connect with parents, relatives and friends who are at a distance or beyond geographical boundaries and reconnect with their old friends, colleagues and mates. It also helps people to make new friends, share content, pictures, audios, videos amongst them. The sample size of the study is 100. A questionnaire is designed to find out the various factors of social media that have impact on youngster's perception of society. The current research also analyses the advantages and disadvantages of social media and the role of parents and teachers in prevention of misuse of social media.

**Keywords:** Social Media, Communication, Internet-based education

Read Full Paper · Download PDF · Back to index

---

## 9 Case study on measurement of productivity of WFH IT professionals

Paper ID V7I4-1146 · Pages 33-37 · Management

**Dr. Veena Angadi**, Professor, Bangalore City College, Bengaluru, Karnataka

The Covid-19 crisis has opened senior leaders' minds to the idea of adopting WFH for all or part of their workforces. In addition to TCS, companies including Twitter, Facebook, Shopify, Siemens, and State Bank of India have announced that they will make remote work permanent even after a vaccine is available. A large-scale transition from traditional, colocated work to remote work arguably began with the adoption of work-from-home (WFH) policies in the 1970s, Thanks to the advent of personal computers, the internet, email, broadband connectivity, laptops, cell phones, cloud computing, and videotelephony, the adoption of WFH increased in the 2000s. This paper attempts to Highlights to understand. To understand the condition of work from home. To measure the effectiveness of work from home. To study impact of work from home on work life balance. 52% of the employees prefer custom environment so that can they work effectively in the good environment, 48% of the respondents get satisfied by taking initiatives while they are working from home, 45% of the respondents have a great response about their work from home as they are able to spend time with their family members, 40% of the company is providing the employees their own separate work life balance policy which has been the highest satisfactory for the employees

**Keywords:** Work From Home, Productivity, Effectiveness

Read Full Paper · Download PDF · Back to index

---

## 10 Investigation of thermal properties in synthetic fiber reinforced lightweight concrete

Paper ID V7I4-1148 · Pages 38-45 · Civil

**Nandhini S.**, Student, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu
**Muthuraj M. P.**, Assistant Professor, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu

The work investigates the basic possibilities to form a fiber reinforced lightweight concrete which posses worthy thermal insulation since on vogue. Thermal conductivity, supreme attention of thermal property that affects heat transfer in concrete by conduction. In general, achieving light weight concrete brings down the thermal conductivity and dead load of the structure. The transforms in FRLWC are primarily related to the density which

© 2021, IJARIIT.COM All Rights Reserved

is correlated to the total porosity. 0.5%, 1% and 1.5% of polypropylene fiber and glass fiber are used in order to enhance the overall concretes characteristics and in a view to restrict the initial crack propagations. Furthermore, weight and thermal conductivity possibly descended by replacing fine aggregate with several materials with low specific gravity (1% of coco-peat powder, 6% perlite, 30% of GGBS and 10% gypsum) which also enhances the workability of fresh mix. M15 grade of concrete specimens are casted and tested for its strength characteristics and thermal property and results with the above-mentioned percentages of fibers and compared for its optimum composition after validation studies. Wall panels of control mix and optimum composition (1% of glass fiber) are modeled and analyzed using the software ABAQUS 6.14-1 and its results are analogized.

**Keywords:** Fiber Reinforced Light Weight Concrete, GGBS, Gypsum, Perlite, Coco Peat, Glass Fiber, Polypropylene Fiber, Thermal Conductivity, and Thermal Resistivity

Read Full Paper · Download PDF · Back to index

---

## 11 Fringe area transformation of historical Satara village at Aurangabad city

Paper ID V7I4-1155 · Pages 46-53 · Urban Design-architecture

**Rajni Sharma**, Student, Marathwada Institute of Technology, Aurangabad, Maharashtra
**Pranita Pranjale**, Associate Professor, Marathwada Institute of Technology, Aurangabad, Maharashtra

Rapid Urbanization has led to the expansion of cities with changing land use and occupation. These changes have transformed the city hinterlands into Fringe areas / peri-urban settlements. In India, city fringe areas are largely neglected in policy and practices (Randhawa and Marshall, 2014) as they do not belong to any municipal limit and therefore migrants find it easy to settle in these areas. These Fringe areas face serious problems due to inadequate land-use planning and governance. The aim of the research is to study the transformation of historical settlements infringes of Aurangabad city. By detailed studying the settlement history, character and land use pattern, issues and challenges are listed. Based on these listed Issues, the paper highlights the Solutions and Guidelines for the cautious development of these Fringe areas.

**Keywords:** Fringe area, Urbanization, Transformation, Urban growth, Issues, Governance

Read Full Paper · Download PDF · Back to index

---

## 12 Design and Implementation of a Vending Machine and its performance evaluation using EDA tools

Paper ID V7I4-1160 · Pages 54-60 · Electronics Engineering

**Anand Jonathan Roy**, Student, SRM Institute of Science and Technology, Chennai, Tamil Nadu
**Manish Kumar**, Student, SRM Institute of Science and Technology, Chennai, Tamil Nadu
**K. Suganthi**, Assistant Professor, SRM Institute of Science and Technology, Chennai, Tamil Nadu

In today’s world, vending machines have become an extension of the physical and online stores and are evolving as one of the largest consumption modes. Nowadays, you will be able to see them in malls, offices, stations, parks, etc. These machines are rapidly becoming a great part of one’s shopping experience. This is the reason why a lot of people are looking forward to investing in them and earning money with this very

© 2021, IJARIIT.COM All Rights Reserved

convenient business opportunity. This project aims to design a common vending machine with an additional feature (reverse vending machine) that enables a consumer to recycle the container/wrapper of the item purchased by them for which appropriate incentives are returned. It offers the person to carry out their transaction via cash/card /online payment modes. Unique QR codes/Barcodes are associated with each product to have information about the product and its cost. The reverse vending machine consists of a scanner that scans the code of the product which is inserted into the machine and completes the transaction accordingly. The vending machine is programmed using Verilog HDL and is simulated on ModelSim-Intel FPGA Edition Software. Chip planning, timing, power, and various other design and performance analysis are carried out using Intel Quartus Prime Software Suite.

**Keywords:** Vending Machine, Verilog HDL, Reverse Vending Machine, FPGA, Performance Characterization, Slack, HPWL, Quartus Prime

Read Full Paper · Download PDF · Back to index

---

## 13 Home security surveillance

Paper ID V7I4-1168 · Pages 61-63 · Computer Science

**Shubham Tiwari**, Student, The National Institute of Engineering, Mysore, Karnataka
**Rohit Mishra**, Student, The National Institute of Engineering, Mysore, Karnataka
**Ryan Sumbli**, Student, The National Institute of Engineering, Mysore, Karnataka
**Subham Gupta**, Student, The National Institute of Engineering, Mysore, Karnataka

Advancing technology in the field of facial recognition systems (FRS) and optical character recognition(OCR), closed-circuit television (CCTV), and automatic license plate readers could make it possible to create a system that could make the gates of society/ homes intelligent. This project examines the convergence of these technologies to design an efficient system and improve the speed and accuracy of potential burglary or break-in identification, also through facial recognition systems and optical character recognition, we aim to automate Guest Authentication and to provide another layer of protection and create a deterrent to burglary and also automate guest authentication via FRS and OCR (which will make the process safer as well as efficient)

**Keywords:** Facial Recognition, Optical Character Recognition

Read Full Paper · Download PDF · Back to index

---

## 14 Use of solar energy to improve the performance of a jaggery manufacturing unit

Paper ID V7I4-1173 · Pages 64-67 · Agriculture

**Akshay Kaushal**, Research Scholar, Great Lakes Institute of Management, Bilaspur Khurd, Haryana

Jaggery is a boiled sugar cane juice used as a sweetener. Because the combustion process in the jaggery industry has an energy-intensive nature, previous literature studies have introduced various changes in processes and equipment to affect its energy efficiency. This study helps to comprehend commodity alterations and utilization in jaggery by proffering an exergy analysis. The baseline process has been modified operationally to calculate the efficiency of exergies and exergy destruction. By the amendments have

© 2021, IJARIIT.COM All Rights Reserved

respectively enhanced thermal performance and exergy efficiency by 11.2 percent and 0.8 percent. Extensive exergies were expended as excessive energy as flue gas which, due to change requests, was reduced by 11.5 percent. The data indicate that while environmental flue gas was the most apparent type of gas, exergy destruction by irreversible combustion factors caused the largest type of resource use. The study in this report increases the efficiency of energy use as well as setbacks through exergy analytical form.

**Keywords:** Jaggery, Sugar, Bagasse, Energy, Temperature

Read Full Paper · Download PDF · Back to index

---

## 15 Implementation of IoT based smart village for rural development

Paper ID V7I4-1167 · Pages 68-70 · Iot

**Shwetha R.**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Ramyashree P.**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Sagar R. Sankole**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Goutam R.**, Assistant Professor, Atria Institute of Technology, Bengaluru, Karnataka

Villages are considered the heart of our nation India and the economic growth of villages along with cities is as important to us. Hence, for the development to percolate to the grass-root level, the focus must be devoted to the progress of the village. Enabling the concept of IoT (Internet of things) for increasing the possibilities of agriculture growth and productivity, sanitation and well maintenance of drainage which concerned cattle health and human health would lead to the growth of farmers for their smart lifestyle. Therefore, farmers need appropriate facilities and guidance in making their village smart, so this paper IoT implementation proposed for farmers where various data is collected regarding the weather, moist content in soil, blockage and clearance drainage along with harmful gases and dairy products where this information is delivered. This system through raspbian OS, taking input from sensors like IR, UV, LDR. The data is analyzed by collective information and auto-mechanism of some instruments which are connected to reach the target are initiated along sending appropriate messages through GSM to their phones, where Wi-Fi is by default feature included raspberry pi board as no internet connection is required again for communication.

**Keywords:** IoT, Raspbian OS, GSM, and Sensors

Read Full Paper · Download PDF · Back to index

---

## 16 Dielectric Resonator Oscillator

Paper ID V7I4-1154 · Pages 71-73 · Electronics And Telecommunication

**Manisha B.**, PG Scholar, RV College of Engineering, Bengaluru, Karnataka
**Dr. K. Sreelakshmi**, HoD, RV College of Engineering, Bengaluru, Karnataka
**Ranjit Kumar Dora**, Manager, Centum Electronics Ltd., Bangalore, Karnataka,

This paper describes the detailed theory of design of DRO. The design parameters of the Dielectric resonator oscillator (DRO) and the different techniques used to design DRO are illustrated. The use of a negative resistance amplifier (NRC) and the dielectric resonator in the design of DRO are explained.

© 2021, IJARIIT.COM All Rights Reserved

**Keywords:** Resonator, Dielectric Resonator, Dielectric Resonator Oscillator, Negative Resistance Amplifier (NRC)

Read Full Paper · Download PDF · Back to index

---

## 17 Study on thermal conductivity of fiber-reinforced light weight concrete using natural fibers

Paper ID V7I4-1169 · Pages 74-81 · Civil

**Shiva Shankari N.**, Student, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu
**Nithyapriya K.**, Assistant Professor, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu

Lightweight concrete has lower thermal conductivity and a lower coefficient of thermal expansion. This project aims to develop Eco-friendly thermally insulated lightweight concrete by using fibers. Hemp and sisal are natural fibers that play a major role in the reduction of thermal conductivity. Vermiculite is a naturally available material that can be used for lightweight concrete furthermore provides good thermal insulation. Reducing the thermal conductivity by adding fibers in different proportions (1%,1.5%,2%) in concrete where Vermiculite is partially replaced with fine aggregate and Fly ash is partially replaced with cement in which shows a reduction in thermal conductivity and also it can be used for lightweight concrete. The thermal conductivity of the concrete is tested for different mix proportions. Then the mechanical property and durability of the concrete are tested for different proportions. The thermal conductivity of the fiber-reinforced lightweight concrete is tested and the results show that when the amount of fiber increased the thermal conductivity is low. Thus, the low thermal conductivity is obtained by natural fibers. The mechanical strength of the different proportions of mixes are carried out and results show that the increase in fiber reduces the strength. The plate and wall panel are analyzed in Abaqus for the control mix and low thermal conductivity fiber-reinforced lightweight concrete mix which gives the minimum thermal conductivity and appropriate strength. The results from these experiments are found out that the natural fibers and vermiculite can be a good solution for thermally insulated Eco-friendly building construction

**Keywords:** Thermal Conductivity, Natural Fibres, Hemp Fiber, Sisal Fiber, Vermiculite, Fly Ash, Fiber Reinforced Concrete, Light Weight Concrete

Read Full Paper · Download PDF · Back to index

---

## 18 Improving the accuracy of Neural Networks through Ensemble Techniques

Paper ID V7I4-1174 · Pages 82-86 · Neural Networks

**Monalika Padma Reddy**, Student, Visvesvaraya Technological University, Belgaum, Karnataka
**Deeksha A.**, Student, Visvesvaraya Technological University, Belgaum, Karnataka

Neural networks usually suffer from model performance problems due to high variance. Ensemble techniques refer to the method of combining multiple models resulting in improving the overall performance of the model. The overall performance can be improved by combining the predictions from multiple models having a good accuracy instead of highly tuning the models, to reduce the variance of predictions and reduce the error due to generalization. In this paper, the different types of ensemble techniques such as stacking ensemble, horizontal voting, and weight average ensemble are being discussed which can be used to improve the model accuracy.

© 2021, IJARIIT.COM All Rights Reserved

The numerous disadvantages of hyperparameter tuning like the wrong choice of parameters, overfitting, and other inefficient optimizing strategies can be overcome using ensemble techniques. The ensemble techniques have numerous advantages such as improving the model performances, reduction of model variance, and so on. Accuracy is improved because results are obtained using the mean predictions of the number of sub-models and the performance is improved with the learning weights of each of the models.

**Keywords:** Ensemble techniques, Horizontal Voting, Hyperparameters, Neural Networks, Stacked generalization ensemble, Weight Average Ensemble

Read Full Paper · Download PDF · Back to index

---

## 19 Cold mix technology using granite waste and rubber waste in road construction

Paper ID V7I4-1183 · Pages 87-89 · Civil Engineering

**Shreyas Anil Patane**, Research Scholar, Vivekanand Education Society Polytechnic, Mumbai, Maharashtra
**Gavrav Pandurang Bavdhane**, Research Scholar, Vivekanand Education Society Polytechnic, Mumbai, Maharashtra
**Dhiraj Pradip Joshi**, Research Scholar, Vivekanand Education Society Polytechnic, Mumbai, Maharashtra
**Omkar Sunil Chavan**, Research Scholar, Vivekanand Education Society Polytechnic, Mumbai, Maharashtra
**Sanika Kandalekar**, Assistant Professor, Vivekanand Education Society Polytechnic, Mumbai, Maharashtra

Hot Mix Asphalt is used as a paving mix for many decades in road construction. In India, 90 percent of roads are constructed by bituminous pavements only. Certain Imitations associated with hot mix asphalt using are Re emission of greenhouse gases from hot mix plant, that down of plants during the rainy season, problems in maintaining the paving temperature when hauling stances are more, There for to overcome the disadvantages of hot mix asphalt there is an increasing trend for using cold mix design with bitumen emulsion all over the world because of several advantages such as elimination of heating of hinder and aggregate while producing mixes, this helps in protection of the environment and energy conservation.

**Keywords:** Cold Mix technology, Emulsion, Aggregate, Anti-striping Agent, Rubber Waste

Read Full Paper · Download PDF · Back to index

---

## 20 Design of water supply treatment process for rural areas

Paper ID V7I4-1184 · Pages 90-94 · Environmental Engineering

**Falguni Dachewar**, Research Scholar, Yeshwantrao Chavan College of Engineering (YCCE), Nagpur, Maharashtra
**Dr. Harshal Warade**, Assistant Professor, Yeshwantrao Chavan College of Engineering (YCCE), Nagpur, Maharashtra

Every aspect of life requires water. Safe drinking water is a basic human right and a prerequisite for improving global living conditions. A clean water supply is the bedrock of a strong economy, but it is woefully devalued globally. Nearly 1.5 million children die each year from water-related diseases around the world. The health of the inhabitants in rural areas has always been low and suppressed. A proper water supply tends to improve people's quality of life by increasing their usage of clean drinking water, reducing the prevalence of water-borne diseases, and increasing their productivity. A design of the water supply treatment process will prove to be beneficial for people in rural regions with careful planning, economic and financial evaluations along with

© 2021, IJARIIT.COM All Rights Reserved

effective design, operation, storage, and distribution facilities provided.

**Keywords:** Treatment Processes, Non-Conventional, Conventional, and Units

Read Full Paper · Download PDF · Back to index

---

## 21 Effectively developing a recommendation system by implementing collaborative filtering

Paper ID V7I4-1188 · Pages 95-99 · Recommendation System

**Darshan C. M. Pawar**, Research Scholar, Atria Institute of Technology, Bengaluru, Karnataka
**Arthi Sharma V.**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Syeda Fathima Zohra**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Syeda Arbeena**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Maqdum Shariff**, Assistant Professor, Atria Institute of Technology, Bengaluru, Karnataka

Recommender structures are developed to predict a client's preferences and recommend items that are likely to be relevant to them. They are most likely the most complicated AI computations used by web businesses to assist with transactions. Collaborative filtering, for example, finds a group of users based on the goods they buy or provide comments on and then recommends popular items in the group. Using variables like Video ID, hate, likes, favourite count, description, and keyword, a video recommendation engine is employed on the YouTube dataset. The most popular online video community on the planet is YouTube. Users' likes and dislikes on the site are used to suggest groups of videos to them. Collaborative content filtering algorithms were used in the suggested system. Data can be collected in a variety of ways, such as downloading with certain categories, ensuring that the information is always up to date. Users will see the top five YouTube videos based on the experimental results.

**Keywords:** Recommendation System, Machine Learning, Collaborative Filtering, Python

Read Full Paper · Download PDF · Back to index

---

## 22 Strengthening and compressive behavior of composite multilimbed lightweight CFS build up a column

Paper ID V7I4-1192 · Pages 100-102 · Structural Engineering

**C. N. Nazinin**, Research Scholar, Ilahia College of Engineering and Technology, Mulavoor, Kerala
**Adila Abdulla Kunju**, Assistant Professor, Ilahia College of Engineering and Technology, Mulavoor, Kerala

In building construction there are basically two types of structural steel, hot-rolled steel shapes, and cold-formed steel shapes. The manufacturing process of cold-formed steel involves forming the material by either press-braking or cold roll forming to achieve the desired shape. The built-up CFS columns have better performance than CFS columns of single-channel sections. In this study, the structural performance of new types of composite columns: I-shape, C-shape, and Z-shaped CFS columns of partially concrete-filled and fully concrete-filled are analyzed. This axial performance is compared with hot rolled sections (ISMB) using ANSYS 19. A finite element analysis (FEA) model was developed to simulate the structural performance of these specially shaped CFS columns. Columns were analyzed under axial loading conditions. Investigation in buckling

© 2021, IJARIIT.COM All Rights Reserved

improvement due to partially and fully filled in CFS has good scope in the cost-effective method of improving stiffness and strength. Global buckling was the major failure mode detected. From the comparison, it was observed that the weight of CFS is half of ISMB and fully filled concrete CFS I-shaped section has a 111% increase in load than ISMB section

**Keywords:** CFS Column, Hot Rolled Ismb Column, Finite Element Analysis (FEA), Buckling, Axial Loading, Multi-Limbed Column, Pinned Support, Full Filled Concrete (FC), Partially Filled Concrete (PC).

Read Full Paper · Download PDF · Back to index

---

## 23 Multi regional GKE cluster implementation on GCP using Terraform

Paper ID V7I4-1158 · Pages 103-106 · Cloud Engineering (google Cloud)

**Aditya Ashok Illur**, Student, RV College of Engineering, Bengaluru, Karnataka
**Aaryaman T P Katoch**, Student, RV College of Engineering, Bengaluru, Karnataka
**Poornima Kulkarni**, Professor, RV College of Engineering, Bengaluru, Karnataka
**Manas M. N.**, Professor, RV College of Engineering, Bengaluru, Karnataka

With the increase of threats and attacks, it's more necessary than ever to be prepared, and implementing cloud endpoints for decryption and authorization is getting increasingly difficult. Kubernetes is one of the finest methods for mitigating the risk of multi-regional failures. This paper describes ways to develop effective and efficient ways to achieve it with the best practices to build the global Kubernetes presence for the cloud authorization endpoint with guidance to build infrastructure and DevOps practices that are necessary to make it operate in multi-region, high-availability presence and leveraging Kubernetes and spanner. Also, automation using GitHub Style CI-CD

**Keywords:** Endpoints, Decryption, Kubernetes, Cloud Authorisation, Multi-Region, Spanner, CI-CD

Read Full Paper · Download PDF · Back to index

---

## 24 Web development system for online food and stationery products

Paper ID V7I4-1164 · Pages 107-112 · Computer Science Engineering

**Manasij Mandal**, Student, JIS College of Engineering, Kalyani, West Bengal
**Dr. Bikramjit Sarkar**, Assistant Professor, JIS College of Engineering, Kalyani, West Bengal
**Ayusree Nandi**, Student, JIS College of Engineering, Kalyani, West Bengal
**Pritilata Majumdar**, Student, JIS College of Engineering, Kalyani, West Bengal
**Twinkel Dhar**, Student, JIS College of Engineering, Kalyani, West Bengal

The daily increasing demand from restaurant travelers created the need to pay more attention to the hospitality industry. Customers need many alternative supplies with ease of ordering and delivery. Technical intervention has come to be obligatory to enhance the excellence of services and commercial enterprises on this monopoly. Pieces of proof have already existed for fragmentary automation of the food ordering procedure in our we of a, most of these technologies applied are primarily based on wi-fi technology. This documented reviews the utilization and combination of a net-based total era for eating places. A dynamic database software system became designed to fetch all the statistics from a centralized database. Consumer software becomes given importance at some point of the improvement of this interface and performance, accuracy was the

© 2021, IJARIIT.COM All Rights Reserved

priority for better consequences and services and to reduce the majority of the human error. It became observed that this gadget became successful in overcoming the shortcomings determined in the previously evolved similar structures. furthermore, this system becomes very cost-effective in development as well as at some point of use. Online food and stationary product ordering device are contingent right here which make simplify the food and stationary product ordering procedure. The used gadget suggests a consumer weld and updates the food list with all to be had optional in order which, it becomes affluence the patron's paintings. Customers can choose a couple of objects to give an order and may view order information earlier than log out. Customers then get an order confirmation from the system. The updated order is located in the string and restored inside the database and again back into real-time. This whole system assists the group of workers to go through the orders in actual time and method them efficaciously with minimal mistakes. Through this website, we will try to give online food and stationery to the students and teachers of my college which was found to be very helpful. Through this website, they can easily get their needful at any time. This website contains a map, where they can order from any shop of their choice

**Keywords:** Web-based, Food, PHP, MYSQL, CSS, HTML, BOOTSTRAP

Read Full Paper · Download PDF · Back to index

---

## 25 Study on strength of gypsum composite wall panel

Paper ID V7I4-1171 · Pages 113-120 · Civil

**Sivasangari Gopalakrishnan G.**, Research Scholar, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu
**Nithyapriya K.**, Assistant Professor, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu

Gypsum based composites are widely used in building construction because of their low cost, easy manufacture and many benefits for house living conditions. The wall panels are solid and can be used as load bearing walls. The materials to be used for the panel are gypsum, white cement, glass fibre, and sisal fibre. Gypsum has been widely used in the field of construction engineering due to low energy consumption, cost effective, good fire resistance, thermal and sound isolation properties etc. White cement is a cement with a high tricalcium aluminate content and almost no tetra calcium alumina ferrite. The white cement mortars showed 7% greater tensile strength and 25% greater compression strength than the grey cement mortars. Roving Glass Fibre commercially available E glass fibres can be used to reinforce the gypsum plaster matrix and produce a strong composite material having improved tensile and impact properties. Incorporation of glass fibre increases the mechanical, thermal and water resistance properties. Sisal Fibre is a natural fibre of Agavaceae (Agave) family that yields a stiff fibre, traditionally used in making twine and rope. The advantages of natural fibre composites include lightweight, low-energy production and environmental friendly. Several series of gypsum composites by weight substitution of gypsum with a 1.5% weight of glass fibre and 1% of sisal fibre with proportions such as 20% of white cement are developed and the mechanical properties are to be tested. The axial and shear capacities of gypsum composite wall panel have to be obtained from the experimental tests. The simplified analytical model is verified using the results of ANSYS analysis with materials and properties typical of those used in the building. The results are compared with the experimental results of the test conducted, and results from the model analysis.

**Keywords:** Gypsum Composite Wall, Finite Element Model, Glass Fibers, Sisal Fibers

**© 2021, IJARIIT.COM All Rights Reserved**

Read Full Paper · Download PDF · Back to index

## 26 Study on acoustic properties of natural fiber reinforced light weight concrete

Paper ID V7I4-1175 · Pages 121-126 · Civil Engineering

**Nivetha V.**, Student, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu
**M. P. Muthuraj**, Assistant Professor, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu

Fibers and foams are commonly used in commercial solutions in acoustic applications because of their excellent sound absorption coefficient at high frequencies [1, 2]. The present study focuses on improving the sound absorption property of lightweight concrete by adding coconut fibers in different proportions (0.5%, 1%, and 1.5%) in concrete where fine aggregate is replaced by 7% perlite. Gypsum is added to replace 10% cement to make the concrete lightweight and also to perform as a good sound absorber. A foaming agent is also added to improve the porous property of the concrete [2]. The acoustic absorption coefficient is determined using the impedance tube method-ISO 10534- 1:1996 [7]. The responses from the tests performed are compared and the results are analyzed. The results show that the addition of fiber increases sound absorption property and also the addition of perlite and gypsum which makes the concrete lightweight also has a significant impact.

**Keywords:** Sound Absorption Coefficient, Perlite, Coconut Fiber, Foaming Agent, Impedance Tube

Read Full Paper · Download PDF · Back to index

## 27 Blood bank management system

Paper ID V7I4-1200 · Pages 127-130 · Computer Science And Engineering

**Abhishek Raj Nair**, Student, Marian Engineering College, Thiruvananthapuram, Kerala
**Dhanush Krishnan U.**, Student, Marian Engineering College, Thiruvananthapuram, Kerala
**Emy Alphonsa Selastin**, Student, Marian Engineering College, Thiruvananthapuram, Kerala
**Tijo B. Gomez**, Student, Marian Engineering College, Thiruvananthapuram, Kerala
**Nitha L. Rozario**, Assisstant Professor, Marian Engineering College, Thiruvananthapuram, Kerala

Blood is a fundamental component of the human body that is essential for human life; it delivers nutrients and oxygen to all body cells, and we chose the blood bank as our paper because of its significance. A real-time central blood bank management system based on Firebase was created to aid in the management of donor and seeker records, bloodstock monitoring, and providing a service that assures patients have speedy access to blood donors of any sort, whether volunteers, hospitals, or blood banks. The system was designed in such a way that both web-based and android-based platforms are being used. The web platform is used by blood bank system administrators to update available bloodstock information, manage blood requests and donor requests, and the mobile platform is used to search for blood supplies from registered blood banks or hospitals and motivates donors to donate blood by reminding them through notifications. As a result, this platform will play a critical role in making blood quickly available for patients in need, boosting the chances of saving their lives.

**Keywords:** Blood Bank Management System, Cloud Storage, Donor, Seeker, Real-Time

Read Full Paper · Download PDF · Back to index

© 2021, IJARIIT.COM All Rights Reserved

## 28 Review of the impact of residual stresses on various parameters during a wire-cut EDM cutting process

Paper ID V7I4-1210 · Pages 131-134 · Advance Manufacturing

**Sunil**, Research Scholar, Harcourt Butler Technical University, Kanpur, Uttar Pradesh
**S. K. S. Yadav**, Assistant Professor, Harcourt Butler Technical University, Kanpur, Uttar Pradesh

Wire cut EDM is a very sophisticated technique that is utilized in precision manufacturing. Because of the tiny residual stresses that exist inside a grain, mostly as a consequence of the existence of dislocations and other crystalline defects, residual stresses produced during cutting operations must be taken into consideration. The primary goal of this study is to give an overview of current developments in the field of residual stress generation and their impact on different factors such as surface roughness, dielectric material utilized, and pulse on time during wire cut EDM. Examine the methods for measuring residual stress briefly as well.

**Keywords:** Wire-Cut EDM, Residual Stresses, Performance Parameter, Advance Manufacturing Process

Read Full Paper · Download PDF · Back to index

---

## 29 Kesla Smart Lock

Paper ID V7I4-1209 · Pages 135-137 · Electrical

**R. Karthik**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**R. Venkata chalam**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**Y. Mohan**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**M. C. Charanraj**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**K. Swaroop**, Assistant Professor, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh

The information-sharing aspect of information technology is playing a major role in all kinds of business either it’s a non-profit organization or a profit organization. Now a day, all types of business requirements and adopt the facility of advertisement to promote their services and products. Digital advertisement is the current requirement of modern businesses and the information world. Security plays a major role where a Huge amount and expensive things are going to be stored (lockers, personal lockers, house purpose, etc…). The proposed system provides more benefits over a traditional lock, as well as great security. The KEY consists of a Fingerprint Sensor and 16x2 LCD along with a PICI8F452 microcontroller. The LOCK consists of a microcontroller along with a servo motor. Users can perform operations such as locking and unlocking the locker or door. The aim of this project is to make such type of lock which will provide more security as well as cost-efficient implementation. Electronic KEY consists of Fingerprint Sensor as input and LCD display as output device and microcontroller as controlling unit. The Fingerprint Sensor should provide to unlock the key which is set by the user. On the other option, Fingerprint Sensor changing option is gives more security, that only authorized persons can do it. Thus the security of this system is ensured.

**Keywords:** Finger Print, Microcontroller, LCD Display, Application Software

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 30 Development and performance evaluation of interlocking bricks using industrial waste materials

Paper ID V7I4-1207 · Pages 138-146 · Civil Engineering

**Vijay Adhithya A.**, Student, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu
**Kalpana V. G.**, Assistant Professor, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu
**Malavan K.**, Research Scholar, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu

Red brick is a basic building material used in the construction of buildings. In the ever-growing construction field, Civil Engineers are searching for new building materials based on economy, durability and efficiency. It should also be eco-friendly. This project aims to create low cost, eco-friendly, sustainable and durable system for the construction of load-bearing walls using the Interlocking Bricks (IB). It is a mortar-less masonry system and cement is also not used in brick manufacturing. The interlocking brick is made using waste materials (i.e. fly ash & GGBS) and hydraulic lime as binder. Mix proportions are varied based on the proportion of waste materials. Comparison of interlocking brick and conventional brick on the basis of compressive strength & water absorption of the brick unit. It was found that interlocking brick composed of 55% of fly ash, 25% of GGBS and 20% of lime had the best results in all the tests. The compressive strength was 30% higher than the conventional red bricks. The interlocking brick wall panel was tested by applying axial compressive load and software analysis is carried out using ANSYS 2021 R1 to compare it with the experimental results to find the degree of accuracy between theoretical and experimental models. Cost analysis is done to compare the rate of construction with conventional red brick masonry and was found that it was almost 40% cheaper.

**Keywords:** Fly Ash, GGBS, Lime, Compressive Strength, Interlocking Brick, Mortar-less Masonry, ANSYS, and Cost Analysis

Read Full Paper · Download PDF · Back to index

---

## 31 Cartoonify Image using Bilateral Filter and Adaptive Threshold

Paper ID V7I4-1191 · Pages 147-149 · Computer Science Engineering

**Saqib Ahamed Sharief**, Student (Any Degree), Atria Institute of Technology, Bengaluru, Karnataka
**Sanjay S. V.**, Student (Any Degree), Atria Institute of Technology, Bengaluru, Karnataka
**Sunil H. V.**, Student (Any Degree), Atria Institute of Technology, Bengaluru, Karnataka
**Padmini C.**, Assistant Professor, Atria Institute of Technology, Bengaluru, Karnataka

In the ever evolving technology and research in various domains processing of an image which having an object in an image, finding out dimensions, the objects count, changing images to blurring effect and providing animated features are given appreciation in the modern world involving media and communication. There are multiple properties in image processing. Each of property helps to produce image with more clarity. Each image is looked through various grids. Each picture element is together viewed as a 2-D matrix. With each cell storing different individual pixel values corresponding to every cell of picture element.

**Keywords:** Image Processing, Animated Features, 2-D Matrix

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 32 Android dictionary application in Android studio

Paper ID V7I4-1194 · Pages 150-156 · Computer Science & Systems Engineering

**Keerthana Mudadla**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**M. Sion Kumari**, Assistant Professor, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Sadasivuni Nikhitha**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Padmanjani Darapureddy**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Praneetha Meka**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh

For Students, Teachers and any individual across the world, Dictionary plays a significant role in their life in variety of ways. For instance, with the help of dictionaries, Students can understand their subjects better, improve their communication, and improve their grades by using the words correctly. For medical professionals, a dictionary consisting of medical terms, sorted alphabetically, will be helpful for quick reference. The first ever dictionaries are in the form of books, available even now in any bookstore. But they consume lot of time in searching and the risk of losing them or pages being torn-out is high. With the evolution of technology, it is now much easier to search the unfamiliar words on search engines such as google, etc., with an active internet connection. This advancement is much efficient than the custom book-form, yet is far from the best. This is because of some factors like battery consumption, internet charges, etc., that are evident with using search engines. Thus, the need for developing an android dictionary app is in excess. There are some offline dictionary apps that exist before which fulfill the basic requirement of providing meaning for a word or they're just limited to few features. But they do not provide more features altogether in one app that would help user understand better. For example, a "Easy English Dictionary Offline Voice Word Meaning" app available in the google playstore does not contain features like antonyms, word sharing and it also doesn't give the context in which the word can be used. In order to take care of all these issues, we created a platform where the user finds all advanced features of the dictionary in a single app. This helps them improve their language and expand their domain of vocabulary. This offline app is developed by using Java for back-end and XML for front-end development, SQLite Database for database creation, and with Android Studio as IDE. This paper gives an understanding about how our application is a package of many features available together, which a dictionary should essentially incorporate in order to provide the user with utmost understanding. In our app, we provide features like definitions, synonyms, antonyms, examples and pronunciations to the words using Text-To-Speech class. The main aspect which distinguishes and makes our app special from the other offline apps is its sharing feature. When a user browses through any document/site on his mobile and comes across a word that he/she is unfamiliar with, the word can be simply shared to the app from that document/site itself. The app then displays the word with its definition, synonyms, etc. This eliminates the extra effort and time spent in opening the app and then searching the word.

**Keywords:** Text-To-Speech, Android Studio, SQLite Database, Java, XML

Read Full Paper · Download PDF · Back to index

© 2021, IJARIIT.COM All Rights Reserved

## 33 Effect of Reinforced Aerocon Block Infill And Double Diagonal RCC Strut RC Frames Under Cyclic Loading

Paper ID V7I4-1180 · Pages 157-167 · Civil Engineering

**G. Ajisha Selva Santhi**, Student, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu
**Dr. S. Arulselvan**, Associate Professor, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu

Traditional infill materials considerably influence the holistic response of framed structures due to their increased strength and stiffness. At present, aerocon autoclaved aerated concrete (AAC) blocks have widespread use around the world as a prospective infill material. Hence, a smaller scale prototype of a RC frame with Reinforced Aerocon Block Infill was constructed in the laboratory to evaluate its performance under lateral loading. Also, to enhance the load carrying capacity and stiffness characteristics, RC frame with Double Diagonal RC Strut was constructed and tested under lateral loading.This study is intended to investigate the behaviour of RC Frame with Reinforced Aerocon Block Infill and RC Frame with Double Diagonal RC Strut under lateral loading. The load-carrying capacity, Stiffness degradation, Ductility factor , Cumulative ductility factor and Energy dissipation capacity of the RC frames had been documented. The response of the frames showed the complete behaviour of the RC frames under lateral loading. the infill contribution to the overall structural performance, significant enhancement of stiffness, strength and energy dissipation of frame is evident. Compression diagonal failure was eliminated in the brick infill by the presence of reinforcement layers.

**Keywords:** Cyclic Loading, Aerocon AAC Blocks, Reinforced Block Masonry, Lateral Loading

Read Full Paper · Download PDF · Back to index

---

## 34 Effectiveness of online teacher education program- A case study

Paper ID V7I4-1161 · Pages 168-176 · Education

**Dr. Ritika Dabas**, Assistant Professor, State Council of Educational Research and Training, New Delhi, Delhi
**Dr. Geeta**, Assistant Professor, State Council of Educational Research and Training, New Delhi, Delhi

Teachers have to perform multiple roles like academic facilitators, transmitters of knowledge, organizers, and guides. In order to enable teachers to meet these professional expectations, concerned stakeholders work hard to design teachers' training course design, exposure about pedagogical practices is given, updation of knowledge and skills is ensured through in-service teacher training programs. In-service teacher training help teachers to evolve and adapt to the fast-changing global scenario. The spread of the COVID 19 virus forced educators to design and opt for online ways of fostering the professional capabilities of teachers to enable them to get connected to their students through various online modes. The present study focuses on the need and ways of online training for teachers so that they can reduce the learning deficit caused due to corona pandemic. The factors like course design, mode of transaction, hours spent, degree of participation, the competence of teacher educators, exposure, and expertise to use technology add to the effectiveness of any online program. An effective online teacher training program brings desirable behavioral changes in terms of knowledge, skills, and beliefs of the participants.

**Keywords:** Online Teacher Education, Effectiveness, In-Service Teacher Education

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 35 Interactive inverter for grid-tied solar power generation

Paper ID V7I4-1186 · Pages 177-178 · Electrical

**K. Mohan**, Research Scholar, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**Sarah Babu V.**, Research scholar, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**T. Dinesh**, Research scholar, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**K. Rahul Raj**, Research scholar, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**V. Pandiyan**, Faculty and guide, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh

Presently a lot of work is being carried out in held of distributed generation. Many distributed generation systems are being designed and connected to the electric grid. At a time when the predictable sources of energy such as coal, oil, etc are fast vanishing, a study of distributed generation systems and building of such systems using renewable energy sources becomes very main. When a DG source is being connected to the grid, there are many constraints to be met one of which is the harmonic content of the current being injected into the grid. The current being injected should have harmonic content compliant to standards such as IEEE This project deals mainly with building the hardware for a grid-interactive inverter. This means that a proper scheme should be present in the system to limit the harmonic current inoculation into grid. The hardware is customized to be used for a PV panels based distributed generation system. In this work, Liters are designed to eliminate only the higher-order harmonics. This is due to the reason that liters would be less bulky and cheap when they are designed to attenuate only the higher-order harmonics. In order to mitigate the lower order harmonics, an adaptive selective harmonic elimination technique (AHE) is used. The validity of the AHE technique is varied in hardware. Overall, the project work involves the building of the inverter hardware, the Liters, transformer and design and implementation of closed-loop control along with AHE scheme.

**Keywords:** Solar Panels, Inverter, Batteries, Led, Capacitor

Read Full Paper · Download PDF · Back to index

---

## 36 Anterior fractured tooth restoration using fiber-reinforced composite: A case report

Paper ID V7I4-1189 · Pages 179-182 · Dentistry

**Dr. Pradnya V. Bansode**, Professor, Government Dental College and Hospital, Aurangabad, Maharashtra
**Dr. Seema D. Pathak**, Professor, Government Dental College and Hospital, Aurangabad, Maharashtra
**Dr. Madhuri Wavdhane**, Asso.Professor, Government Dental College and Hospital, Aurangabad, Maharashtra
**Dr. Geetam U. Duduskar**, MDS Student, Government Dental College and Hospital, Aurangabad, Maharashtra

Anterior teeth fracture is one of the most common types of complaints in the dental office. It affects not only the function and speech of the patient but also the emotional and psychological well-being of the patient due to esthetic concerns. The reconstruction of the structurally compromised anterior tooth is of great challenge to dentists. Conventional composite restoration is the choice of restoration in such cases, but strength is an issue. To provide longevity and strength to restorations fiber-reinforced composites can be used in such cases. In the present article esthetic rehabilitation of anterior fractured tooth using fiber reinforced composites is presented.

**Keywords:** Fibre Reinforced Composite, Fractured Anterior Teeth, Esthetics

© 2021, IJARIIT.COM All Rights Reserved

Read Full Paper · Download PDF · Back to index

## 37 Review of heat exchanger for subcooling of liquid Nitrogen in GM cryocooler

Paper ID V7I4-1201 · Pages 183-186 · Mechanical Engineering

**Krushna D. Koshti**, Research Scholar, Shrama Sadhana Bombay Trust's College of Engineering and Technology, Jalgaon, Maharashtra
**Prajitsen G. Damle**, Associate Professor, Shrama Sadhana Bombay Trust's College of Engineering and Technology, Jalgaon, Maharashtra

The heat exchanger is a device that exchanges heat between two flow lines. The goal of this article is to emphasize and presents briefly the heat exchanger designs used for liquefaction of nitrogen gas and subcooling of liquefied gas. Different researchers proposed various heat exchanger designs for liquefaction and subcooling of liquid nitrogen. Liquefied nitrogen gas has many applications. In this article, the heat exchanger designs developed by researchers over time for effective subcooling of liquid nitrogen are addressed and studied. Further content is focused on increasing the effectiveness of this type of heat exchanger for effective subcooling. The gaps in research identified and mentioned in the article.

**Keywords:** Liquid Nitrogen, Heat Exchanger, Subcooling

Read Full Paper · Download PDF · Back to index

## 38 5G Network: The Emerging Trend of the Decade

Paper ID V7I4-1218 · Pages 187-191 · Computer Science

**Aksh Yadav**, Research Scholar, Thakur Polytechnic, Mumbai, Maharashtra
**Harsh Singh**, Student, Thakur Polytechnic, Mumbai, Maharashtra
**Siddhant Singh**, Student, Thakur Polytechnic, Mumbai, Maharashtra
**Advay Surve**, Student, Thakur Polytechnic, Mumbai, Maharashtra
**Poonam Vengurlekar**, Professor, Thakur Polytechnic, Mumbai, Maharashtra

Everyone loves speed and besides rapid web, so it's nothing unexpected that each significant telecom on the planet is attempting to make it considerably quicker. Smartphone's, watches, homes, and vehicles are progressively requiring stable web associations. To make due on the planet where in consistently the speed changes and where we encourage for increasingly more innovation, here comes the fifth-age innovation: 5G. In future, i.e., a world past 4G, a portion of the excellent goals that should be satisfied are expanded limit, further developed information rate, diminished inertness, and quality assistance. To satisfy these needs, enormous scope improvement in the phone design of 5G is required. This paper essentially lays accentuation on the fifth era for example 5G cell network design and a portion of the fundamental arising advances that can demonstrate productive in acculturating the engineering and summiting the requests of clients. This paper is satisfied with the subtleties identified with 5g with the superb spotlight on the enormous different info various yield innovation and gadget to-gadget correspondence (D2D). An overall believable 5G cell network design is being proposed with the rule taken from the web books and by the point-by-point investigation of the theme.

**Keywords:** 5G, Wireless Network, Organisation, 5G Network Trend, MIMO

© 2021, IJARIIT.COM All Rights Reserved

Read Full Paper · Download PDF · Back to index

## 39 Importance of technology in managing indoor air quality

Paper ID V7I4-1211 · Pages 192-195 · Technology

**Dr. Abhijit Sarkar**, Doctrate Degree Holder, Sharekhan By BNP Paribas, Mumbai, Maharashtra

This research investigates the connection between technology and HVAC & then presents a review of the indoor air quality monitoring systems based on usage of technology. Indoor Air Quality (IAQ) is more important than people realize and is often an overlooked hazard. We often miss those nagging and often subtle signals of discomfort that poor air conditions can cause. We may understand that the air is stuffy, or damp, or irritating to our sinuses, but our job tasks seem to be calling us and we ignore the signs that accompany poor IAQ. Underperforming HVAC systems and buildings with poor ventilation expose hundreds of thousands of workers to indoor air contaminants every day.

**Keywords:** IoT, Sensors, Indoor Air Quality(IAQ), Productivity

Read Full Paper · Download PDF · Back to index

## 40 DonateEazy: Web application to assist local donations towards NGOs and non-profit organisations

Paper ID V7I4-1206 · Pages 196-200 · Computer Science Engineering

**Suhena Sujay**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Viviana Perpetua Aranha**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Shivani Kini**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Ratna Kumari**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Dr. Devi Kannan**, Associate Professor, Atria Institute of Technology, Bengaluru, Karnataka

Around 1.89 billion people, nearly 36% of the world's population live in extreme poverty. Most people lack the basic necessities such as daily meals and housing. Several NGOs and independent organizations work relentlessly around the globe to help deliver the resources to the people in need every single day .In these unprecedented times of COVID-19, the pandemic has hit the unprivileged hardest . The number of people suffering with unemployment and critical health issues has skyrocketed and donations are needed now more than ever . DonateEazy aims to make the majority of the process online, from creating and running campaigns to supporting social causes. It allows the donors to directly get in touch with the NGOs and the volunteers to the donors making the process easier.

**Keywords:** Web Application, Donation Website, Mern Stack

Read Full Paper · Download PDF · Back to index

© 2021, IJARIIT.COM All Rights Reserved

## 41 Web application security – Automating the manual exploitation methods and eliminating false positives

Paper ID V7I4-1208 · Pages 201-204 · Security

**Jayshish M. Popat**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Mohammad Ashar Nawab**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Asuri Ritesh Kumar**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Nishant Prakash**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Manjula M.**, Professor, Atria Institute of Technology, Bengaluru, Karnataka

Many web application security scanners are prone to false alarms indicating that your website is vulnerable when it isn’t. False positives are a major problem in web application security, as they make security testing slower, less accurate and more frustrating. Proof-Based Web Vulnerability Scanning Technology in DevSecOps/SecDevOps environment will let you eliminate security vulnerabilities as early as possible, helping you save a lot of resources. It would automatically exploit identified web security vulnerabilities and also produce a proof of exploits that confirms that the identified vulnerabilities are genuine and not false positives. In this paper we present a technique to find web vulnerabilities using our proposed algorithm and provide extracted sample data as proofs. Our tool identifies vulnerabilities with the same level of certainty as a penetration tester or bounty hunter. This will assist developers and security teams in fixing vulnerabilities in less possible times.

**Keywords:** Vulnerabilities, Exploits, Proofs, False Positives, Resources

Read Full Paper · Download PDF · Back to index

---

## 42 Advance skin diseases diagnosis and leaveraging using image processing

Paper ID V7I4-1219 · Pages 205-208 · Image Processing

**Akhil Reddy**, Student, Sreenidhi Institute of Science and Technology (SNIST), Hyderabad, Telangana
**Raghupathi Reddy**, Student, Sreenidhi Institute of Science and Technology (SNIST), Hyderabad, Telangana
**Shiva Kumar**, Student, Sreenidhi Institute of Science and Technology (SNIST), Hyderabad, Telangana
**Dr. K. Sateesh Kumar**, Assistant Professor, Sreenidhi Institute of Science and Technology (SNIST), Hyderabad, Telangana

Air pollution has a variety of effects on human skin. In heavily populated areas, skin problems are very frequent. These diseases have a severe effect on people's life because they create a significant demand for disease diagnosis. The suggested study on a skin disease detection system uses image processing to get an accurate diagnosis. By studying the input image, the process detailed here seeks to discover skin illness. Filtering the input to eliminate noise, converting the image to a grayscale image, and image segmentation are all part of the approach. Feature extraction is used to reduce the quantity of data that the classifier has to process. The SVM (Support Vector Machine) is then used in the image classification to identify the skin disease. The greater use of technology has resulted in a more efficient and accurate manner of diagnosing the disease, allowing it to be treated more quickly. Skin illnesses such as rosacea, melanoma, psoriasis, and acne can be detected with an accuracy of 89 percent using the proposed method.

© 2021, IJARIIT.COM All Rights Reserved

**Keywords:** SVM, GLCM

Read Full Paper · Download PDF · Back to index

---

## 43 Management of fractured endodontic instruments by file bypass technique: A report of two cases

Paper ID V7I4-1220 · Pages 209-212 · Dentistry

**Dr. Pradnya V. Bansode**, HoD & Professor, Government Dental College and Hospital, Aurangabad, Maharashtra
**Dr. Seema D. Pathak**, Professor, Government Dental College and Hospital, Aurangabad, Maharashtra
**Dr. Madhuri B. Wavdhane**, Associate Professor, Government Dental College and Hospital, Aurangabad, Maharashtra
**Lipsita Priyadarshini**, Post Graduation Student, Government Dental College and Hospital, Aurangabad, Maharashtra

The separation of an endodontic instrument within the root canal system can be one of the most stressful and unpleasant situations with which the clinician can be confronted. These fractures often occur due to incorrect use of instruments. Different devices and techniques have been developed to retrieve fractured instruments during the endodontic procedures The clinician is confronted with a few options when considering this situation. These options can include leaving the fragment where the fracture occurred and incorporating the fragment to form part of the final obturation or removal from the root canal. It can be stated that the bypass technique can be considered a simple and effective technique for the management of broken instruments into the root canal.

**Keywords:** Instrument Fracture, Instrument Separation, File Fracture, Fractured Instrument, NiTi Rotary File, Root Canal Treatment

Read Full Paper · Download PDF · Back to index

---

## 44 The efficiency of food waste material for the removal of metal and metalloid from a multi-element solution

Paper ID V7I4-1195 · Pages 213-216 · Research Article

**Nazrin Riyas**, Student, Ilahia College of Engineering and Technology, Mulavoor, Kerala
**Shabins Basheer**, Student, Ilahia College of Engineering and Technology, Mulavoor, Kerala
**Asna Binu**, Student, Ilahia College of Engineering and Technology, Mulavoor, Kerala
**Arjun T. A.**, Student, Ilahia College of Engineering and Technology, Mulavoor, Kerala
**Rashida P. K.**, Teacher, Ilahia College of Engineering and Technology, Mulavoor, Kerala

Excessive release of wastewater particularly rich in heavy metals from industrial activities is a critical environmental problem worldwide. Many metals, which are toxic and can cause various environmental problems Therefore, their removal from polluted solutions becomes one of the focuses of environmental remediation. The studies have shown the potential of food waste materials as low cost adsorbents for the removal of heavy metals and toxic elements from wastewater. Adsorption processes are being widely used by various researchers for the removal of heavy metals from waste streams and activated carbon has been frequently used as an adsorbent. Despite its extensive use in water and wastewater treatment industries, activated carbon remains an expensive material. In this study, the adsorption capacities of food waste materials along with agricultural and industrial waste by-products such as rice husk and fly ash were evaluated

© 2021, IJARIIT.COM All Rights Reserved

by comparing the adsorbents' efficiency for the removal of elements from complex element solutions, maintaining homogeneous experimental conditions. The examined materials resulted to be extremely efficient for the adsorption of many elements from multi-element solutions as well as from a heavy metal wastewater. The objective of this research is to study the utilization possibilities of less expensive adsorbents for the elimination of heavy metals from wastewater.

**Keywords:** Low-Cost Adsorbents, Adsorbents' EffiCiency, Metals, Heavy Metal Wastewater, Environmental Remediation

Read Full Paper · Download PDF · Back to index

---

## 45 Review on Improving the capacity of black cotton soil by using different materials example bio-enzymes and bagasse ash, etc.

Paper ID V7I4-1222 · Pages 217-219 · Soil Mechanics ( Civil Engineering )

**Shaikh Pirsab Maqbulsab**, Student, Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra
**Ghogare Satyajeet**, Student, Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra
**B. R. Lagad**, Professor, Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra
**Dr. S. R. Bhagat**, HoD, Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra

Soil is the main part of the foundation; it is very important to build a strong and durable structure. If soil is not stable then, there may cause the failure of the structure. In black cotton, the soil has a very low bearing capacity and high swelling and shrinkage characteristics it forms a very poor foundation, that cannot be affordable, India is the largest area occupied by black cotton soil. India is an agricultural country that comes in the top ten countries in the world it contributes many times through the agricultural field. India consists of 30-40% of Black cotton soil. Maharashtrian Western produces sugarcane on a large scale and bagasse formed by sugarcane. And to improve the strength of soil the stabilization (making more stable) of soil by conducting experiments on Black cotton soil by replacing bagasse ash (4%, 8%,12%,16%,20%). Another material mixed in black cotton soil is bio-enzyme (Terrazyme) with different dosages of 250ml/2m^3,250ml/1.5m^3,250ml/1m^3,250ml/0.5m^3 respectively. Due to this the strength of soil increases.

**Keywords:** Black Cotton Soil, Soil Stabilization

Read Full Paper · Download PDF · Back to index

---

## 46 COVID-19 facemask and Social Distancing Detector

Paper ID V7I4-1214 · Pages 220-223 · Machine Learning

**Mansi Jha**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Priya G. M.**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Nisha**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Pallavi N.**, Assistant Professor, Atria Institute of Technology, Bengaluru, Karnataka

The world is facing a huge health crisis due to the rapid transmission of COVID-19. The World Health Organization (WHO) issued several guidelines for protection against the spread of coronavirus. The impact of COVID-19 has fallen on almost all sectors of development, mainly the healthcare system is going through a

© 2021, IJARIIT.COM All Rights Reserved

crisis. According to WHO, the most effective preventive measure against COVID-19 is wearing a mask and maintaining social distance in public places. This paper introduces face masks and social distancing detectors that can be used by the authorities to make mitigation, evaluation, prevention, and action planning against COVID-19 which is causing a health crisis. Detection of people who are not wearing masks and not maintaining social distance is a challenge due to the Outbreak of the Coronavirus pandemic which has created various problems. This paper aims at explaining the design of a system that helps in solving the above issues, i.e detection of mask and social distance.

**Keywords:** Face Mask Detection, Social Distancing Detection, Convolutional Neural Network

Read Full Paper · Download PDF · Back to index

---

## 47 Inductor coupled converter

Paper ID V7I4-1229 · Pages 224-226 · Electrical

**R. Kotesh**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**M. Vignesh**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**B. Lakshmikanth**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**A. Raman**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**M. Seenivasan**, Assistant Professor, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh

This research work presents a high gain direct current–direct current (DC–DC) converter which is derived from a traditional boost converter. Distributed renewable energy sources such as photovoltaic (PV) modules, wind, and fuel cells are becoming possible alternatives. However, to connect these systems to the grid, reliable DC–DC boost converters with high voltage gain is becoming a requirement. Firstly, a new open-loop DC–DC boost converter with superior performance in terms of voltage step-up ratio and reduced voltage stress on the switches, compared to other existing high gain DC–DC boost converter counterparts is proposed. Along with analyzing the operation principle of the proposed converter. This converter can easily achieve a gain of 20 while benefiting from the continuous input current, effectively maintain the voltage output at the required level, closed loop dc-dc converter with Proportional–Integral-Differential (PID) controller, a multi-loop with Proportional–Integral (PI) was proposed and simulated. a charge controller was designed and operated along with closed loop dc-dc converter to supply load with two different voltage requirements. Based on the simulation results the proposed controller can maintain the output voltage at the required level with respect to the changes in load.

**Keywords:** Converter, High Voltage, Step-Up

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 48 Aura – Virtual Personal Assistant

Paper ID V7I4-1217 · Pages 227-229 · MI &amp

**Shubham**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Supriya Rani**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Sanskar Srivastava**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Pallavi T. P.**, Assistant Professor, Atria Institute of Technology, Bengaluru, Karnataka

Today, with the advancement of technology, virtual personal assistant plays important role in day-to-day life from searching information from the web to automating certain tasks. Various virtual personal assistants exist like Google Assistant, Siri, Cortana. Laika is one such text-based virtual assistant which can perform certain tasks. Laika is simple with a user-friendly interface and can perform simple tasks like making short notes, telling jokes, greetings, and suggest certain tasks. With the increasing popularity of Virtual Personal Assistants, the interaction between humans and their machines has increased significantly. This system can interact with humans and machines without being limited by their physical appearance or capabilities. This system is mainly used in various industries such as education, medical assistance, and home automation. Due to this, the concept of Virtual Personal Assistants has gained widespread acceptance.

**Keywords:** Natural Language Processing (NLP), Stemming Techniques

Read Full Paper · Download PDF · Back to index

---

## 49 Review paper on industrial wastewater treatment processes

Paper ID V7I4-1241 · Pages 230-235 · Civil Engineering

**Gopal Ganesh Rathod**, Research Scholar, Dr. Babasaheb Ambedkar Technological University, Nanded, Maharashtra
**Prafulla Dnyaneshwar Baviskar**, Research Scholar, Dr. Babasaheb Ambedkar Technological University, Nanded, Maharashtra
**Balram Lagad**, Associate Professor, Dr. Babasaheb Ambedkar Technological University, Nanded, Maharashtra
**Dr. S. R. Bhagat**, Professor, Dr. Babasaheb Ambedkar Technological University, Nanded, Maharashtra

This paper reviewed five (5) researches on industrial wastewater treatment processes, the methods employed in these researches are aerobic, anaerobic or the combination of both methods. The paper tried to briefly discuss the motives of the researchers, their instrumentations and results. These researches include a combined anaerobic-aerobic system for treatment of textile wastewater conducted in Malaysia (2007) by Mahdi et al., Fayza et al., in 2004 conducted a research on chemical industrial wastewater treatment, a preliminary study on nitrogen and organic removal efficiency of a lab-scale system using aerobic and an-aerobic reactors by Florante et al., in 2009, a research on Wastewaters from olive mills and pulp and paper mill industries in Jordan conducted by Bashaar in 2004 and a survey on wastewater treatment plants in the Slovak Repulic by Gašpariková et al., in 2004

**Keywords:** Waste Treatment, Oxidation Methods

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 50 Performance evaluation of non-hierarchical routing protocols for healthcare applications

Paper ID V7I4-1136 · Pages 236-241 · Digital Communication Engineering

**Suman Shekhar A.**, Student, RV College of Engineering, Bengaluru, Karnataka
**Dr. K. Sreelakshmi**, Professor & Head of Department, RV College of Engineering, Bengaluru, Karnataka

All wireless sensor network (WSN) is a network of spatially distributed sensors that monitor physical or environmental characteristics. Wireless Body Area Network (WBAN) is a subset of WSN. WBAN is a new technology that is gaining popularity these days, WBAN devices are critical in the process of health monitoring and patient monitoring. Routing protocols will play a critical role in improving the effectiveness of communication between nodes and increasing the lifetime of a WBAN. The development and study of WBAN routing protocols has become a popular research area in recent years, particularly for medical monitoring applications. The energy-aware and high lifetime of the network are important parameters in the patient monitoring, For Health care application requires a unique routing protocol to transmit the data to their intended destination. The different non-hierarchical routing protocols like RPL, CTP presented in this context, The existing algorithms cannot fully satisfy the application requirements. In this paper energy efficient and reliable routing protocol is proposed for healthcare applications, our proposed routing protocol improves the network lifetime and reduce the energy consumption by using a weighted method, we evaluated the performance of proposed routing protocol in various routing parameter and comparing with RPL, CTP routing scheme. the Experimental results shows that proposed routing protocol performs better when compare to other two routing scheme. It is the best replacement with existing methods.

**Keywords:** Wireless Body Area Network, Efficiency, Residual Energy, Routing Protocol, Reliability

Read Full Paper · Download PDF · Back to index

---

## 51 Review paper on HMM Model for speech recognition systems

Paper ID V7I4-1212 · Pages 242-245 · Hmm

**Abha Anand B.**, Student, RV College of Engineering, Bengaluru, Karnataka
**Atul Ranjan Shipu**, Student, RV College of Engineering, Bengaluru, Karnataka
**S. G. Raghavendra Prasad**, Assistant Professor, RV College of Engineering, Bengaluru, Karnataka
**Sharadadevi Kaganurmath**, Assistant Professor, RV College of Engineering, Bengaluru, Karnataka

© 2021, IJARIIT.COM All Rights Reserved

In a practical sense, speech reputation via machine has matured. Several speech-recognition algorithms are currently in use in a variety of programs, from a smartphone voice dialer to a voice response tool that costs stock values based on spoken input. One substantial development is that the software of statistical approaches, one of that is that the hidden Markov model (HMM). A speech-reputation process is generally divided into taxonomies primarily based totally on whether or not it needs to cope with particular or nonspecific talkers (speaker-based vs. speaker-impartial) and whether or not absolutely remoted utterances or fluent speech are acceptable (remoted phrase vs. related phrase). Present-day generation can also additionally effortlessly achieve near-ideal accuracy in speaker-impartial remoted-digit reputation, with the handiest 2-threepercentage digit-string mistakes while the digit collection is uttered in a certain associated style with the aid ofusing the regular speaker.

**Keywords:** Speech Recognition System, HMM, Speaker Based, Speaker Impartial

Read Full Paper · Download PDF · Back to index

---

52

## Planning and estimation of G+1 structure of the residential building

Paper ID V7I4-1230 · Pages 246-249 · Civil Engineer

**Tanvi Pawar**, Research Scholar, Vivekanand Education Society Polytechnic, Mumbai, Maharashtra
**Keshar Lawane**, Research Scholar, Vivekanand Education Society Polytechnic, Mumbai, Maharashtra
**Garsha Gaikwad**, Research Scholar, Vivekanand Education Society Polytechnic, Mumbai, Maharashtra
**Roshni Virwani**, Research Scholar, Vivekanand Education Society Polytechnic, Mumbai, Maharashtra
**Sanika Kandalekar**, Lecturer, Vivekanand Education Society Polytechnic, Mumbai, Maharashtra

Estimation is the scientific way of working out the approximate cost of an Engineering Project before the execution of the work. The project deals with the plan and estimation of a residential building. Since planning, drawing, estimation of any building structure by a manual method using pencil, sheets, etc. takes more time and also there is the possibility of having mistaken while calculation. With advanced technology, we can reduce the time used for drawing and calculation and also human error. The principal objective of this project is to Plan and Estimate Residential Building (G+1) structure. Microsoft Excel helped us by giving accurate measurements for estimation and AutoCAD helped us in drawing accurate measurements for the planning of the proposed building plan. With the help of Microsoft Excel and Auto CAD we successfully found the estimated area of Plot area = 252.84 m 2, Ground floor area = 124.24 m 2, First-floor area = 107.92 m 2, Total floor area = 232.16 m 2, F.S.I Permitted = 1.0, F.S.I consumed = 0.92 & let; 1.0.

**Keywords:** Planning, Microsoft Excel, Auto CAD, Estimate, Residential Building, Measurements, (G+1) Structure, Drawing, Calculation

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 53 A review paper on green concrete

Paper ID V7I4-1231 · Pages 250-252 · Civil Engineering

**Dhondiram Vijaykumar Waghmare**, Research Scholar, Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra
**Rushikesh Vishnu Divte**, Research Scholar, Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra
**Dr. S. R. Bhagat**, Associate Professor, Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra
**B. R. Lagad**, Assistant Professor, Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra

The Concrete used is made by the use of inorganic waste is called Green Concrete. There are more eco-friendly and are used as a means to promote the sustainable development of our planet. This paper is parallel to the Possibility of the use of by-products such as fly ash, pozzocrete, used foundry sand, etc, etc., in the implementation of the program. Green concrete is formed by the partial replacement of cement and fine Aggregate by their respective switches. This paper is concerned with the effect on the compressive strength of the concrete when the cement is partially replaced with pozzocrete P60, up to 30% by weight of cement and fine aggregate is replaced with the used foundry sand is a by 10%, 25% and 50% by weight of cement. For this study, five sets of mixing ratios were prepared. This study was carried out in order to study the function of the advantages of the partial replacement of cement and fine aggregate By their country.

**Keywords:** Blast to the Plate, and the Co2-Emissions, Environmentally-Friendly Concrete, Fly Ash, Green Concrete, Silica Fume

Read Full Paper · Download PDF · Back to index

---

## 54 Power backup management system

Paper ID V7I4-1235 · Pages 253-253 · Iot & Software

**Viraj Dnyandeo Utekar**, Student, University of Mumbai, Mumbai, Maharashtra

The system power after power cut drastically degrades down, at a point the entire power is dead and the system goes to sleep, due to which person sits ideal if there cause a major outage, this causes major impact for the business as the resolving of late task leads to late deliverance of project, Power Backup Management System will resolve this issue by storing the power unit and use portably at any time.

**Keywords:** Degrade, Deliverance, Professionalism, Roadblock, Virtual

Read Full Paper · Download PDF · Back to index

---

## 55 Crop yield prediction and alternate crop prediction using ML

Paper ID V7I4-1245 · Pages 254-257 · Machine Learning

**Disha Chiplonker**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Arjun A.**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Pruthvi M.**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Rakshith V. R.**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Sunil G. L.**, Assistant Professor, Sai Vidya Institute of Technology, Rajanukunte, Karnataka

Agriculture is one of the most important occupation practiced in India. It is the broadest economic sector and

© 2021, IJARIIT.COM All Rights Reserved

plays an important role in overall development of the country. About 60% of the land in India is used for agriculture in order to suffice the needs of 1.2 billion people. Thus, modernization of agriculture is very important and thus will lead the farmers our culture towards profit. The proposed method aims to provide an efficient and accurate solution for prediction of yield rate of crop and also providing alternate crop based on given conditions. So, using machine learning algorithms and techniques such as Linear Regression, Random Forest Regressor to identify the pattern among data and process it as per the input condition, the method predicts yield rate of crop and alternate crop. The proposed method takes into consideration factors like location and weather conditions to process the data.

**Keywords:** Crop, Crop Prediction, Yield Prediction, Alternate Crop Prediction, Machine Learning, Random Forest Regression, Linear Regression

Read Full Paper · Download PDF · Back to index

---

## 56 Design of MMIC phase shifter in Ku Band for Antenna Beam steering applications

Paper ID V7I4-1216 · Pages 258-260 · Radio Frequency And Microwave Engineering

**Namrata Marigoudar**, Research Scholar, RV College of Engineering, Bengaluru, Karnataka
**Dr. K. Sreelakshmi**, Professor and HoD, RV College of Engineering, Bengaluru, Karnataka

The paper presents a 4-bit MMIC phase shifter at 14 GHz using eyesight available PDK in the ADS tool. The designed phase shifter has an insertion loss of 4 dB and Return loss of 18 dB with phase angles 22.5, 45, 67.5, 90-degree phase angles.

**Keywords:** Monolithic Microwave IC, Ku Band, ADS Nonlinear Demo Kit, Phase Shifter

Read Full Paper · Download PDF · Back to index

---

## 57 Live Care: Virtual healthcare assistant

Paper ID V7I4-1228 · Pages 261-264 · Python (web Development)

**Mansi Narwade**, Research Scholar, Dr. D. Y. Patil Institute of Technology, Pune, Maharashtra
**Vishakha Arote**, Research Scholar, Dr. D. Y. Patil Institute of Technology, Pune, Maharashtra
**Divyansh Swabhawane**, Research Scholar, Dr. D. Y. Patil Institute of Technology, Pune, Maharashtra
**Irfan Shaikh**, Research Scholar, Dr. D. Y. Patil Institute of Technology, Pune, Maharashtra
**Dr. Chaya Jadhav**, Project Guide, Dr. D. Y. Patil Institute of Technology, Pune, Maharashtra

Within few days COVID-19 transformed our lives and made us go all virtual. Most of the essential services went virtual. However, there were some services that took time, one of them was Healthcare. To prevent the transmission of coronavirus Telemedicine emerged as a very efficient platform in connecting the doctors and patients. The Project aims at supporting the patients as well as the clinicians to bridge the gap and enjoy the service. Further the project will also have steps and tips to use the platform. Telemedicine is not a new concept; it was present before COVID-19 as well. It was more popular in the west and not much followed here.

**Keywords:** Telemedicine, Virtual, Patients, Doctor, Healthcare, COVID-19

© 2021, IJARIIT.COM All Rights Reserved

Read Full Paper · Download PDF · Back to index

## 58 Menu-based Penetration Testing and Vulnerability Assessment

Paper ID V7I4-1227 · Pages 265-268 · Cyber Security

**A. N. Anshuman**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Abhinandan C.**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Suraj Upadhya G.**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Thanushree C.**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Kishore S. Verma**, Associate Professor, Sai Vidya Institute of Technology, Rajanukunte, Karnataka

The systems and networks run by an individual or an organization are prone to get exploited by hackers for personal gains or any other motive. The flaws or loopholes in the operating systems or operating procedures and practices may lead to a stage where once they are compromised; there is no going back beyond that point. This is a serious issue that must be rectified and safety measures must be inculcated in the operations. The systems and networks in use must be thoroughly checked for vulnerabilities to ensure protection. This is a required objective in every system and every organization. The project that we are working on is a menu-based vulnerability assessment and penetration testing tool that checks the selected system or network and tries to find the most common and most complex risks associated with the system or network. The tool is called EDITH, which stands for “Executable and Distinguished Interface to Hack”. This tool simplifies the process by allowing the authorized user to choose from the options provided. The simplicity of the tool is what makes it idiosyncratic in the field of penetration testing and risk analysis. The tool is built using advanced python modules that support kernel and terminal levels of access and operation rights. The tool provides a wide range of options to check vulnerabilities and perform penetration testing on the selected system or networks. The options are categorized into network-related tests and system-related tests. The tool is capable of performing penetration tests from a low-security system to a highly secured firewall built system. The tests performed by the tool are completely ethical and do not void any laws unless they are used for illegal purposes. This is a brief description of our project.

**Keywords:** Vulnerability, Penetration Testing, Analysis, Menu-Based Vulnerability Assessment

Read Full Paper · Download PDF · Back to index

## 59 Genotypic, phenotypic, and heritability studies in groundnut (Arachis hypogaea)

Paper ID V7I4-1242 · Pages 269-271 · Agriculture

**Mempal Dhanyan**, Goldking Biogene Pvt. Ltd, Ahmedabad, Gujarat
**S. I. Kapadia**, Research Head, Goldking Biogene Pvt. Ltd, Ahmedabad, Gujarat
**K. S. Patel**, M.D., Goldking Biogene Pvt. Ltd, Ahmedabad, Gujarat
**P. K. Patel**, Director research, Goldking Biogene Pvt. Ltd, Ahmedabad, Gujarat
**Sunil Sapavadiya**, Plant Breeder, Goldking Biogene Pvt. Ltd, Ahmedabad, Gujarat
**K.N. Patel**, Plant Breeder, Goldking Biogene Pvt. Ltd, Ahmedabad, Gujarat

A total of 36 different genotypes maintained under Goldking Research Centre were evaluated in Kharif, 2019

© 2021, IJARIIT.COM All Rights Reserved

for some variability parameters like GCV, PCV, Heritability, and Genetic advance as percent of the mean. The statistical analysis shows that the estimates of GCV and PCV along with heritability and genetic advance were found to be high for pod yield per plant, plant height number of aerial pegs per plant, biological yield per plant 100 pod weight, and harvest index which indicate that these quantitative characters are preponderantly governed by additive genes so there is a good scope of selection for further improvement in these traits and ultimately pod yield.

**Keywords:** Groundnut, GCV, PCV, Heritability, Genetic Advance

Read Full Paper · Download PDF · Back to index

---

## 60 Automated air pollution monitoring and forecasting system using Machine Learning

Paper ID V7I4-1199 · Pages 272-275 · Electronics And Computer

**Vinayak Pragada**, Student, Vidyalankar Institute of Technology, Mumbai, Maharashtra
**Romil Keniya**, Student, Vidyalankar Institute of Technology, Mumbai, Maharashtra
**Abhijeet Chauhan**, Student, Vidyalankar Institute of Technology, Mumbai, Maharashtra
**Beena Ballal**, Assistant Professor, Vidyalankar Institute of Technology, Mumbai, Maharashtra

Various Air Quality Monitoring systems have been recently developed and installed in some of the cities such as Mumbai, Bangalore, Delhi, Hyderabad, etc. But the actual results do not satisfy enough. Several issues in the existing system were the number of gases detected were very few. There was a need for such a system that monitors more amounts of gases in less amount of time. Time was also an issue regarding the monitoring of the gases. Some gases consumed an enormous amount of time, so it became crucial to decrease them and make a more efficient system. The proposed system is automated air pollution monitoring and forecasting system using machine learning which uses an Arduino Mega, MQ gas sensors module for its development along with some other basic components like16x2LCD, Buzzer, Potentiometer. MQ135 gas sensor detects gases like NH3, NOx, alcohol, benzene, smoke, CO2, SO2, etc. which are the main reason for degrading air quality. Wi-Fi module is used to connect our system to the Cloud so that all the readings and the data can be transferred to the desired server for forecasting purposes. A trained model is expected to use the ARIMA algorithm for the best prediction purposes. This model is then applied to the upcoming data and forecasting is done. The various existing system was learned which are developed till date, it was found that the air quality numerical model such as WRF-Chem, community Multi-scale air quality model (CMAQ), CAMx, NAQPMS was used. The drawbacks in these models were found like, Source list was not updated in time for WRF-Chem, Detailed information about the source of the pollutants, and other variables are generally not known. After knowing all the facts from the study, this system is expected to use a Scikit machine learning tool for forecasting. The proposed model monitors the upcoming data in no time and if the value goes beyond the threshold value it activates the buzzer and the server is notified.

**Keywords:** Machine Learning, Arduino, Time Series Forecasting, Gas Sensors

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 61 Mechanical ventilation for COVID- 19 patients

Paper ID V7I4-1251 · Pages 276-279 · Eletrical

**A. Ramesh Naik**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**Justin Jose**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**Umar Fazil M. J.**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**R. Chaithra**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**P. Kiran Kumar**, Associate Professor, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh

The main aim of the project is to design a mechanical ventilator and connect it remotely using the Internet of things. With the advancement in technology and IoT devices, a ventilator can be operated remotely. During the COVID-19 pandemic, it is difficult for the doctors to operate a patient on the ventilator from a nearby distance. In order to safeguard our medical staff, a ventilator is designed to operate it remotely. In this system, a ventilator and IoT device/laptop/smartphone are connected to each other over the internet and can take necessary decisions. It can also have communication between each other. It is built using NodeMCU an IoT device

**Keywords:** Blynk, LM298, NODEMCU, COVID- 19, IOT based ventilator, Respiratory Rate, Temperature Sensing, Heartbeat Sensing

Read Full Paper · Download PDF · Back to index

---

## 62 A Wrist drop case study

Paper ID V7I4-1221 · Pages 280-281 · Medical Science

**Gourab Maji**, Student, South Dum Dum Municipal Hospital, Kolkata, West Bengal

A 30-year-old man had experienced a humerus shaft fracture. Afterward, he underwent open reduction internal fixation surgery. wrist drop case study

**Keywords:** Humeral Shaft Fracture, Radial Nerve Injury, Wrist Drop

Read Full Paper · Download PDF · Back to index

---

## 63 Statistical analysis of the change in accuracy of tabla players with increasing mathematical abilities

Paper ID V7I4-1223 · Pages 282-286 · Mathematics And Music

**Malank Goel**, Research Scholar, Delhi Public School, R.K Puram, New Delhi, Delhi

Tabla has been the principal percussion instrument in Indian classical music for decades. In this paper, accuracy will be considered as the ability to stay on beat and within the taal, while also increasing the tempo. This paper analyses the difference in the accuracy of a player’s performance based on their mathematical ability. The performances were collected from 5 tabla players with varying mathematical expertise. The performances were analyzed and based on the accuracy, statistical tools were used to compute whether a higher mathematical aptitude will lead to more accuracy.

**Keywords:** Tabla, Instrument, Accuracy, Statistics, Standard Deviation, Maths, Mathematical Aptitude, Mathematical

© 2021, IJARIIT.COM All Rights Reserved

Operations, Fibonacci Series

Read Full Paper · Download PDF · Back to index

## 64 Full crowns overrated: save the tooth, salvage the tooth structure with aid of intraoral scanner- A case report

Paper ID V7I4-1254 · Pages 287-292 · Dentistry

**Dr. Pradnya V.**, HOD and Professor, Government Dental College and Hospital, Aurangabad, Maharashtra
**Dr. Seema D. Pathak**, Professor, Government Dental College and Hospital, Aurangabad, Maharashtra
**Dr. Madhuri B. Wavdhane**, Associate Professor, Government Dental College and Hospital, Aurangabad, Maharashtra
**Dr. Lipsita Priyadarshini**, Post Graduate Student, Government Dental College and Hospital, Aurangabad, Maharashtra

Dentistry has evolved in the recent era whether in the technology of digital impressions or conservative restoration of endodontically treated tooth. Intraoral scanners (IOS) are devices for capturing direct optical impressions in dentistry. Optical impressions reduce patient discomfort. IOS are time-efficient and simplify clinical procedures for the dentist, eliminating plaster models and allowing better communication with the dental technician and with patients. The images of the dentogingival tissues captured by imaging sensors are processed by the scanning software, which generates point clouds. These point clouds are then triangulated by the same software, creating a 3D surface model (mesh). The 3D surface models of the dentogingival tissues are the result of the optical impression and are the 'virtual' alternative to traditional plaster models. Porcelain veneers have long been a popular restorative option that have evolved into a well-accepted treatment that can be fabricated in various ways. With the availability of newer high-strength materials such as lithium disilicate and processing technologies like CAD/CAM and heat pressing, dental professionals are now able to produce highly esthetic, high-strength restorations that blend seamlessly with the natural dentition while also withstanding posterior occlusal forces. This has resulted in innovative methods of providing minimally invasive dentistry. So instead of full crowns lets try to save the tooth and salvage the tooth structure. The purpose of this article is to summarize the restorations that may compete the full crowns so that they are kept into the minds of dentists when a tooth is planned to receive cuspal coverage.

**Keywords:** Occlusal Tabletops, Intraoral Scanner, CAD/CAM, Lithium Disilicate

Read Full Paper · Download PDF · Back to index

## 65 A Survey paper on image compression technique

Paper ID V7I4-1243 · Pages 293-295 · Information Technology

**Nikhil Jagan Mhatre**, Student, Institute of Management and Computer Studies, Thane, Maharashtra

© 2021, IJARIIT.COM All Rights Reserved

In this advanced world where every image is Digitized for transmission and computer processing, whether scanned from two-dimensional analog originals or captured using an image sensor-equipped device such as a digital camera, CAT scanner. This paper provides a survey about JPEG Mini- Image Compression which was developed by “BEAMR”, An imaging Technology Company that powers some of the world's top web publishers, social networks, and media companies which is led by serial entrepreneurs and technology experts, possessing an extensive experience in media compression and delivery.

**Keywords:** JPEG Mini, Lossless, BEAMR, Compression Software, JPEG Mini online

Read Full Paper · Download PDF · Back to index

---

## 66 Reimagine workspace for better productivity during WFH

Paper ID V7I4-1232 · Pages 296-300 · Architecture

**Vineet Vijay Bodhe**, Student, MIT ADT University, Loni Kalbhor, Maharashtra

COVID-19 has brought a significant change in work culture, many skilled workers lost their jobs while those who could survive had to struggle inculcating cognitive & leadership skills which would make them eligible to stand still in the corporate world. Before COVID-19, workplace and rest place was different and each space was enjoyed to the fullest by the people. This segregation between the workplace and the habitable place was much needed but this pandemic coined these two places into one. This pandemic led corporate organizations to allow employees to work from home. The shift of work culture is seen during this pandemic. Social distancing and isolation are mainly observed which led employees to work remotely. Disturbances at home affected work productivity which ultimately resulted in depression and mental illness among the working-age group. Before covid-19 people had a social life, change of environment helped people stay active and have a healthy life. Sudden isolation leads people to suffer psychological disorders as a whole day is spent indoors. A habitable space where people reside plays a significant role in maintaining mental & physical well-being, which includes soothing color scheme, aesthetically appealing interiors, the amount of sunlight the comes in, etc. furthermore design of the workplace at home plays a vital role in provoking creativity and helps employees function effectively with higher productivity. This research paper aims to focus on designing a workplace at home for better productivity of an employee while emphasizing reimagining, developing, and coming up with solutions to cater to the depression and thus uplifting and boosting the creativity with the help of specific materials.

**Keywords:** COVID-19, Work, Workplace, WFH, Social Distancing, Isolation, Depression, Transparent Cubical

Read Full Paper · Download PDF · Back to index

---

## 67 Arduino based oxygen generation

Paper ID V7I4-1246 · Pages 301-303 · Electrical

**S. Ganesh**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**E. Manikanta**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**Amal Jyothi**, Student, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**B. Venu Reddy Kumar**, Assistant Professor, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh
**Dr. V. Sekhar**, Professor & HOD, Kuppam Engineering College, Ekarlapalle, Andhra Pradesh

© 2021, IJARIIT.COM All Rights Reserved

An Oxygen Generator is developed to interface with Home air Conditioner that serves for Home element medical aid & it's managed by a Microcontroller that is connected to water from finish to finish that users can watch and control the entire system. Oxygen levels are to be maintained as per OSHA-cited acceptable levels. For generating oxygen we are using the Pressure Swing Adsorption Technique with two-bed molecular sieve columns with Elite filled inside in it which acts as a Filtering component of Nitrogen. When a hassled air is passed through the Elite it filters out Nitrogen due to its chemical nature Nitrogen molecules gets trapped inside its pores and allows the rest of the Air workings to pass through it so that we can get oxygen-enriched air at the outlet and it is given to home

**Keywords:** Arduino, Oxygen Cylinder, LCD, Relay

Read Full Paper · Download PDF · Back to index

---

## 68 Need for an Integrated Platform to Bridge the Gaps in Communication of Students & Faculties, at an Intra-College Level – A Survey Analysis

Paper ID V7I4-1278 · Pages 304-307 · Online Learning

**Akshat Mukhriya**, Student, IMS Engineering College, Ghaziabad, Uttar Pradesh
**Deep Singh**, Student, IMS Engineering College, Ghaziabad, Uttar Pradesh
**Achintya Jaiswal**, Student, IMS Engineering College, Ghaziabad, Uttar Pradesh
**Abhishek Saini**, Student, IMS Engineering College, Ghaziabad, Uttar Pradesh

Being part of the scenario, we have faced and observed various challenges in the context of having a communication gap due to accessibility issues. In order to analyze the severity and minimize these gaps of accessibility in between the professional relationship of faculties and students outside the classroom, we have conducted a survey. This paper will present the review's analysis from the survey, in order to understand the need for an integrated platform. A platform that could be responsibly designed in order to shrink this void. It will conclude with the scope of an integrated platform that can be used to facilitate the needs of them both simultaneously.

**Keywords:** Online Learning, Cognitive Presence, Online Modes of Education, ICT in Education, Competetive Competence

Read Full Paper · Download PDF · Back to index

---

## 69 Solake – An innovative solution for the sustainable revival of lakes tied together with solar renewable energy generation

Paper ID V7I4-1225 · Pages 308-316 · Sustainability

**Malank Goel**, Research Scholar, Delhi Public School, R.K Puram, New Delhi, Delhi

This project analyses how lakes and water bodies in the country, specifically in the cities, are in a state of disrepair and increasingly becoming extinct. Since lakes and water bodies have a very important role to play in maintaining the groundwater level and providing open spaces for the community, many attempts have been made to revive them, but they have not sustained because of their humongous costs to revive (build) and survive (maintain). This project attempts to provide an environmentally sustainable and economically viable approach to revive lakes and at the same time generating renewable solar energy to self-sustain its ecosystem

© 2021, IJARIIT.COM All Rights Reserved

& generating income by selling extra power produced to Govt. This project is a collaborative effort to bring together technologies and techniques from solar power plant design and implementation, revival and rejuvenation of water bodies, wastewater treatment, and groundwater recharging, and econometric modeling to establish a financially feasible self-sustaining model for the revival of lakes and urban water bodies.

**Keywords:** Lake Revival, Sustainability, Solar Power, Self-Sustaining, Waste Water Treatment, Ground Water, Surface Run-Off, Rejuvenation, Park

Read Full Paper · Download PDF · Back to index

---

## 70 Analyzing the energy performance of a building and retrofit it into a net energy efficiency building in a warm humid climate

Paper ID V7I4-1240 · Pages 317-323 · Construction Project Management

**Hamilton Shaju**, Research Scholar, M.G.R. University, Chennai, Tamil Nadu
**Vidhya Naveen**, Professor, M.G.R. University, Chennai, Tamil Nadu

The economic development of a country is closely linked to its energy consumption. Currently, India is ranked 6th in total energy consumption it still needs more energy to keep the pace in control with its future development. At present changes have made to make building more energy efficient keeping the usage of buildings energy consumption in mind The main objective of this thesis is to obtain a clear understanding of the usage of building energy consumption and To study the economic benefits and advantages of an NZE office building in hot and Humid climate and reduce the carbon footprint in future where the energy demands are increasing day by day and to achieve it in a low cost. It is done through evaluating the building performance and energy usage (EUI) by modeling and stimulation by analyzing energy use index, various optimistic design solutions,s and life cycle cost. The study also deals with finding solutions that reflect current trends achieved towards making building more intelligent, self-sustained, and more sustainable.

**Keywords:** Building Performance, Sustainability, Humid Climate

Read Full Paper · Download PDF · Back to index

---

## 71 Determination of Dynamic PCU values at the signalized intersection for mixed traffic conditions

Paper ID V7I4-1250 · Pages 324-328 · Civil Engineering

**Safna Salam**, Research Scholar, Ilahia College of Engineering and Technology, Mulavoor, Kerala
**Ayesha Shiraz**, Research Scholar, Ilahia College of Engineering and Technology, Mulavoor, Kerala
**Muhammed Asifsha**, Research Scholar, Ilahia College of Engineering and Technology, Mulavoor, Kerala
**Suhail A. Shahul**, Research Scholar, Ilahia College of Engineering and Technology, Mulavoor, Kerala
**Shifana U. N.**, Guide, Ilahia College of Engineering and Technology, Mulavoor, Kerala

Traffic conditions in India and many of the developing countries differ from the western country mainly in the composition and lane discipline. Under such conditions, vehicles widely varying in their size, accelerating abilities, and performance capabilities are to share same lanes of the road, which is highly heterogeneous in nature. Especially at signalized intersections. Hence, Passenger Car Unit (PCU) values of several vehicles do not

© 2021, IJARIIT.COM All Rights Reserved

remain static. Recent research works show that the PCU of any type of vehicle can be different at different traffic composition and volume level which points towards the importance of the concept of dynamic PCU. Different methods are used for estimation of PCU by some researchers on signalised intersection under mixed traffic conditions. Objective of the present study is to estimate dynamic PCU values of different vehicle categories at signalised intersection under mixed traffic conditions by Area Occupancy Method. Effect of traffic characteristics on the dynamic PCU value is also analysed. With the use of estimated dynamic PCU by Area occupancy method, mathematical model is developed for estimation of dynamic PCU using regression technique. From the study it was observed that with the increase in vehicle composition dynamic PCU value also increased and the increase in lane width, dynamic PCU value of two wheelers decreased. The lane width and dynamic PCU values of two wheelers is found to have a negative correlation. Mathematical model was developed for the estimation of dynamic PCU of various categories of vehicles using regression by in cooperating the effect of traffic composition and lane width and cycle time.

**Keywords:** Signalized Intersection, Area Occupancy, Dynamic

Read Full Paper · Download PDF · Back to index

---

72

## Multifunctional agricultural machine

Paper ID V7I4-1252 · Pages 329-336 · Mechanical Engineering

**Harsh Yadav**, Student, Pravin Patil College of Diploma Engineering and Technology, Mira Bhayandar, Maharashtra
**Siddharth Yadav**, Student, Pravin Patil College of Diploma Engineering and Technology, Mira Bhayandar, Maharashtra
**Sagar Kanadiya**, Student, Pravin Patil College of Diploma Engineering and Technology, Mira Bhayandar, Maharashtra
**Himanshu Singh**, Student, Pravin Patil College of Diploma Engineering and Technology, Mira Bhayandar, Maharashtra
**Vishal Kandalgaonkar**, Head of Department, Pravin Patil College of Diploma Engineering and Technology, Mira Bhayandar, Maharashtra

© 2021, IJARIIT.COM All Rights Reserved

In our day-to-day life lot of traditional process have become automated because of automation of process activities are becoming more economic less labor intensive and most of all less time-consuming so, is the process in agriculture. Automation has been well integrated in various industries. In recent times agriculture an essential and traditional process has been automate which resulted in greater quality as well as quantity of crops and as quality of the product risen in a great amount so is the demand for them in modern consumers. The modern consumers demand organic products which are only possible by the use of organic crops createdat farms. This demand will be ever-lasting and grow day by day as the number of consumers keeps steadily increasing because of rapidly increasing population also due to application of automation in agriculture it has brought great comfort to the farmers working on field whom have picked it up and successfully keep up it however automation of agriculture has only been picked up by big companies' reason being they have the capital ensure the installation and smooth running of automation equipment in agriculture a normal farmer is not able to achieve such a great quality of product and compete against these big companies. If the automation process becomes at a reasonable price where a normal farmer can afford it and have a great product with consistent quality and even greater consumer demand. We are in this project using simple mechanics in order to make the cost of components cheap, affordable and easily replaceable for assembling prototype of a simple semi-automatic device at a reasonable price device for the average farmer. Using technologies such asadvance technologies to do the same amount of work quicker and better.

**Keywords:** Agriculture, Farmer, Automation, Prototype, Plough, Harvest, Seed drilling, Cart, Tool

Read Full Paper · Download PDF · Back to index

---

## 73 Weed detection using Machine Learning

Paper ID V7I4-1255 · Pages 337-340 · Computer Science And Engineering

**Anupuri Sai Priya**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Nadimpalli Lavanya**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Pallavi K.**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**G. Nithyasree**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Santhosh Reddy P.**, Assistant Professor, Sai Vidya Institute of Technology, Rajanukunte, Karnataka

Agriculture is one of the world's oldest sources of human nourishment. To satisfy the strain of an ever-increasing population, agricultural output must be greatly enhanced. People employed natural techniques to enhance production within the past, like utilising garbage as a fertiliser within the fields, which increased output sufficiently to fulfil the population's needs. Following this epoch, the utilization of lethal chemicals like herbicides skyrocketed. As a result, we've got made extra money while also causing greater environmental damage. the most important goal of this research is to use image processing to detect and take away weeds.So, in this project, we've created a way to decrease herbicide consumption by only spraying them where weeds are present. Using image processing, we were able to locate weeds in the site photos and classify them based on their area and aspect ratio.

**Keywords:** Weed, Image, Productivity, Agriculture, Increase

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 74 Performance evaluation of GMM super-pixel model-based technique with various bleeding detection techniques in WCE images

Paper ID V7I4-1256 · Pages 341-347 · Medical Image Processing

**Rathnamala S.**, Assistant Professor, Sethu Institute of Technology, Virudhunagar, Tamil Nadu
**Dr. S. Jenicka**, Associate Professor, Sethu Institute of Technology, Virudhunagar, Tamil Nadu

Wireless Capsule Endoscopy (WCE) is a non-invasive medical process that permits the assessment of the whole gastrointestinal tract that includes small intestine parts ahead of the conventional endoscope scope. This in turn needs the approach of a computer-aided scheme to assess the video frames for reducing the time of diagnosis. In this approach, the performance comparison on various existing techniques like color-based feature extraction, histogram-based approach, Discrete Wavelet Transform (DWT), K-nearest neighbor (KNN), K-means, and Support Vector Machine (SVM) techniques employed in the detection of bleeding to that of the proposed Gaussian Mixture Model (GMM) super-pixel model has been carried out. The study is carried out in terms of feature extraction models used so far and the classification approaches employed so far. Then the experimental study is carried out in terms of existing techniques and the performance is compared with GMM super-pixel feature extraction model and linear SVM to prove the effectiveness of the super-pixel-based model for bleeding detection. From the experimental analysis, the GMM super-pixel model is concluded better for automated bleeding detection.

**Keywords:** Wireless Capsule Endoscopy, GMM super-pixel, linear SVM, color based feature extraction, histogram based approach, DWT, and KNN algorithm.

Read Full Paper · Download PDF · Back to index

---

## 75 Comparison of readiness for the practice among Bacculerate and Diplomate Pregraduate Nurses – Are there any differences?

Paper ID V7I4-1266 · Pages 348-354 · Nursing Education

**Dinesh Kumar Suganandam**, Lecturer, College of Nursing, Christian Medical College, Vellore, Tamil Nadu
**Vinitha Ravindran**, Professor, College of Nursing, Christian Medical College, Vellore, Tamil Nadu
**Vathsala Sadan**, Professor & Dean, College of Nursing, Christian Medical College, Vellore, Tamil Nadu

Nursing Education in India is undergoing a major transition in inorder to improve the standards across. Graduate Nurses' transition from educational program to clinical practice is a global concern. They often feel insecure, inadequately prepared and it’s a time of reality shock. Diplomate and Bacculerate programs are the two entry-level courses in Nursing in India. There is documented evidence on the differences between diploma and degree nurses in terms of professional competence. However, readiness for the practice among pregraduate nursing students is less explored in the Indian context. This article will reveal the differences in readiness for the practice among Bacculerate and Pregraduate nurses in the South Indian setting.

**Keywords:** Bacculerate, Diplomate, Nursing, Readiness for practice

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 76 Calmify: Novel Way to Monitor the Mental Health using IoT

Paper ID V7I4-1267 · Pages 355-358 · Biomedical Engineering

**Harmanjot Singh**, Student, Jodhamal Public School, Jammu, Jammu and Kashmir

Emotional and mental health is important as it encompasses our psychological, emotional and social wellbeing. It plays a vital role in the health of our relationships, allowing us to adapt to changes in life and deal with adversity. The Covid-19 pandemic has had a major impact on our lives. Many of us are facing challenges that can be stressful, overwhelming and cause strong emotions in adults and children. One in four people in the world will be affected by mental or neurological disorders at some point in their lives. Around 450 million people currently suffer from such conditions, placing mental disorders among the leading causes of ill-health and disability worldwide. Considering this as quintessential and need of the hour, I have developed Calmify a full mental wellness Tech package to help and discover ways to take a healthy approach to your emotional wellness. It includes a mobile application along with a novel and innovative Mental Wellness Smart Glove, which will surely help people to cope with stress in a healthy way. IoT technologies have a great potential in mental health for diagnoses, treatment, and care due to the increased ability to collect real-time data indicating patterns of activity and behaviour of people. On that note, I developed Calmify as an IoT-based BioMedical Embedded System that aims to provide a mental health solution that is efficient, cost-effective, feasible, easy to use and most importantly affordable for everyone. The smart glove is a wearable device that can monitor the mental wellbeing of the patient and provide ML predictions on the onset of serious mental health issues using psychophysiological signals obtained from unobtrusive smart sensors embedded in the glove which can be carried during daily life routines of individuals. Overall, it will be helpful in providing proactive healthcare to the patients.

**Keywords:** Mental Health, Emotional Wellbeing, stress detection, mental health problems, mobile application, mental wellness smart glove, wearable device, sensors, Internet of Things (IoT), BioMedical Device, Embedded Systems, monitoring solution, machine learning, prediction, daily life psychophysiological data

Read Full Paper · Download PDF · Back to index

---

## 77 Sentiment and thematic analysis on E-commerce application for user reviews using Machine Learning

Paper ID V7I4-1275 · Pages 359-361 · Machine Learning

**Rutuja Sanjay Mane**, Student, JSPM Narhe Technical Campus, Pune, Maharashtra
**Aarti Sanjay Sahib**, student, JSPM Narhe Technical Campus, Pune, Maharashtra
**Prachi Sunil Mulay**, Student, JSPM Narhe Technical Campus, Pune, Maharashtra
**Sumesh Santosh Mapara**, student, JSPM Narhe Technical Campus, Pune, Maharashtra
**Sulochana Sonkamble**, Professor, JSPM Narhe Technical Campus, Pune, Maharashtra

Over the year's we have experienced tremendous growth in the use of ECommerce Applications. Since the pandemic, there has been an escalation in the use of these applications. Hence, we must understand the factors that are affecting the effectiveness of the services. In this paper, we will be analyzing different eCommerce applications on Google Play and App Store by performing sentiment analysis on user reviews by machine learning and then perform thematic analysis to identify the themes of reviews. Sentiment analysis is

© 2021, IJARIIT.COM All Rights Reserved

the process of identifying and categorizing opinions expressed in the text, especially when we want to determine whether the attitude of the customer concerning the services provided is positive, negative ,or neutral. Performing Sentiment analysis manually is a humongous task as there are millions of users. Hence we will be implementing different classifiers using supervised ML algorithms. These Classifiers will be trained and compared, then the classifier with the highest accuracy will be used to predict the sentiment polarity. Later on, we will be performing thematic analysis on positive and negative reviews to determine themes representing various factors affecting the effectiveness of e- commerce apps both positively and negatively. In the end, we will be proposing how to tackle the negative issues that are hampering the services

**Keywords:** E-Commerce, Machine Learning, Sentiment Analysis, Thematic Analysis, Applications

Read Full Paper · Download PDF · Back to index

---

## 78 Medicines for underprivileged patients using android application

Paper ID V7I4-1277 · Pages 362-365 · Mobile Application

**Vishnu R.**, Research Scholar, SNS College of Technology, Coimbatore, Tamil Nadu

Gift of medication is one of the most huge commitments that an individual can make towards the general public. Drugs for health care(DFHC) framework is a mix of site application and android application made for such respectable and incredible reason. The rising innovation in android improvement has made this conceivable. The emergency clinics, patients and clients can enroll through site. Furthermore, on other hand, the android application gives an approach to searcher to look for givers were calling and informing to companions through application on android. This application can likewise be utilized by medication benefactor and searcher where individual can enlist for keen on medication gift .User can get giver area through GPS and calling to them will be available. In DFHC there will be use GPS innovation that will be utilized to follow the route to the medication giver. The client will get the course to arrive at the ideal area and he doesn't need to ask physically, in this manner time can be spared.

**Keywords:** Drugs for health care (DFHC), Technology, Global Positioning System (GPS), and Android Application

Read Full Paper · Download PDF · Back to index

---

## 79 Development of a home security Robot using Deep Learning and IoT

Paper ID V7I4-1269 · Pages 366-377 · Mechanical Engineering

**Shravan Aruljothi**, Research Scholar, New Horizon College of Engineering, Bengaluru, Karnataka
**Sharad Dewanand Parate**, Research Scholar, New Horizon College of Engineering, Bengaluru, Karnataka
**Harshit S.**, Research Scholar, New Horizon College of Engineering, Bengaluru, Karnataka
**Nehal Dinesh Andani**, Research Scholar, New Horizon College of Engineering, Bengaluru, Karnataka

The major problem in every urban city is the lack of security to residential areas. The number of thefts, electricity and food wastage at homes in urban areas increase every year due to human error. As per the National Crime Records Bureau (NCRB), 2,44,119 cases of robbery, theft, and burglary took place in residential premises in 2019. Also, electricity consumption in Indian homes has tripled since 2010. In 2019, an urban Indian household consumed about 90 units (kWh) of electricity as a monthly average which is one-third of the

© 2021, IJARIIT.COM All Rights Reserved

monthly world average. To solve these issues, we have proposed an idea of a “Home Security Robot” for a smart city using AI. The Home Security Robot will help in eliminating the reliance on security guards and will effectively monitor everything in the house (if there are any gas leakage, fridge malfunctions, unnecessary electricity wastage, indoor air quality and any unknown movements inside the house). If the owner is under attack, he/she can shout out “HELP” or “SAVE ME "so that the robot can take in the voice command to automatically call the police. The navigation part is done by Arduino and Bluetooth RC Controller App. There are 2 parts (Face Detection & Recognition using Raspberry Pi and IoT system using BOLT module with sensors). The first part has three python programs used for facial detection and recognition using OpenCV with Haar Cascade Classifier and LBPH algorithm. The first program (Face Dataset) is used for collecting images of known users and storing it in a database using Haar Cascade Classifier. The second program (Face Training) is used to train the stored images using LBPH algorithm so the model can distinguish between the users whose faces are stored in database and then these trained images are stored in the trainer.yml file. The third program (Face Recognition) is used to read the trained images stored in the trainer.yml file and then uses Haar Cascade Classifier to recognize the detected face and identifies whether the face belongs to a user or an intruder. The IoT system with the help of BOLT module helps in checking the temperature in the room and checking if any unnecessary lights are on in the room. If the room temperature is outside the safe range specified or if any lights are on, owner will get an alert via SMS.

**Keywords:** IoT, Deep Learning, Raspberry Pi, BOLT, OpenCV, Haar Cascade Classifier, Viola-Jones Algorithm, LBPH Algorithm

Read Full Paper · Download PDF · Back to index

---

## 80 Social Cause Marketing (Pink Capitalism) and its impact on consumers’ brand preferences

Paper ID V7I4-1276 · Pages 378-384 · Marketing

**Saniya Savant**, Student, SVKM NMIMS School of Law, Navi Mumbai, Maharashtra

As its name implies, cause-based marketing is the process of marketing a specific idea, cause, or goal, rather than a specific business, product, or service. These initiatives are often partnerships between a nonprofit organization – typically the driving force behind the” “messaging of the campaign itself – and either an ad agency or corporate partner, which typically handles the execution of the campaign. Although cause-based marketing campaigns can focus predominantly on PPC or social advertising, these campaigns can and often do incorporate” elements of guerilla marketing in their execution. Trying to grab people’s attention is no easy feat these days, and as such many organizations adopt more creative ways of getting their message out, as we’ll see later on. Many cause-based marketing campaigns are organic offshoots of grassroots marketing efforts, which also tend to focus on causes. This paper will discuss thoroughly cause-related marketing through the lenses of Pink Capitalism. It will also discuss how pink capitalism is not entirely an ethically incorrect concept and focus on the silver lining of the same, which would benefit both the NGO as well as the corporations.

**Keywords:** Cause-Related Marketing, Campaign, NGO, Corporations, Pink Capitalism

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 81 Helping business owners to find potential competitors

Paper ID V7I4-1279 · Pages 385-389 · Deep Learning

**Suraksha S. S.**, Research Scholar, RV College of Engineering, Bengaluru, Karnataka
**Darunya B. C.**, Research Scholor, RV College of Engineering, Bengaluru, Karnataka
**Priya D.**, Assistant Professor, RV College of Engineering, Bengaluru, Karnataka
**Anisha B. S.**, Assistant Professor, RV College of Engineering, Bengaluru, Karnataka

Opening a business in any place is not an easy task as it needs lots of things to be considered. One should consider its competitors before opening a business. This project is one attempt to help those business people to find their competitors. In this project, a taco palace is planned to open in the city of Monterrey, Mexico. Here the attempt is to find a neighborhood with not too many competitors with enough customers. To find the neighborhood, considering the latitude and longitude values of the city of Monterrey, Mexico, and can be able to locate the best place to open the restaurant. In this project Foursquare API is used to explore the neighborhoods and get the most common restaurants near that place and using this function clusters can be grouped. For clustering, a K-means clustering algorithm is used. Clusters are used to know the similar business in that areas. Clusters group the similar business and list out all its names. To visualize the neighborhoods Folium library is used.

**Keywords:** K-Means Clustering, Folium Library, Foursquare API.

Read Full Paper · Download PDF · Back to index

---

## 82 Size-specific variation in the rate of oxygen consumption, ammonia excretion, and O: N ratio of freshwater bivalve lamellicorns marginalis during the season of monsoon

Paper ID V7I4-1320 · Pages 390-395 · Physiology

**Pritesh Ramanlal Gugale**, Assistant Professor, Rayat Shikshan Sanstha's Balwant College, Vita, Maharashtra

Malacology means the study of molluscan animals and also conchology means the study of the molluscan shell. Body mass is one of the best known and most studied characteristics of aquatic animals on scaling of metabolic rates. We studied here how size-specific variation in the rate of oxygen consumption, ammonia excretion, and O: N ratio in Freshwater Bivalve Mollusc Lamellidens marginalis species in an attempt to know how size-specific variation affects their metabolism. The freshwater bivalve molluscs were chosen for experimental work from Bhima River at Siddhatek in August and September for the period of monsoon season with body size i.e. small (75-79 mm in shell-length) and large (90-93 mm in shell-length). In current work reported that the rate of oxygen consumption and O: N ratio was high in the small body-sized bivalve mollusc but the rate of ammonia excretion was low in small body-sized bivalves compared to large ones. The results are discussed in the flush of metabolic processes in fresh-water bivalve molluscs.

**Keywords:** Size Specific, Variation, Oxygen Consumption, Ammonia Excretion, O: N Ratio, and Monsoon

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 83 AI-based chatbots for providing health-related information

Paper ID V7I4-1326 · Pages 396-401 · Artificial Intelligence

**Dungi Pravalika Reddy**, Student, Andhra University College of Engineering for Women, Visakhapatnam , Andhra Pradesh
**Dadala Shantha Shekinah**, Student, Andhra University College of Engineering for Women, Visakhapatnam , Andhra Pradesh
**Gunisetty Pavani Suvarna Satya**, Student, Andhra University College of Engineering for Women, Visakhapatnam , Andhra Pradesh
**Kolla Hasitha Naidu**, Student, Andhra University College of Engineering for Women, Visakhapatnam , Andhra Pradesh
**Dr. K. Soumya**, Lecturer, Andhra University College of Engineering for Women, Visakhapatnam , Andhra Pradesh

Chatbots in the health care systems may have the potential to provide patients with access to immediate medical information. Health care chatbots can help patients better manage their own health; improve access and timeliness to care. Al-based Chatbots for supplying health-related information. The System uses artificial intelligence which includes advanced Natural language processing to answer the query Tf-IDF weighting. The User can query any health-related activities through the system. The user does not have to personally go to the health for an inquiry. The software analyses the questions and then answers the user. The software answers the queries as if it is questioned by a person. The software answers using a Graphical user interface which implies that as if a pupil is talking to the user. The user has to register himself to the software and has to log in. After login user can access the bot. A chatbot is a program that communicates with people.

**Keywords:** Chatbots, AI, Graphical User Interface

Read Full Paper · Download PDF · Back to index

---

## 84 City cleanliness using geo-tagged images with experimental results

Paper ID V7I4-1285 · Pages 402-406 · Waste Management

**Krishna Sonawane**, Student, AISSMS Institute of Information Technology, Pune, Maharashtra
**Prachi Pingle**, Student, AISSMS Institute of Information Technology, Pune, Maharashtra
**Siddhant Lunawat**, Student, AISSMS Institute of Information Technology, Pune, Maharashtra
**Trupti Zagade**, Student, AISSMS Institute of Information Technology, Pune, Maharashtra
**Dr. Meenakshi Thalor**, Professor, AISSMS Institute of Information Technology, Pune, Maharashtra

During the process of smart city construction, city planners and managers always spend a lot of energy and money for cleaning street garbage due to the random appearances of street garbage. Consequently, visual street cleanliness assessment is particularly important. However, the existing assessment approaches have some clear disadvantages, such as the collection of street garbage information is not automated and street cleanliness information is not real-time. To address these disadvantages, this paper proposes a novel urban street cleanliness assessment approach using mobile edge computing and deep learning. First, the high resolution cameras installed on vehicles collect the street images. Mobile edge servers are used to store and extract street image information temporarily. Second, these processed street data is transmitted to the cloud data centre for analysis through city networks. At the same time, Faster Region-Convolutional Neural Network (Faster R-CNN) is used to identify the street garbage categories and count the number of garbage. Finally, the results are incorporated into the street cleanliness calculation framework to ultimately visualize the street

© 2021, IJARIIT.COM All Rights Reserved

cleanliness levels, which provides convenience for city managers to arrange clean-up personnel effectively. Index Terms— Smart cities, street cleaning, garbage detection, deep learning, mobile edge computing.

**Keywords:** Smart Cities, Street Cleaning, Garbage Detection, Deep Learning, Mobile Edge Computing

Read Full Paper · Download PDF · Back to index

---

## 85 Algorithmic Trading with Deep Learning

Paper ID V7I4-1286 · Pages 407-413 · Computer Science

**Mayank Anuragi**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Rakshit Ramnath Naik**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Manoj Galanki**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Kavitha S. Patil**, Professor, Atria Institute of Technology, Bengaluru, Karnataka

In this paper, Artificial Neural Network (ANN) is used to predict trading signals like Strong Buy, Buy, Neutral, Strong Sell and Sell a total of 5 signals. The ANN outputs one of the trading signals based on the market data of cryptocurrencies. The ANN makes use of the candle-stick data along with additional data like Volume, Number of Trades, etc and technical indicators to predict the signals. The ANN is trained on multiple intervals of the market, i.e. 1 minute, 3 minutes, 5 minutes and so on up to 3 days in the intervals. Along with the market data, the paper also makes use of the news articles to better predict the trading signals, this is only used when the ANN predicts the Buy or Sell, and by using the news articles those Buy and Sell signals are converted to Strong Buy and Strong Sell respectively. The ANN was trained on 3 years of data, and Google's BERT [1] model was trained on almost 1000 news article's titles on topics related to cryptocurrencies and the model outputs whether it's a positive or negative title. The accuracy of the ANN models for all the markets is in the range of 85 - 90% and the same accuracy is observed with the BERT model which is trained on the news article's title.

**Keywords:** Algorithmic Trading, Artificial Neural Network, Google BERT, Cryptocurrency Market

Read Full Paper · Download PDF · Back to index

---

## 86 Reducing crude protein level in commercial layer chicken feed by balancing digestible amino acids

Paper ID V7I4-1288 · Pages 414-419 · Poultry Nutrition

**Sakthivel D.**, Research Scholar, Veterinary College and Research Institute, Namakkal, Tamil Nadu
**Mani K.**, Dean, College of Poultry Production and Management, Hosur, Tamil Nadu
**Kannan D.**, Professor and Head, Veterinary College and Research Institute, Udumelpet, Tamil Nadu
**Vasanthakumar P.**, Professor and Head, Veterinary College and Research Institute, Namakkal, Tamil Nadu

A total of 10 commercial layer farms in the stage of phase-I laying period (25 to 40 weeks) reared in raised platform caged house with uniform management wereselected for the experiment. In each farm, 4000 birds will be selected and divided into two treatment groups of 2000 birds each. The feed formulation with reduced crude protein level (15 per cent) compared to standard level of 17 per cent will be formulated by balancing the digestible amino acids (Lysine, methionine+cysteine, threonine, tryptophan, arginine, isoleucine and valine). Feed ingredients used in feed formulation were maize, cumbu, broken rice, soya bean meal, sun flower cake,

© 2021, IJARIIT.COM All Rights Reserved

deoiled ricebran, rapeseed meal, fish meal,etc. Based on the above study it could be concluded that crude protein reduction is one of the way to reduce feed cost in commercial layer chickens, but should be properly balanced with all the essential digestible amino acids rather than total amino acids basis. But the quality of feed ingredients, loss in body weight and egg weight is the area of concern.

**Keywords:** Crude protein, Commercial layers, Chicken, Digestible aminoacids

Read Full Paper · Download PDF · Back to index

---

## 87 Traffic rule violation detection and reporting system

Paper ID V7I4-1301 · Pages 420-421 · Machine Learning

**B. G. Vinayak**, Student, Sai Vidya Institute of Technology, Bengaluru, Karnataka
**Rakesh M. R.**, Student, Sai Vidya Institute of Technology, Bengaluru, Karnataka
**Santosh Reddy P.**, Assistant Professor, Sai Vidya Institute of Technology, Bengaluru, Karnataka

The increasing number of vehicles in cities can cause high volumes of traffic, and implies that traffic violations become more critical nowadays in India and also around the world. This causes severe destruction of property and more accidents that may endanger the lives of the people. To solve the alarming problem and prevent such unfathomable consequences, traffic violation detection systems are needed. For which the system enforces proper traffic regulations at all times, and apprehends those who do not comply

**Keywords:** Traffic violation, Tensorflow, OpenCV, OpenALPR API

Read Full Paper · Download PDF · Back to index

---

## 88 Impact of COVID-19 Lockdown on Air Pollution and Air Quality Index (AQI) in India

Paper ID V7I4-1309 · Pages 422-435 · Environmental Engineering

**Ankit Kumar**, Student, Indian Institute of Technology, New Delhi, Delhi

© 2021, IJARIIT.COM All Rights Reserved

From the start of industrialization, air pollution in India and around the globe started increasing with new pollutants coming into existence. The extent of air pollution has also increased in the last few decades, very rapidly affecting human health and the earth's ecosystem badly. During pandemics like it happened in other countries, the same way, in India also government-imposed lockdown that resulted in the termination of all economic activities. The pandemic and imposed lockdown provided improved air quality as a gift to mankind. This duration also shows insight into the relationship between the economy and good air quality. We also get some insight into how to improve air quality without affecting the basic needs of society. This paper aims to examine the variation of the concentration of 5 main contaminants (PM2.5, PM10, NO2, CO and Ozone) before and after the lockdown imposed in 5 major Indian cities. After reading this paper, we get an insight into to what extent we can reduce air pollution by imposing lockdown and how the socio-economic, geographical variance across cities decides the extent of reduction in air pollution. We also get direction for future management strategies and policies to regain economic strength with sustainable improvements. So at the moment, wehave to focus on both air pollution management and economic recovery. This study provides insight into the air quality index across the geographical variation of India.

**Keywords:** Impact of COVID-19, Lockdown, Air Pollution, Aqi, India, Cities

Read Full Paper · Download PDF · Back to index

---

## 89 Face recognition based attendance monitoring system

Paper ID V7I4-1314 · Pages 436-440 · Deep Learning

**Keerthi Sree Ganne**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**B. Prajna**, Professor, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Golagani Naga Kalyani**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**G. Neha Gagana**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Gurugubelli Rajani**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh

This project is to construct a face recognition-based attendance monitoring system for various educational institutions for taking attendance of students accurately. Previously attendance was taken manually where the professor/ teacher used to record attendance of students in log registers. This process is time-consuming and hectic. The professor/teacher might miss marking the attendance for few students or an illegal third party might manipulate the log register. The accuracy and security were at stake always. Then there was a new attendance system using fingerprints. This system might be accurate but there is a chance of stealing fingerprints from the biometric device for malicious activities. In this project, we use the face which is the most important part of our body. The facial features of individuals are recognized and analyzed for taking attendance. In this project, we use one of the most popular programming languages Python, and its library called OpenCV which is used to capture live images and videos. The face images and details like registration number and name of the student will be saved in files and attendance notes can be seen in Excel Spreadsheet. The image detection and processing are done using the LBPH algorithm which is known for its simple yet efficient performance.

© 2021, IJARIIT.COM All Rights Reserved

**Keywords:** Deep Learning, Face Recognition Based Attendance, Opencv, Face Detection, Lbph Algorithm, Image Classifier, Spreadsheet, Camera

Read Full Paper · Download PDF · Back to index

---

## 90 Planning and designing of G+1 structure of the residential building

Paper ID V7I4-1306 · Pages 441-443 · Civil Engineering

**Harshada Satish Pansare**, Research Scholar, Vivekanand Education Society's Polytechnic College, Mumbai, Maharashtra
**Shivani Kirdat**, Student, Vivekanand Education Society's Polytechnic College, Mumbai, Maharashtra
**Sweta Gathe**, Student, Vivekanand Education Society's Polytechnic College, Mumbai, Maharashtra
**Esha Palsmabkar**, Student, Vivekanand Education Society's Polytechnic College, Mumbai, Maharashtra1
**Fatema Trawadi**, Lecturer, Vivekanand Education Society's Polytechnic College, Mumbai, Maharashtra

The primary objective of this project is to gain sufficient knowledge in the planning and design of buildings. Our project deals with the planning and design of a residential building. Planning of structure was done in Auto cadd software and design of structural components like slab, beam, column, footing, staircase, etc was done by Stadd Pro software. It is a reinforced concrete framed structure consisting of G+1.IS 456:2000 codes are the basic code for general construction in concrete structures, hence all the structural members are designed using the limit state method in accordance with the IS 456:2000 code and design aids. With the help of Microsoft Excel and AutoCAD we successfully found the estimated area of Plot area = 193.97sq.m, Ground floor area = 105.02 sq.m, First floor area = 105.02 sq.m,F.S.I Permitted = 1.0 .

**Keywords:** Staad Pro, Residential Building, Autocad, Microsoft Excel, G+1 Structure. IS Code 456:2000, Limit State Method

Read Full Paper · Download PDF · Back to index

---

## 91 Teacher’s learning on ICT platforms during Pandemic: Relevance for teacher education with special focus on Zoom, YouTube

Paper ID V7I4-1308 · Pages 444-445 · Online Teacher Education

**Lalitha Devi B.**, Research Scholar, National Institute of Technology, Warangal, Telangana
**Madhumathi P.**, Assistant Professor, National Institute of Technology, Warangal, Telangana

There is a rise in the importance of teacher’s learning on ICT platforms during times of pandemics. However, there are some important issues to be addressed to make this learning more progress-oriented. In this context, the focus should be on the technical awareness of teachers, the usefulness of the ICT platforms, and the methodology adopted to put the platform to appropriate and productive use. The paper focuses on the relevance of ICT platforms for Teacher Education with a special mention of Zoom and YouTube.

**Keywords:** Open Learning, ICT Platforms, Teacher Education, Zoom, Youtube, Webinars, Workshops

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 92 Review on chalcone (preparation, synthesis of pirazolines ring and biological screening based on chalcones and derivation into pirazolines)

Paper ID V7I4-1325 · Pages 446-451 · Chemistry

**Milind Chhaburao Nagare**, Assistant Professor, M.S.G. College, Malegaon, Maharashtra

Pyrazolines are well-known and important nitrogen-containing 5-membered heterocyclic compounds. Pyrazolines are known to exhibit different biological and pharmacological properties such as anticancer, antibacterial, antifungal, and ant tubercular activities. Chalcones with an enone group between two aromatic rings exhibit remarkable pharmacological activities such as anti-inflammatory, antibacterial, antitumor, antifungal activity.

**Keywords:** Chalcone, Synthesis Methods, Pirazolines, Biological Activity

Read Full Paper · Download PDF · Back to index

---

## 93 Smart system for student placement prediction

Paper ID V7I4-1253 · Pages 452-455 · Machine Learning

**Kavya G.**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Pranitha Y.**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Sanjana A.**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Sirisha D. G.**, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
**Mamatha A.**, Assistant Professor, Sai Vidya Institute of Technology, Rajanukunte, Karnataka

Its goal is to develop college-level forecasting automation, predict the chances of students being placed in information technology companies, and help screen candidates before the hiring process begins. It involves using machine learning algorithms as a basic model to classify students into appropriate groups, so the results will help them improve their skills and other ways of thinking. The same results are also compared with the results obtained from other models such as logistic regression, random forest, and SVM to obtain the optimal and so on. Placements are considered to be very important for each and every college. The main objective of this model is to predict whether the student gets placed or not in campus recruitment. A high placement rate is a key entity for any educational institution. Hence such a system has a significant place in the educational system of any learning institution.

**Keywords:** Classification, Machine Learning, Automation, Logistic Regression, Student Placement

Read Full Paper · Download PDF · Back to index

---

## 94 Change Management & the Concept of Common Data Environment in Indian Construction Industry

Paper ID V7I4-1339 · Pages 456-461 · Civil Engineering

**Khan Waqar Ahmed Imtiyaz**, Student, Veermata Jijabai Technological Institute, Mumbai, Maharashtra
**Dr. Sumedh Mhaske**, Professor, Veermata Jijabai Technological Institute, Mumbai, Maharashtra

Construction industry is that industry in which many spontaneous decisions are taken due to various reasons

© 2021, IJARIIT.COM All Rights Reserved

inadequate information, personal assumptions and the experience of the construction professionals. Project changes and/or adjustments are inevitable as they are a fact-of-life at all stages of a project's life cycle. Managing changes effectively is crucial to the success of a construction project. There's a need of the hour that Construction industry needs an Integrated solutions to manage these changes and a systematic change management system to discipline and coordinate the process, for example, documentation, drawing, process, flow, information, cost, schedule and personnel. This research presents an integrated solution by use of OpenKM software. The methodology used will be using OpenKM in the existing construction process and making a more feasible and easy to use interface to counteract the Obstacle due to change management on daily basis and make Time/Cost optimization respectively.

**Keywords:** Construction Industry, project changes, change management, OpenKM.

Read Full Paper · Download PDF · Back to index

---

## 95 Seismic retrofitting and collapse evaluation of irregular bridge with non-linear effects

Paper ID V7I4-1202 · Pages 462-466 · Structural Engineering

**Firoz P. Andhru**, Student, Ilahia College of Engineering and Technology, Mulavoor, Kerala
**Remya Raju**, Assistant Professor, Ilahia College of Engineering and Technology, Mulavoor, Kerala

Performance of bridges with elastic pad bearing is weak in earthquakes. On 2004 Sumatra earth quake Chengappa bridge in Andaman suffered from the dislocation of bridge. This study examine the structural performance of Chengappa bridge with and without dampers. In first model examine the seismic effect of linear bridge with and without damper. In second model seismic effect of double curved bridge is examined with and without damper. Finite element models were developed, time history analysis and dynamic analysis performed using ANSYS to assess the structural performance of these bridge. The dimensions of the bridge used for the analysis taken same as the chengappa bridge for both linear and non-linear effects. Structure were analysed under GM3 earthquake loading. Time period, deck displacement, base shear and acceleration investigated

**Keywords:** Linear and Non-Linear, Time History Analysis, Dynamic Analysis, Finite Element Model, Ground Motion3.

Read Full Paper · Download PDF · Back to index

---

## 96 Clinical evaluation of Standard Q Rapid Ag TEST vs RT PCR

Paper ID V7I4-1280 · Pages 467-468 · Molecular Biology

**Dr. Manjubhashini**, Doctrate Degree Holder, Rao's Path Lab, Salem, Tamil Nadu
**Soundaravalli V.**, Technical Director, Rao's Path Lab, Salem, Tamil Nadu
**Santhiya S.**, Molecular Biologist, Rao's Path Lab, Salem, Tamil Nadu
**Vidyapoornam N.**, Managing Director, Rao's Path Lab, Salem, Tamil Nadu

The Pandemic COVID-19 poses the major problem in diagnosing which requires skilled technicians and well-equipped infrastructure. To overcome we have evaluated the Standard Q rapid Ag test for SARS-CoV-2 virus from nasal swab at POC sites which was eventually compared with RT PCR as reference assay. A maximum of 505 samples were collected from the patients who visit hospitals and laboratories for different purposes with

© 2021, IJARIIT.COM All Rights Reserved

appropriate consent form. It is found to be that rapid Ag test shows good sensitivity, specificity and predictive value range with RT PCR and it will be also useful in swarm screening and in emergency conditions.

**Keywords:** Rapid Antigen Test, SARS-CoV-2, RT-PCR

Read Full Paper · Download PDF · Back to index

---

## 97 Review paper on improving COVID-19 vaccine distribution in India

Paper ID V7I4-1305 · Pages 469-471 · Big Data

**Siddharth Padhiar**, Student, NMIMS Deemed-to-be-University, Mumbai, Maharashtra
**Juhi Patel**, Student, NMIMS Deemed-to-be-University, Mumbai, Maharashtra
**Gaurav Bhattad**, Student, NMIMS Deemed-to-be-University, Mumbai, Maharashtra

With the stark rise in the outbreak of COVID-19 in numerous countries, India, amongst other nations, too is considerably affected by it also it has shaken the global health system and economy by their roots. The virus is still spreading and there are no signs of decreasing the trend. Vaccination is the only effective and important means which could control this situation. Several research institutions and pharmaceutical companies have plunged into the race of vaccine development against COVID-19 and currently, it is being distributed among normal people. Logistics and supply chain for distribution of vaccine in a country like India where the population is way too much is the challenge. The deployment of COVID-19 vaccines is kind of a challenge because of transportation and storage. Temperature data is an important source of knowledge that can be recorded from different data sources such as sensors. The study focuses on predictive maintenance to manage the vaccine distribution while transporting. Also, it focuses on post-vaccine symptoms data which can be used for improving the vaccine.

**Keywords:** Covid-19, Pandemic, Supply chain, Logistic, Big Data Technology, Forecasting

Read Full Paper · Download PDF · Back to index

---

## 98 Remote control tool to test the interfaces of IoT hub

Paper ID V7I4-1315 · Pages 472-476 · Iot

**Shreevidya S.**, Research Scholar, RV College of Engineering, Bengaluru, Karnataka
**Nagaraju P.**, Associate Professor, RV College of Engineering, Bengaluru, Karnataka
**Manoj Kumar Podha**, Software Technologist II, Philips Innovation Campus, Bengaluru, Karnataka

The proposed Remote-Control service tool allows remote connection of the medical devices with the IoT hub software. The hub provides proactive services to the associate devices and these devices are connected to the hub via the proposed tool. The tool realizes the features offered by the hub and is capable of performing registration of the associate devices via unique identification numbers such as the serial number and material number, or the system identifier along with attribute update feature. The tool is deployed via the CICD pipeline using Azure DevOps. The functional correctness of the code and its comprehensive analysis are done by unit testing and generation of code coverage report respectively.

**Keywords:** Angular, Azure DevOps, Code Coverage, Electron, Jasmine, Registration, Simulator

© 2021, IJARIIT.COM All Rights Reserved

Read Full Paper · Download PDF · Back to index

## 99 Enhanced Security implementation in IoT

Paper ID V7I4-1321 · Pages 477-482 · Iot

**Punam Mahendra Lokhande**, Student, Alamuri Ratnamala Institute of Engineering and Technology (ARMIET), Thane, Maharashtra

This research paper is about implementing security protocols in IoT. IoT devices are tremendously getting popularity and are in used frequently by users. Security is more critical in IoT. Here we are using a privacy mechanism approach is Attribute-Based Encryption (ABE). A public-key encryption approach that enables smooth access control, scalable key management, and flexible data distribution. We concern with two types of ABE, B Key-Policy Attribute-Based Encryption (KP-ABE) and Ciphertext-Policy Attribute-Based Encryption (CP-ABE) are the best for secured use of IoT. The main focus of this implementation is to applying security to the pub-sub architecture using KP-ABE. KP-ABE mechanism. We are implementing AES cryptography on the payload. By use of cipher key to generate dynamic S-Box which is changing with every changing of the cipher key. That results in cryptographic strength.

**Keywords:** IoT, Attribute-Based Encryption (ABE), Cryptography, Pub-Sub Architecture Dynamic S-Box

Read Full Paper · Download PDF · Back to index

## 100 Phishing website detection using Machine Learning

Paper ID V7I4-1324 · Pages 483-486 · Information Technology

**R. Dhatri**, Research Scholar, Gudlavalleru Engineering College, Gudlavalleru, Andhra Pradesh
**N. Shafiyabi**, Research Scholar, Gudlavalleru Engineering College, Gudlavalleru, Andhra Pradesh
**U. Nithish**, Research Scholar, Gudlavalleru Engineering College, Gudlavalleru, Andhra Pradesh
**P. Vamsi**, Research Scholar, Gudlavalleru Engineering College, Gudlavalleru, Andhra Pradesh
**K. Subrahmanya Kousik**, Assistant Professor, Gudlavalleru Engineering College, Gudlavalleru, Andhra Pradesh

© 2021, IJARIIT.COM All Rights Reserved

Today internet or websites plays a major role in every person's life. Almost Every sector using the website services like the banking sector using some apps for payment, the passport sector is using for registration and renewal of passport, the government sector for application of PAN cards, adhar cards, etc. This makes human life simpler. But this provides an opportunity to make phishing websites. Phishing websites are the same as legitimate or real websites. The purpose of the phishers is to steal their personal information, account ID, Passwords from individuals and organizations. They even add some tricks by asking security questions like apet name, city name to gain users' trust. Although legitimate and phishing looks like same there are somefeatures that make difference between that two things. That features such as IP address, URL length, having @symbol, double slash redirection, Prefix, and suffix, having subdomain, domain registration link, HTTPS tokens,Request URL, URL of anchor, disabling right-click, using a pop-up window, and some more. Already manyapproaches are proposed for detecting phishing websites machine learning is the most appropriate one. This isbecause there are some common features that can be identified by machine learning. In this paper, we used arandom forest algorithm to detect phishing websites based on features that make difference between both ofthe websites.

**Keywords:** Phishing Websites, Random Forest, Machine Learning, Numpy, Pandas

Read Full Paper · Download PDF · Back to index

---

## 101 Effect of COVID-19 on consumer behavior in the corporate sector

Paper ID V7I4-1350 · Pages 487-493 · Consumer Behaviour

**Priya Nair**, Research Scholar, Narsee Monjee Institute of Management Studies, Mumbai, Maharashtra
**Anirrban Ghosh**, Research Scholar, Narsee Monjee Institute of Management Studies, Mumbai, Maharashtra
**Sanjay Rao**, Research Scholar, Telloquent Solutions Private Limited, Bengaluru, Karnataka

The coronavirus pandemic has made the longest lockdown ever in the world in history. This pandemic has affected all the human health, food chains, international businesses, companies, global economy as well as it impacts on the behaviour of the consumers. As all the offline stores were closed during the lockdown, a large number of consumers are using online stores to fulfil their needs. In that pandemic situation, purchasing of most products from online stores increased about 6-10% in all over the world. Therefore, the pandemic has increased the use of digital platforms and consumer behaviour has a large impact of covid19. Consumer behaviour helps the marketers to gain knowledge about the expectations of the customers and it makes successful business as the organization provides products according to the customers’ needs. Therefore, consumer behaviour led to an impact of making successful business.

**Keywords:** Consumer Behaviour, Corporate Houses, Customer, Economic Crisis, Consumption, Buying Behaviour, COVID-19, Brands, Online Stores

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 102 Glycerol – An alternate energy source for livestock feeding

Paper ID V7I4-1356 · Pages 494-498 · Animal Nutrition

**Mukesh Sharma**, Research Scholar, Dau Shree Vasudev Chandrakar Kamdhenu University, Durg, Chhattisgarh
**Dr. Manoj Gendley**, Associate Professor, Dau Shree Vasudev Chandrakar Kamdhenu University, Durg, Chhattisgarh
**Dr. Kranti Sharma**, Assistant Professor, Dau Shree Vasudev Chandrakar Kamdhenu University, Durg, Chhattisgarh

Glycerol, is being an attractive feed ingredient for cattle, is a by-product of a wide range of industrial applications. Glycerol has potential value in livestock feeding since it improves feed efficiency, metabolism, and can avoid ketosis. Research indicates that glycerol can be a suitable partial grain replacement in the diet of cows during the transition period and at early lactation. The impact on milk yield is not significant, but glycerol mostly decreases milk fat content. The inclusion of glycerol in the dairy ration has an effect on ruminal fermentation patterns. Glycerol is rapidly fermented in the rumen into propionate, and it is metabolized to glucose in the liver through the process of glycogenolysis, additionally, glycerol administration to ruminants can reduce greenhouse gas emissions. The purpose of this review is to highlight the potential benefits and drawbacks related to the use of glycerol in cattle. Glycerol, from biodiesel Industries, must be purified in order to make it a useful product for livestock feeding. The use of glycerol in ruminant nutrition can be justified for several reasons: (i) as a source of energy, (ii) as a glycogenic precursor, and (iii) it may have an effect on milk composition. The high energy value of glycerol provides the opportunity to use it as a partial substitute for grain in dairy rations. Supplementation of glycerol in dairy animals' diets is associated with increased propionate, butyrate, valerate, and isovalerate concentrations in the rumen. Glycerol can be used as 10%–15% of the dietary dry matter (DM) and is a well-established tool for treatment for ketosis in cows. Glycerol increases plasma glucose and may reduce non-esterified fatty acids and hydroxybutyrate levels. The dietary supplementation of glycerol does not have a direct effect on DM intake, milk yield, or milk composition. However, some researchers reported an increase in milk yield after glycerol supplementation associated with decreased milk fat concentration. It is also possible that the concentration in the milk of odd-chain fatty acids and cis-9, trans-11 conjugated linoleic acid may increase after glycerol application.

**Keywords:** Dairy Cows, Glycerol, Metabolism, Ketosis, Rumen Microorganism

Read Full Paper · Download PDF · Back to index

---

## 103 Antimicrobial textiles based on nanosilver

Paper ID V7I4-1328 · Pages 499-502 · Nanotechnology

**Meenal Singh**, Student, Indian Institute of Technology, Delhi

In recent years, Antimicrobial textiles have been an area of great research due to many of their desired properties like reducing infection transmission in the medical environment, enhanced performance, and improving odor control. Their basic feature is to protect the fabric from rotting caused by microbes. Antimicrobial textiles fulfill functions such as preventing cross-infection, arresting microbial metabolism, and protecting the textile from staining, discoloration, and quality deterioration.

**Keywords:** Rot Proofing, Nanosilver, Antimicrobial, UV-Transmittance, Hydrophobicity, Microencapsulation

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 104 Stock Sentiment Analysis using News Headlines

Paper ID V7I4-1349 · Pages 503-505 · Machine Learning

**Tavva Sai Prathyusha**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Thummapala Mounika**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Vemaraju Siri chandana**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Vysyaraju priyanka**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Seepana Priyanka**, Lecturer, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh

Efficient Market Hypothesis is the popular theory about stock prediction. With its failure much research has been carried in the area of prediction of stocks. This project is about taking non quantifiable data such as financial news articles about a company and predicting its future stock trend with news sentiment classification. Assuming that news articles have impact on stock market, this is an attempt to study relation between news and stock trend. To show this, we created three different classification models which depict polarity of news articles being positive or negative.

**Keywords:** Sentiment analysis, TF-IDF, Bag-of-words, Random forest, Multinomial Naïve Bayes, Passive-Aggressive Classifier

Read Full Paper · Download PDF · Back to index

---

## 105 Prediction of chronic kidney disease and diet recommendation

Paper ID V7I4-1351 · Pages 506-509 · Computer Science

**Annapoorna B. A.**, Student, Sai Vidya Institute of Technology, Bangalore, Karnataka
**Nisarga Y. N.**, Student, Sai Vidya Institute of Technology, Bangalore, Karnataka
**Rachana R. Shastry**, Student, Sai Vidya Institute of Technology, Bangalore, Karnataka
**Sreelatha P. K.**, Assistant Professor, Sai Vidya Institute of Technology, Bangalore, Karnataka

Chronic renal disorder is that the sort of disease within which there's a decrease in kidney function over a period of months or years. Early prediction of CKD is one in all the main problem in medical fields. So automated. tools which use. machine learning techniques determine the patient’s kidney condition which will be helpful to the doctors in prediction of disease.. Our system retrieves the features which are significantly affects the human with CKD, and so the ML technique which automates the classification of the disease into different stages. Our main goal is to predict the disease stage and suggest suitable diet for CKD patients using classification algorithms on medical test records. Diet recommendations for patients are going to be given per the potassium zone which is calculated using blood potassium level to weigh down the progression of CKD.

**Keywords:** Chronic Kidney Disease, Glomerular Filtration Rate, Naïve Bayes, Decision Tree, Random Forest, K-Nearest Neighbors Classifier

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 106 A study on effect of emotional attitude on emotional purchase intention

Paper ID V7I4-1352 · Pages 510-516 · Marketing

**Namratha**, Research Scholar, Osmania University, Hyderabad, Telangana
**P. Purushotham Rao**, Professor, Osmania University, Hyderabad, Telangana
**Dr. A. Patrick**, Assistant Professor, Osmania University, Hyderabad, Telangana

The study emphasis on emotional attitude and emotional purchase intention, where the study focused on six major items under Emotional Attitude and Emotional purchase Intention. The main purpose of the study is to find the direct effect of Emotional Attitude on Emotional Purchase Intention. It also emphasizes how these impacts the customer's attitude regarding age, gender, and qualification. This study is applicable in terms of objective and various hypotheses are implemented. To collect the data self-administered questionnaire was designed and the data is collected from the region of Hyderabad, Using a convenient sample of 97 respondents. The data is analyzed with assorted methods like frequency calculation and the Chi-squared test. It was found that gender, age, and education qualification had a very significant role to play. Amos was used to finding the direct effect of Emotional Attitude on Emotional Purchase Intention.

**Keywords:** Emotion, Emotional Attitude, Emotional Purchase Intention, Customer's Attitude

Read Full Paper · Download PDF · Back to index

---

## 107 Fetal birth weight estimation in high-risk pregnancies through Machine Learning Techniques

Paper ID V7I4-1342 · Pages 517-521 · Machine Learning

**Meghana S.**, Student, Sai Vidya Institute of Technology, Bangalore, Karnataka
**Y. Sree Rushitha**, Student, Sai Vidya Institute of Technology, Bangalore, Karnataka
**Susan Syeda**, Student, Sai Vidya Institute of Technology, Bangalore, Karnataka
**Priyanka M.**, Student, Sai Vidya Institute of Technology, Bangalore, Karnataka
**Dr. Shantakumar B. Patil**, Professor, Sai Vidya Institute of Technology, Bangalore, Karnataka

Low birth weight of the fetus is considered one of the most critical problems in pregnancy care, which will affect the health of the newborn and in more severe cases will lead to its death. This situation is the reason for the high infant mortality rate throughout the world. In terms of health, artificial intelligence technologies, especially those based on machine learning (ML), can early predict problems related to the health of the fetus throughout pregnancy (even at birth). Therefore, the project proposes an analysis of several ML techniques that can predict whether the fetus will lose weight at birth in its gestational age. The importance of early diagnosis of problems related to fetal development depends on the possibility of increasing the number of days of pregnancy through timely intervention. This intervention will help to improve the weight of the fetus at birth, thus reducing neonatal morbidity and mortality.

**Keywords:** Fetal birth weight estimation, Machine learning, linear regression, Random forest Regressor, XGB regression

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 108 A study on Quality of Life in Indian adults – Outcomes and role of nutrition

Paper ID V7I4-1370 · Pages 522-530 · Science

**Dr. Madhavi Marathe**, Senior Manager, Medical Affairs, Danone India (Nutricia International Private Limited), Mumbai, Maharashtra
**Dr. Pushkala Padmanabh**, Assistant Manager, Medical Affairs, Danone India (Nutricia International Private Limited), Mumbai, Maharashtra

Understanding factors influencing the Quality of Life (QoL) of people has been a subject of growing interest, as measurement of QoL includes subjective dimensions of general well-being of individuals. The present study is aimed at assessing the QoL as perceived by Indian adults and arriving at a cutoff for categorizing QoL. A cross-sectional survey was conducted on a stratified sample of 2762 adults in 8 cities representing 4 geographical zones of India - North, South, East and West. WHOQoL-BREF was self-administered to measure QoL while a structured questionnaire and an app-based 24-hr diet recall were used to assess perceptions and practices about health and nutrition that affect QoL. The QoL scores were computed in accordance with WHO manual and cutoff value was arrived based on percentage mean score to categorize respondents as having poor and good QoL. Descriptive statistics were reported as mean, standard deviation, percentage for the scores and other variables, while a two-sample t-test was performed to compare the QoL scores for independent variables. The QoL percentage mean score of 68.5 for the sample population was obtained which was considered as a cutoff for categorizing QoL. It was observed that nearly half of the respondents (46.2%) had poor QoL. Men had a better QoL score than women while older adults had lower scores than younger adults (P

**Keywords:** Quality of Life; Indian population; Nutrition; Protein; Physical health; Healthcare; Awareness; WHOQoL-BREF

Read Full Paper · Download PDF · Back to index

---

## 109 Recognition of Handwritten digits using Machine Learning and Deep Learning algorithms

Paper ID V7I4-1381 · Pages 531-535 · Machine Learning

**Sahithi Akundi**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**B. Prajna**, Professor, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Bathina Lakshmi Rishitha**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Balaka Supraja**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Arugula Gayathri**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh

Digitalization has become very prominent in today’s world. The need for storing information in computers is rapidly increasing. Converting handwritten documents into digital form by humans is often difficult and time-consuming. With the rapid development of technology, human’s reliance on machines to do time-consuming and monotonic tasks also greatly increased. Machine learning and deep learning are the major fields in Computer Science that have developed intelligent algorithms to train machines to do a set of repetitive tasks. Handwritten digit recognition is one of the significant areas of research and development with an increasingly large number of possibilities that could be attained. Handwritten Digit Recognition is the ability of a computer to receive and interpret handwritten input from various sources such as paper documents, photographs, touch

© 2021, IJARIIT.COM All Rights Reserved

screens, and other devices. This paper illustrates handwritten digit recognition with the help of MNIST datasets using Support Vector Machines (SVM) and Convolution Neural Network (CNN) models. The main objective of this paper is to compare the accuracy of the models stated above and develop a Graphical User Interface (GUI) application with the most accurate model.

**Keywords:** Digitalization, Deep Learning, Machine Learning, Handwritten Digit Recognition, MNIST, Convolution Neural Networks, Support Vector Machine

Read Full Paper · Download PDF · Back to index

---

## 110 Association of social networking addiction and anorexia nervosa (desire for thinness)

Paper ID V7I4-1287 · Pages 536-537 · Educational Psychology

**Dr. Khan Zeenat Muzaffar**, Research Scholar, Marathwada College of Education, Aurangabad, Maharashtra

The present research was conducted to study the association between Social Networking addiction and Anorexia Nervosa( desire for thinness) among adolescents. A sample of 913 junior college students were selected as a sample for the present study.The findings suggest that there is no significant association between Social networking addiction and Anorexia nervosa.

**Keywords:** Social Networking Addiction Level, Anorexia Nervosa

Read Full Paper · Download PDF · Back to index

---

## 111 Analysis of business process automation: RPA

Paper ID V7I4-1396 · Pages 538-540 · Master In Computer Application

**Namrata Manohar Dhuri**, Student, MET Institute of Computer Science, Mumbai, Maharashtra
**Dr. Abhijit N. Banubakode**, Principal, MET Institute of Computer Science, Mumbai, Maharashtra

This research is a study to explore the features available in the leading RPA software for business. Robotic process automation (RPA) is a leading software technology that helps in building, deploying, and managing software robots that surpass human actions interacting with digital system. The software bot can perform task as of human do like identifying what’s there on the screen, extracting & identifying data, navigating system etc. But RPA robots are more consistent than human. The main highlights of this study discussed the Pros and Cons of RPA.

**Keywords:** Robotic Process Automation, Architecture, Lifecycle, Applications

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 112 The Pink City litter survey: Litter investigation of Kardhani Market Malviya Nagar, Jaipur

Paper ID V7I4-1382 · Pages 541-547 · Civil Engineering

**Ishfaq Ul Abass**, Student, Vivekananda Institute of Technology, Jaipur, Rajasthan
**Sanjay Kumar Meena**, Student, Vivekananda Institute of Technology, Jaipur, Rajasthan
**Sumit Kumar**, Student, Vivekananda Institute of Technology, Jaipur, Rajasthan
**Satynarayan Chaudhary**, Student, Vivekananda Institute of Technology, Jaipur, Rajasthan
**Shan Ahmad Mir**, Student, Vivekananda Institute of Technology, Jaipur, Rajasthan
**Raghvendra Sharma**, Student, Vivekananda Institute of Technology, Jaipur, Rajasthan

Nowadays, Litter is a worldwide problem. Every country expends a large amount of money to clean up litter. The USA expended almost 11 billion dollars annually. Litter is an environmental problem which not only responsible for air, water, and soil pollution but also produces harmful effects on humans, animals, plants, and the risk of fire hazards, endangering. Litter is big a problem also in India. Annual waste generation is almost 62 million tons in India, only 43 million tons collected by the different Govt. & private bodies. It is clear that almost 19-million-ton waste remains in the form of litter so our study focused on identifying the nature and source of litter and on solving this problem. We did a survey to identify nature, source, and public attitudes towards litter. We did 2 types of litter surveys in the Satkaar market, Jaipur (Rajasthan). In the first survey, we collected litter material from three streets of the Satkaar market then took it to the lab for analysis. Firstly we categorized litter into seven categories plastic, paper and cardboard, composite material, glass item, metallic items, food and vegetable waste, and other category waste (foam, rubber, cigarette butts, flower and garland, cloths, bird feather). we found that most littering items ids plastic (almost 40% of total % weight of litter ), average recyclable litter is 34.66 % and biodegradable litter is about 43%.in the second survey I made a set of 23 questions to know the attitude and behavior of public towards litter. We found in this survey that most people think that litter is a crime, both administration, and the public are responsible for litter when the educational level increased then the habit of littering is reduced.

**Keywords:** Biodegradable, Kardhani market, Litter, Paper, Plastics, Rubber, Street, Recyclable, Trash

Read Full Paper · Download PDF · Back to index

---

## 113 Face Mask Detection

Paper ID V7I4-1379 · Pages 548-551 · Computer Scienece Engineering

**Bhaskar N. Patel**, Student, Sai Vidya Institute of Technology, Bengaluru, Karnataka
**Siddhant Sipoliya**, Student, Sai Vidya Institute of Technology, Bengaluru, Karnataka
**Shashwat Mishra**, Student, Sai Vidya Institute of Technology, Bengaluru, Karnataka
**Shreyansh**, Student, Sai Vidya Institute of Technology, Bengaluru, Karnataka
**Sreelatha P. K.**, Assistant Professor, Sai Vidya Institute of Technology, Bengaluru, Karnataka

Manual surveillance of whether people are wearing a mask or not is not only costly but also a risky process. In this present world, which is being hit by the Coronavirus pandemic, the risk of spread of virus is exponentially high when people are not wearing mask. Thus, the automation of the process of detection of people not wearing mask had become a necessity. Our project uses deep learning techniques to determine whether a

© 2021, IJARIIT.COM All Rights Reserved

person is wearing a mask or not. Our proposed system identifies the mask violators automatically which reduces the risk of transmission of virus and also makes it easier for the authority to monitor the mask violators and take action against them without being put at risk of transmitting the virus. We use MobileNetV2 architecture to efficiently achieve best accuracy which is the key to our system. We were able to achieve accuracy of 99.22% after training the model. Detecting and tracking the face mask is the main aim of the project.

**Keywords:** Mask, Pandemic, Coronavirus, Surveillance, Automation, Authority, Virus and Deep Learning

Read Full Paper · Download PDF · Back to index

---

## 114 Multidrug-resistant Acinetobacter baumanii infections – A dreadful superbug to humans

Paper ID V7I4-1398 · Pages 552-556 · Microbiology

**Dr. N. A. Fairoz Banu**, Student, Sree Balaji Medical College and Hospital, Chennai, Tamil Nadu
**Dr. Chitralekha Saikumar**, Professor, Sree Balaji Medical College and Hospital, Chennai, Tamil Nadu

Acinetobacter baumanii is considered to be one of the significant pathogens causing nosocomial infections and outbreaks in hospital settings, especially in ICU. The dreadful concern with Acinetobacter infections is their ability to gain resistance against all commonly used antibiotics like Penicillin, cephalosporins, Fluoroquinolones, carboxypenicillin, carbapenems as a result this Multi-Drug Resistant (MDR) strains increases patient hospital stay, cost of treatment, mortality, and morbidity among affected patients. A total of 146 Acinetobacter isolates were received from various clinical samples. Samples received were routinely subjected to Culture. Gram staining was done. The smear showed Gram-Negative Coccobacilli taken and subjected for further biochemical reactions. Antibiotic susceptibility testing was done by Kirby Bauer disc diffusion method in Muller -Hinton agar plate. The majority of Acinetobacter baumanii isolates were received from the 19-40 age group (45.8%), followed by the 41- 60 (26% ) age group. Most of the Acinetobacter baumanii strains were isolated from wound swab 33.5%, followed by urine 29.4%, sputum 17.1%, Blood 10.2%.Antibiotic sensitivity of 146 Acinetobacter baumanii isolates showed Highest resistance to Ampicillin (100%), Gentamycin (70.5%),Cotrimoxazole (68.4%) , Piperacillin Tazobactam (66.4%) , Ciprofloxacin (63%), Nitrofurantoin (61.6%) , Ceftriaxone (61.6%). Levofloxacin, Amikacin, Tigecycline, Colistin were found to be the most effective antibiotics with a sensitivity of 73.2%, 87.6%, 91.7%, 100% respectively. Of 146 isolates 63 (43%) were Multi-Drug Resistant, i.e isolates showing resistance to more than 3 classes of antibiotics. Hence strict infection control and antimicrobial stewardship policies should be implemented in hospitals to reduce mortality and morbidity associated with Acinetobacter baumanii infections.

**Keywords:** Acinetobacter Baumanii, Multi-Drug Resistant, Antimicrobial Stewardship

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 115 Digital health care system for medical report/ certificate sharing

Paper ID V7I4-1393 · Pages 557-562 · Enggineering

**Komal Suresh Raut**, Student, Sipna College of Engineering and Technology, Amravati, Maharashtra

The health care services industry is always showing signs of change and supporting new advancements and advances. This paper describes our blockchain architecture as a new system solution to supply a reliable mechanism for secure and efficient medical record exchanges. It is going to revolutionize the e-Health industry with greater efficiency by eliminating many of the intermediates as we know them today. Digital Health Care (DHC) reform suggests a new consumer paradigm in data and information processing. Here users can be distributed or access networked collaborative care to a centralized repository of personal health records. The new approach in this paper is to explore the Advanced Block-Chain paradigm for e-Health record-keeping and while addressing the special needs of patient privacy. As society is moving towards peer networking and online practices, we are going to combine the best parts of the two worlds in both the healthcare regulation and the technology revolution while formulating advanced solutions.

**Keywords:** BlockChain, Medical Report Data Accessibility, E-Health System, Reliability, Security; Blockchain, Architecture

Read Full Paper · Download PDF · Back to index

---

## 116 Facial Recognition with Expression

Paper ID V7I4-1410 · Pages 563-566 · Computer Science

**Manoj P.**, Student, New Horizon College of Engineering, Bengaluru, Karnataka
**Mahesh N.**, Student, New Horizon College of Engineering, Bengaluru, Karnataka
**Shivakumar Vishwakarma R.**, Student, New Horizon College of Engineering, Bengaluru, Karnataka
**Alpha Vijayan**, Associate Professor, New Horizon College of Engineering, Bengaluru, Karnataka

In this paper, motions are a strong tool in communication and a technique that humans show their emotions is through their facial expressions. one among the difficult and powerful tasks in social communications is countenance recognition, as in non-verbal communication, facial expressions are key. In the field of computing, face expression Recognition (FER) may be a spirited analysis space, with many recent studies using Convolutional Neural Networks (CNNs). during this paper, we demonstrate the classification of FER supported static images, using CNNs, while not requiring any pre-processing or feature extraction tasks. The paper conjointly illustrates techniques to improve future accuracy throughout this space by victimisation preprocessing, which includes face detection and illumination correction. Feature extraction is utilized to extract the foremost prominent components of the face, together with the jaw, mouth, eyes, nose, and eyebrows. what is more, we tend to conjointly discuss the literature review and gift our CNN design, and the challenges of victimisation max-pooling and dropout, that eventually aided in higher performance. we tend to obtained a check accuracy of 61.7% on FER2013 throughout a seven-classes classification task compared to seventy five.2% in progressive classification.

**Keywords:** Facial Expression Recognition, CNN, Face Detection, OpenCV , Haar Cascades.

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 117 Melanoma Classification using Convolutional Neural Network Model Integrated with Tabular Model

Paper ID V7I4-1427 · Pages 567-571 · Computer Science

**Harshkumar Modi**, Student, SRM Institute of Science and Technology
**Bhavya Chhabra**, Student, SRM Institute of Science and Technology
**Sukkrit**, Student, SRM Institute of Science and Technology

Melanoma is a major skin cancer type that has a very high death rate. The various sorts of skin abrasions cause an imprecise analysis because of their high resemblance. Precise categorization of the skin abrasions in the premature phase will allow dermatologists to cure the affected individuals in well time and hence saving their lives. This is backed by a research that shows that 90% of the cases are curable, if identified in the initial phase. With the advancements in the computing power and image classification, automatic detection of the melanoma using computer algorithms has become far reliable. With many methods used, neural networks prove to be the best solution devised to attain the highest accuracy in classifying melanoma through early symptoms. We did our survey to find the drawbacks of recent models that serve this purpose with the goal to overcome them and provide a better solution. With the findings based on this survey, we proposed a model that stives to overcome the drawbacks concluded from the previous models. With an accuracy of ~96%, the proposed model provides better solution in prediciting whether the skin lesions are malignant or not.

**Keywords:** Melanoma, Neural Networks, Lesions, automatic detection

Read Full Paper · Download PDF · Back to index

---

## 118 Development and evaluation of solar photovoltaic driven condensing unit for the solar distillation system

Paper ID V7I4-1357 · Pages 572-576 · Renewable Energy Sources

**Supriya Balasaheb Ghule**, Research Scholar, Dr. Balasaheb Sawant Agriculture University, Ahmednagar, Maharashtra
**Dr. A. G. Mohod**, Professor, Dr. Balasaheb Sawant Agriculture University, Ahmednagar, Maharashtra
**Dr. Y. P. Khandetod**, Principal, Dr. Balasaheb Sawant Agriculture University, Ahmednagar, Maharashtra
**Dr. K. G. Dhande**, Professor, Dr. Balasaheb Sawant Agriculture University, Ahmednagar, Maharashtra
**M. B. Patil**, Assistant Professor, Dr. Balasaheb Sawant Agriculture University, Ahmednagar, Maharashtra

Solar distillation is a promising technology for clean water production in areas with abundant solar energy. The main constraint of this technology is low production capacity. In various studies, it has been found that improving water evaporation and vapor condensation inside distillation units can help in increasing the productivity of the solar distillation unit. In the proposed research work single basin double slope solar distillation unit was modified using external reflectors and a solar photovoltaic driven condenser. Experimentation was carried out for comparative performance evaluation of simple conventional distillation unit and modified distillation unit with external reflector and condenser. It was found that the external reflector on the glass cover increases the incident solar energy and thus increases water temperature inside the distillation unit. The rate of evaporation also increased due to condensing fan and condenser coupled with the distillation unit. Results obtained for comparative performance simple distillation unit and modified distillation unit shows that the productivity of single basin double slope solar distillation unit with reflector and SPV drove

© 2021, IJARIIT.COM All Rights Reserved

condenser was 35%. Also, it was found that the modified distillation unit was economically feasible than the conventional distillation unit.

**Keywords:** Single Basin Double Slope Distillation Unit, Solar Photovoltaic, Reflector, External Condenser, Productivity, Efficiency.

Read Full Paper · Download PDF · Back to index

---

## 119 Voice Based Message System Visually Impaired People

Paper ID V7I4-1413 · Pages 577-580 · Voice Recognition Using Artificial Intelligence

**Nagesh S.**, Student, New Horizon College of Engineering, Bangalore, Karnataka
**S. Sathish Kumar**, Student, New Horizon College of Engineering, Bangalore, Karnataka
**Latha K.**, Student, New Horizon College of Engineering, Bangalore, Karnataka
**S. Shanmuga Priya**, Senior Assistant professor, New Horizon College of Engineering, Bangalore, Karnataka

The advancement in computer based accessible systems has opened up many avenues for the visually impaired across a wide majority of the globe. Audio feedback based virtual environment like, the screen readers have helped visually impaired people to access internet applications immensely. However, a large section of visually impaired people in different countries, in particular, the Indian sub-continent could not benefit much from such systems. This was primarily due to the difference in the technology required for Indian languages compared to those corresponding to other popular languages of the world. In this paper, we describe the voice message system architecture that can be used by a visually impaired person to access messages easily and efficiently. The contribution made by this research has enabled the visually impaired people to send and receive voice-based messages in their native language with the help of a mobile device. Our proposed system GUI has been evaluated against the GUI of a traditional message server. We found that our proposed architecture performs much better than that of the existing GUIS. In this project, we use voice to text and text to voice technique access for visually impaired people. This project introduces the Voice based message system structural design that can be used by a visually impaired person to access messaging easily. The involvement of research is helping visually impaired individual to send and receive voice based messages in their inhabitant language with the help of a computer

**Keywords:** Voice Based, Visually Impaired, Message System, Speech To Text, Text To Speech, Interactive Voice Response and Speech Recognition.

Read Full Paper · Download PDF · Back to index

---

## 120 An efficient quality-driven of face occlusion detection and recognition

Paper ID V7I4-1392 · Pages 581-585 · Image Processing

**Shashidhar V.**, Research Scholar, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Harshitha B. S.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Kavya K.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Kaveri K.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Rashmi J. B.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka

This paper affords a identify and discover human faces in a photograph irrespective of their position, scale, in-

© 2021, IJARIIT.COM All Rights Reserved

aircraft rotation, orientation, pose, illumination, etc. To efficaciously become aware of the individual through surprising the history and different noises withinside the photograph. It has to be easy and powerful for the customers and become aware of faces which might be covered with a scarf, mask, shades, etc, This is one of the vital components that influences the overall performance of face reputation. Many algorithms and technology are proposed to clear up the occluded face reputation wherein we use a haar cascade set of rules that is the simplest one. Initially, this set of rules wishes loads of nice pix(pix of faces) and terrible pix(pix without faces) to teach the classifier then we should extract features from it. Facial detection is prompted through the readability of the photograph, colored or black and white pix. It can simplest help frontal detection of pix and the education does take loads of time with a purpose to separate a terrible face from a nice face.

**Keywords:** Haar Cascade, Face Detection, Recognition, Nice Face, Terrible Face

Read Full Paper · Download PDF · Back to index

---

## 121 Automatic Drain Water Cleaner System

Paper ID V7I4-1415 · Pages 586-587 · Automobile Engineering

**Kaushik Shet**, Student, Dhole Patil College of Engineering, Pune, Maharashtra
**ASHISH KALEKAR**, Student, Dhole Patil College of Engineering, Pune, Maharashtra
**Amol Yadav**, Student, Dhole Patil College of Engineering, Pune, Maharashtra
**Aniket Bhade**, Student, Dhole Patil College of Engineering, Pune, Maharashtra
**Krushna Ghadale**, Professor, Dhole Patil College of Engineering, Pune, Maharashtra

The proposed concept is to exchange the manual add gutter cleaning by Automated Drain Water cleaner system. Now-a-days albeit mechanical drainage plays an important role altogether domestic and industrial applications within the proper disposal of sewages from domestic, industries and commercials are still a challenging task. Drainage pipes are using for the disposal and unfortunately sometimes there could even be loss of human life while cleaning the blockages within the system . The Automated Drain Water Cleaning system may be a machine which helps to guard the environment from different sorts of environmental hazards through the promotion waste management by the removal of garbage from the drainage system. These wastes when not removed end up settling in residential places where these wastes are burnt thereby causing global climate change otherwise these wastes block the drainage systems thereby causing flooding. In this project the proposal concept is to exchange the manual add drainage cleaning by automated system. We know that water features a superb importance face to face life, the water flow in drain full of wastes like polythene, bottles etc. The gutters get blocked because of these wastes in water. To overcome this problem and many |to avoid wasting “to save lots of lots of human life we implement a design “Automated Gutter Cleaning system” which we've designed our project to use this in efficient thanks to control the disposal of wastages and with regular

**Keywords:** Drain Water/Gutter, Rain Water

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 122 Simulation of concrete truck mixer transport operation by using Anylogic software

Paper ID V7I4-1423 · Pages 588-593 · Construction Management

**Arpit Latad**, Student, Veermata Jijabai Technological Institute, Mumbai, Maharashtra
**Pravin chaudhari**, Professor, Veermata Jijabai Technological Institute, Mumbai, Maharashtra

The studies targets to decrease the time price of concrete mixer vans via way of means of improving the manner of loading unloading the concrete via way of means of the use of Anylogic computational simulation. The paper affords the technique of Anylogic simulation version of concrete blend transportation manner additionally thinking about traits via way of means of ready time for loading and unloading, journey time, distance among rmc plant to production sites, varieties of truckmixer and quantity of trucks. It is in particular targeted on a way to concurrently optimize concrete shipping scheduling. Scheduling of truckmixer without delay influences the operation time and cost. This studies targets to triumph over the problems comes throughout the rmc operation the use of destiny prediction simulation version and allocate the quantity of trucks efficaciously and efficiently.

**Keywords:** Construction Management, simulation, ANYLOGIC

Read Full Paper · Download PDF · Back to index

---

## 123 Design and analysis of helicopter rotor

Paper ID V7I4-1419 · Pages 594-599 · Mechanical Engineering

**Gokulchith S. S.**, Student, Marian Engineering College, Thiruvananthapuram, Kerala
**Aromal V. C.**, Student, Marian Engineering College, Thiruvananthapuram, Kerala
**Akhil Rajasekharan Nair**, Student, Marian Engineering College, Thiruvananthapuram, Kerala
**Angush S. T.**, Student, Marian Engineering College, Thiruvananthapuram, Kerala
**Manu Mohan**, Assistant Professor, Marian Engineering College, Thiruvananthapuram, Kerala

A helicopter's blades are lengthy and are restricted by a secondary perspective proportion. Starting at the tip of the vertices, the blade shapes are such that they reduce drag. They maintain a level of messiness that reduces the lift provided at the corners, where the wind current is fastest and vortex era is greatest. The rotor's huge blades would commit to a variety of materials, including aluminum, composites, and steel. The rotor blades would link to the helicopter rotor center, which is powered toward the engine. In this project, CATIA is used to create a three-dimensional model of a helicopter rotor with 2, 3, and 4 blades. Analyzing data in ANSYS allows for a near-accurate result to be obtained in less time while avoiding the possibility of errors for future advancement.

**Keywords:** Drag, CATIA, ANSYS, Vortex

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 124 Design and analysis of water jacket in the inline six-cylinder engine

Paper ID V7I4-1418 · Pages 600-610 · Mechanical Engineering

**Anand S. M.**, Student, Marian Engineering College, Thiruvananthapuram, Kerala
**Sreeganesh S.V.**, Student, Marian Engineering College, Thiruvananthapuram, Kerala
**Akash Prakash**, Student, Marian Engineering College, Thiruvananthapuram, Kerala
**Aswin V. S.**, Student, Marian Engineering College, Thiruvananthapuram, Kerala
**Dr. Vishnu B. R.**, Assistant Professor, Marian Engineering College, Thiruvananthapuram, Kerala

A water jacket is a structure that allows water to pass through a cylinder block in a water-cooled internal combustion engine. Also designed and evaluated is a model with fins like projections around the cylinder outer wall that are in contact with the cooling fluid. This research compares the cooling pattern and flow properties of the three types (original water jacket, water jacket with ribs, and water jacket with fins)

**Keywords:** CFD Analysis, Water Jacket, Cylinder Block, Bore Distortion

Read Full Paper · Download PDF · Back to index

---

## 125 Prediction of stocks and options in stock market using Machine Learning

Paper ID V7I4-1335 · Pages 611-614 · Stocks And Machine Learning

**Yathisha T. S.**, Student, RV College of Engineering, Bengaluru, Karnataka
**Nirmal Jain C. M.**, Student, RV College of Engineering, Bengaluru, Karnataka
**Mithun T. P.**, Assistant Professor, RV College of Engineering, Bengaluru, Karnataka

Machine learning is a type of artificial intelligence that generates predictions based on data by using past stock market indexes as training ground values. Machine learning makes use of a variety of models to make predictions more accurate and easier. The use of machine learning in stock market prediction technology is a trend that helps make better decisions while choosing assets to own. The aim of stock market prediction is to analyze trends and be able to predict the future value of an asset value over time. The analysis in this paper concentrates on asset value estimation utilizing LSTM-based machine learning. The results for the estimation of prices are conducted on assets like Gold, Bitcoin, and Apple Inc. stock. Open, close, low, and high data of assets, obtained from Yahoo Finance are taken into account while training the model. The proposed model can estimate the stock market's movement accurately for the next 30 days.

**Keywords:** Yahoo Finance, LSTM, Open, Close, High, Low

Read Full Paper · Download PDF · Back to index

---

## 126 AI multi-agent shopping system

Paper ID V7I4-1374 · Pages 615-617 · Online Shopping Using Ai

**Mushtaq Ahamed K. S.**, Research Scholar, New Horizon College of Engineering, Bangalore, Karnataka
**Mahesh N.**, Student, New Horizon College of Engineering, Bangalore, Karnataka
**Prasanna Kumar P.**, Student, New Horizon College of Engineering, Bangalore, Karnataka
**Dr. Thirukkumaran R.**, Associate Professor, New Horizon College of Engineering, Bangalore, Karnataka

An AI based multi-agent shopping system where system is fed with various product details. The system allows

© 2021, IJARIIT.COM All Rights Reserved

user to register and enter his details about a particular product. The system records all the details provided by user and checks for various items matching his search. The system comes up with a list of items best suited for user needs. The system also suggests other related items that the user may like. The system suggests these items which are likely to be bought by the user based on his previous purchases. The system handles multiple users at a time and provides accurate results. Current e-shopping systems use the Internet as its primary medium for transactions. E-shopping has grown in popularity over the years, mainly because people find it convenient and easy to buy various items comfortably from their office or home. This paper has proposed a personalized e-shopping system that helps customers to purchase quality goods and get suggestions from the system to provide better results.

**Keywords:** E-Shopping, Related Products, Multi-Agent, Suggestions

Read Full Paper · Download PDF · Back to index

---

## 127 Marketing retail analytics using tableau and Knime

Paper ID V7I4-1412 · Pages 618-621 · Business Analytics

**Raghav**, Student, Vellore Institute of Technology (VIT), Chennai, Tamil Nadu

We deal with the P.O.S (Point of sales) data for a café chain restaurant. Through findings and analysis, we suggest the best ideas for the restaurant to increase its revenues.

**Keywords:** Exploratory Analysis, Menu Analysis

Read Full Paper · Download PDF · Back to index

---

## 128 Electronic Health Records using Blockchain and Cloud computing

Paper ID V7I4-1390 · Pages 622-624 · Block Chain And Cloud Computing

**Sonia S. B.**, Professor, Atria Institute of Technology, Bengaluru, Karnataka
**Amrutha D.**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Bhavana C.**, Student, Atria Institute of Technology, Bengaluru, Karnataka
**Ankitha J.**, Student, Atria Institute of Technology, Bengaluru, Karnataka

Blockchain technology eliminates the need for a central system to guarantee information integrity and custody of data, as well as to mediate transactions and the exchange of crypto assets, by allowing safe and pseudo-anonymous transactions and bilateral agreements between participants. It has crucial qualities like immutability, decentralization, and openness that could help with pressing healthcare challenges including inadequate records at the point of care and restricted access to patients' own medical information. Interoperability software system and technology frameworks to interact safely and efficiently, share data, and utilize that data across healthcare organizations and application vendors, resulting in a more efficient and effective public health system. Due to a lack of interoperability, healthcare today suffers from compartmentalized and disjointed data, hindered communications, and fragmented workflow tools. In a safe and pseudo-anonymous manner, blockchain provides access to longitudinal, full, and adulterate aware medical records that are kept in fragmented systems. The goal of our suggested scheme is to first integrate blockchain technology for EHR and then to enable safe storage of electronic records for users of the framework by defining

© 2021, IJARIIT.COM All Rights Reserved

granular access controls. The following framework gives the EHR system the advantages of a blockchain-based solution that is extensible, secure, and integrated.

**Keywords:** Blockchain, Health Records, Electronic Health Records, Decentralization, and Scalability

Read Full Paper · Download PDF · Back to index

---

## 129 Relevance of Dr. Bhimrao Ambedkar in present day

Paper ID V7I4-1383 · Pages 625-627 · Social

**Dr. Prashant Upadhyay**, Assistant Professor, Late Ram Raj Verma Mahavidyalaya, Sarangpur, Uttar Pradesh

Dr Ambedkar also accepts democracy as a way of life, emphasizing the superiority of the individual, he considers the transformation of power as a means. He used to say that the foundation of democracy is not solidified by giving some constitutional rights. In the concept of his democratic system, 'morality' and 'sociality' have been the two main values, whose relevance increases in the present times. In fact, today the tension in politics has increased so much that the values of political morality have disappeared. Every political party calls for political morality and socialism to make vote banks on its side, but they do not implement these principles after getting power.

**Keywords:** Vaishyas, Kshatriyas, Hinduism, Human Society

Read Full Paper · Download PDF · Back to index

---

## 130 An overview on bio battery unveiling potential

Paper ID V7I4-1369 · Pages 628-633 · Electronics

**Subhash Kumar Sharma**, Assistant Professor, Mahatma Gandhi Post Graduate College, Gorakhpur, Uttar Pradesh
**Sushil Kumar Singh**, Assistant Professor, MGPG College, Gorakhpur, Uttar Pradesh

In the modern age there are so many power sources but one of the more efficient power sources in our Villages are the Bio-Battery, which is an alternate sources of energy. using wastewater- which is a major problem in rural India, Handy source of power generation. Further we can stored energy in the form of Carbohydrates, found in the waste biomass ,contains Microbial Fuel Cells. We can produce electricity in an MFC (Microbial Fuel Cells ) from domestic wastewater and at the same time accomplish biological wastewater treatment. So Bioreactors based on power generation in MFCs are a new approach to waste treatment and power generation.

**Keywords:** Waste Water, MFC, Bio-reactors and Carbohydrates, Bacteria

Read Full Paper · Download PDF · Back to index

---

## 131 Comparative Study of IS 1893:2002 & 2016 for G+12 Staff Quarter Residential Building

Paper ID V7I4-1426 · Pages 634-637 · Structural Engineering

**Rohit Kokane**, Student, Dr. V.V.P. College of Engineering
**Prof. P. B. Autade**, Associate Professor, Dr. V.V.P. College of Engineering

© 2021, IJARIIT.COM All Rights Reserved

IS1893 gives guidelines for designing seismic resistant structures. Significant enhancements in seismic resistant design has been seen in recent years. Hence, after a gap of 14 years, Indian seismic code IS: 1893 has been revised in year of 2016. The purpose behind presenting this project is to gain relevant Indian standard codes knowledge that has been used for design of various buildings component such as beam, column, slab, and foundation and stair case using the software Etabs under the earthquake load and wind load acting on the structure

**Keywords:** Seismic Analysis, Etabs 2019, Comparison between IS 1893:2002 & 2016, Dynamic Analysis

Read Full Paper · Download PDF · Back to index

---

## 132 Solar Energy for Refrigeration and Air Conditioning

Paper ID V7I4-1375 · Pages 638-641 · Solar Energy

**Vishal Pathak**, Student, Delhi Technological University, Delhi
**Shivraj**, Student, Delhi Technological University, Delhi
**J. P. Kesari**, Associate Professor, Delhi Technological University, Delhi

In today's world, the demand for comfort has been growing at an exponential rate. The utilization of air-conditioning and refrigeration systems has increased, which results in higher costs and consumption of energy. It is one of the main constituents of Global Warming. For example, Indian market of air conditioners was of worth $4.3 billion in 2017and will be of $11 billion by 2023 with a mean growth of 17% per annum.[2] Consequently, India produced roughly 2.5 billion tonnes CO2 within the year 2018. As a result a substitute for conventional method of air conditioning is being searched. Use of solar energy in air conditioning and refrigeration can be a substitute. It help in reduction of the consumption, the demand, and therefore costs of energy, without decreasing the desired comfort. These systems help in air conditioning and may even be used for refrigeration purposes. The can easily be used in commercial and residential apartments, colleges, hospitals, hotels etc. In this paper we will discuss the functioning of these systems and future scope of solar power in air conditioning and refrigeration.

**Keywords:** Air-conditioning and refrigeration, CO2 emissions, solar power

Read Full Paper · Download PDF · Back to index

---

## 133 Forecasting of the cotton price using an econometric model

Paper ID V7I4-1386 · Pages 642-650 · Management

**Prapulla S.**, Student, BMS College of Engineering, Bengaluru, Karnataka
**R. Sushma**, Assistant Professor, BMS College of Engineering, Bengaluru, Karnataka
**Madhusudhan K.**, Anand Rathi Share and Stock Brokerage Ltd., Bengaluru, Karnataka

A commodity market is a place for investors to trade in commodities like precious metals, crude oil, natural gas, energy, and spices, among others. Currently, the Forward Markets Commission allows futures trading in India for around 120 commodities. Trading in commodities is great for investors seeking to diversify their portfolio, as these investments often help with inflation. The Indian commodity derivatives market has shown solid flexibility to the Covid-19 pandemic, recovering rapidly from the underlying stock following the nation-

© 2021, IJARIIT.COM All Rights Reserved

wide complete lockdown. This study examines the market fundamentals, contract specification and market and price behaviour is the supreme problem of commodity investors and trader. The present study spotlights the price behaviour/movement and market behaviour/volatile in Indian agricultural commodity market (MCX) using econometric model. The study aims at market fundamentals of the commodity which includes demand, supply, import and export and changes in contract specification. The study also aims to study the volatility and caused effect between futures price and spot price of commodity cotton from the period 2019 to 2020 daily data were collected from Multi Commodity Exchange (MCX). This study also analysed the correlation and co-integration between the spot price and futures price of commodity cotton in Multi Commodity Exchange (MCX). The study employed statistics tools such as descriptive statistics, unit root test (ADF test), correlation test, OLS regression test, co-integration test, granger causality test, GRACH Test and ARIMA. The study found that the existence of normality and absence of unit root in time series data, also risk was higher than the mean return of futures and spot price of commodity cotton. There was low positive correlation between futures price and spot price of commodity cotton. In co-integration between spot and future price of commodity cotton explains that there is a long run relationship and both the prices are interconnected. The GARCH test evidenced that low volatility secured both futures price and spot price of commodity cotton and absence of cause and effect during the study period. The investors have to consider the high volatility commodity futures price which make effective in trading and investments in the aspect of price discovery. The result replicates that each commodity traded or invested in exchange has different price effectiveness concept and the investors and trader should recognise the commodity to hedge price risk. The last step that is ARIMA examines that the best criteria to forecast the cotton future price is ARIMA(0,1)(0,0).

**Keywords:** Commodity Market, Spot and Future Market, Price Discovery, ADF Test, Garch Test, Granger Causality Test, Arima Model

Read Full Paper · Download PDF · Back to index

---

## 134 Objectual understanding of moments of earth and relevant systems

Paper ID V7I4-1401 · Pages 651-653 · Sociology

**Yalla Venkata Chalapathi Rao**, Independent Researcher

This research relating to the effects of the universal system on the environment and living beings in the course of time intervals and understanding the survival systems and practical observation.

**Keywords:** Psychology, Artificial Intelligence, and Astrobiology

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 135 implementation and analysis of credit card fraud detection using a Machine Learning Technique

Paper ID V7I4-1432 · Pages 654-657 · Computer Science And Engineering

**Sanka Reshmi**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Saripalli V. R .Manasa**, Student, Andhra University College of Engineering for Women, Visakhapatnam, AndhraPradesh
**Siramdas Shyamala**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Sreerama Usha Ramya**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**B. Esther Sunanda**, Associate Professor, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**D. Sowjanya**, Lecturer, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh

Due to rapid growth in the field of various cashless transactions or digital transactions, credit cards are widely used in almost every work and hence there are more chances of fraudulent transactions. Depending on the type of fraud faced by banks or credit card companies, various measures can be adopted and implemented. Here the credit card fraud detection is based on fraudulent transactions. Generally, credit card fraud activities can happen both offline and online. But in today's world online fraud transaction activities are increasing day by day. So in order to find online fraud transactions, various methods have been proposed and implemented by various organizations. This project proposes a machine learning technique for credit card fraud detection. Machine learning is the currently used technique implemented in various sectors. It is prioritized due to its ongoing advancements making our lives easier. In the proposed system, we use Random Forest Algorithm (RFA) for finding the fraudulent transactions and the accuracy of the transactions. The main aim is to detect fraud while making a transaction and alert the user if his/her account was accessed by an intruder. Credit card fraud detection using Machine learning is done by using classification and regression techniques. We use the Random Forest algorithm which is a supervised learning algorithm to classify the fraud card transaction into fraud or genuine transactions. This algorithm uses decision trees for classifying the data set. After classifying the dataset a confusion matrix is obtained. The performance of the Random Forest Algorithm is evaluated based on the confusion matrix. The results obtained from the processing data set to give an accuracy of about 70%. The random forest has better efficiency and accuracy than any other machine learning algorithm. This model is implemented by Python and SQL programming languages.

**Keywords:** Credit Card Fraud Detection, Transactions, Random Forest Algorithm, Classification

Read Full Paper · Download PDF · Back to index

---

## 136 Used car price prediction

Paper ID V7I4-1434 · Pages 658-660 · Machine Learning

**Abhishek Jha**, Student, Greater Noida Institute of Technology, Greater Noida, Uttar Pradesh
**Dr. Ramveer Singh**, Professor, Greater Noida Institute of Technology, Greater Noida, Uttar Pradesh
**Manish**, Student, Greater Noida Institute of Technology, Greater Noida, Uttar Pradesh
**Imran Saifi**, Student, Greater Noida Institute of Technology, Greater Noida, Uttar Pradesh
**Shipra Srivastava**, Assistant Professor, Greater Noida Institute of Technology, Greater Noida, Uttar Pradesh

This research paper is the combination of datasets collected by cardekho.com and we have used ML to predict

© 2021, IJARIIT.COM All Rights Reserved

the price of a used car by creating a model using python, flask, and HTML the algorithm that we have used is Random Forest Regression. The price of the car is determined by the manufacturer and not everyone can afford it so they look for some low-cost alternative such as used car and this helps to build a big and evergreen used car market but due to the price irregularities this market is facing lots of problems so we have used machine learning to develop a new model that will predict the price and help consumers to buy the used car at a perfect price.

**Keywords:** Used Car Price, Car Price Prediction, Prediction Model, Machine Learning, Random Forest Regression, Seaborn, Python, Flask, Pandas, Numpy.

Read Full Paper · Download PDF · Back to index

---

## 137 Credit Card Fraud Prediction

Paper ID V7I4-1435 · Pages 661-664 · Machine Learning

**Yash Rajesh**, Student, BMS Institute of Technology and Management, Bengaluru, Karnataka
**Thyagaraj Tanjavur**, Assistant Professor, BMS Institute of Technology and Management, Bengaluru, Karnataka

Fraud detection by credit companies is essential in this digital era where the majority of financial transactions are made online. Fraudsters use loopholes in the payment systems to their benefit. Such problems can be solved to a large extent if the companies add an extra layer of security before confirming the transactions using machine learning algorithms. This project intends to use the Isolation Forest algorithm to enhance the security of credit card transactions by predicting the credibility of the transaction before authorization. Detecting 100% of the fraudulent transaction, minimizing the incorrect fraud classifications, and making the process automated is our objective.

**Keywords:** Credit Card Fraud, Extra Security Layer, Machine Learning Systems, Isolation Forest Algorithm Automated Fraud Prediction

Read Full Paper · Download PDF · Back to index

---

## 138 Comparative study of industrial steel structure (pre-engineered building) and residential RCC structure

Paper ID V7I4-1440 · Pages 665-668 · Structural Engineering

**Mahesh Nivrutti Ghumare**, Student, Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar, Maharashtra
**S. N. Daule**, Associate Professor, Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar, Maharashtra

Industrial steel structure (PEB) constructions are very popular to their advantages over conventional RCC construction. RCC structures are bulky and impart more seismic weight and less deflection whereas Steel structures instruct more deflections and ductility to the structure, which are advantages to resisting earthquake forces. Industrial steel structure Construction the better properties of both steel and concrete along with lesser cost, speedy construction, better quality control, sustainability, etc. Hence the aim of the present study is to compare a G+2 story residential RCC structure and an industrial steel structure. Both structures are designed for the same loading condition. Beam and column sections are made of either RCC, Steel (PEB) sections. STAAD PRO software is used for analysis and design and analysis results are compared. Cost-effectiveness based on

© 2021, IJARIIT.COM All Rights Reserved

material cost for Steel structure and RCC structure determined. The study concludes that industrial steel structures (PEB) are the best-suited types of constructions in terms of material cost.

**Keywords:** Industrial Steel Structure (PEB), RCC, Analysis, and Design

Read Full Paper · Download PDF · Back to index

---

## 139 Characteristic study in optimization of Biomethanation process for high TDS spent wash from Distilleries

Paper ID V7I4-1261 · Pages 672-674 · Engineering Chemistry

**Lalitha Devaraju**, Assistant Professor, Government Engineering College, K. R. Pete, Krishnarajpete, Karnataka
**Dr. Manju B.**, Professor, Maharaja Institute of Technology, Mysore, Karnataka
**Dr. Sathisha N. S.**, Principal, Government Engineering College, K. R. Pete, Krishnarajpete, Karnataka
**Dr. Kiran B. M.**, Associate Professor, Adichunchanagiri Institute of Technology, Chikmagalur, Karnataka

Acidic in nature, dark brown colored rich source of salts, a highly thick and viscous by-product of the sugar industry is known as Molasses. This molasses also contains sugar which could not be crystallized. It is one of the strongest organic industrial waste and even complex troublesome having extremely very high Chemical Oxygen Demand and Biological Oxygen Demand values. Due to the high concentration of organic contents in distillery spent wash which acts as a potential source of renewable energy. In a developing country like India, distilleries have become a major source of pollution as 88% of its raw materials are converted into waste and discharged into the distillery for every liter of ethanol produced.

**Keywords:** Total dissolved solids, Distillery Spent Wash, Organic Effluent

Read Full Paper · Download PDF · Back to index

---

## 140 Seed Vigor Testing in Cotton: A Review

Paper ID V7I4-1347 · Pages 675-679 · Agriculture

**Dr. Vaibhav V. Ujjainkar**, Assistant Professor, Dr. Panjabrao Deshmukh Krishi Vidyapeeth Akola, Maharashtra
**Dr. Manoj W. Marawar**, Associate Professor, Dr. Panjabrao Deshmukh Krishi Vidyapeeth Akola, Maharashtra

Attaining seed and seedling vigor in cotton is a goal of both researchers and producers. By separating and defining components of seed and seedling vigor, progress can be achieved. Seed vigor should be distinguished from seed viability and defined in terms of low degree of seed deterioration. Being a connecting link between two generations of plants or crops, seed is a carrier of new technology or new improvements made by the breeders, seed vigour is an important parameter, needs to be assessed primarily to supplement germination and viability tests to gain insight into the performance of a cotton seed lot in the field or in storage. Seeds are prime factor for crop production, human nutrition, and food security. The key component of the performance of crop seeds is the complex trait of seed vigour. In Agriculture, the crop yield and resource use efficiency depend on successful plant establishment in the field, and it is the vigour of seeds that defines their ability to germinate and establish seedlings rapidly, uniformly, and robustly across diverse environmental conditions prevailing in region. Improving vigour to enhance the critical and yield-defining stage of crop establishment remains a primary objective of the agricultural industry. The knowledge of the regulation of seed germination

© 2021, IJARIIT.COM All Rights Reserved

has developed greatly in recent decades. However, the understanding of the basis of variation in vigour and therefore seed performance during the establishment of crops remains limited. Here we consider seed vigour at an eco-physiological, molecular, and biomechanical level. We discuss how some seed characteristics that serve as adaptive responses to the natural environment are not suitable for agriculture. Past domestication has provided incremental improvements, but further actively directed change is required to produce seeds with the characteristics required both now and in the future. In this paper, the focus is to discuss ways in which basic plant science could be applied to enhance seed performance in cotton production.

**Keywords:** Cotton, Seed Germination, Seed Testing and Seed Vigour

Read Full Paper · Download PDF · Back to index

---

## 141 Facial emotion recognition and detection

Paper ID V7I4-1385 · Pages 680-684 · Computer Science

**Pranav S.**, Student, New Horizon College of Engineering, Bengaluru, Karnataka
**Praveen C.**, Student, New Horizon College of Engineering, Bengaluru, Karnataka
**Niveditha C. B.**, Student, New Horizon College of Engineering, Bengaluru, Karnataka
**Asha Rani Borah**, Assistant Professor, New Horizon College of Engineering, Bengaluru, Karnataka

Face and Emotion recognition presents a challenging problem in the field of image analysis and computer vision. The security of information is becoming very significant and difficult. Security cameras are presently common in airports, offices, universities, ATMs, and banks, and in any locations with a security system. Face recognition is a biometric system used to identify or verify a person from a digital image. The Face recognition system should be automatically able to detect a face and its emotions. This system would be able to perform for multiple people at a time.

**Keywords:** Face Emotion Recognition, Deep Learning, CNN, Keras

Read Full Paper · Download PDF · Back to index

---

## 142 CARKART: A Machine Learning and Augmented Reality application to ease car retailing

Paper ID V7I4-1407 · Pages 685-690 · Computer Science And Engineering

**Mrunalini M.**, Student, Siddaganga Institute of Technology, Tumkur, Karnataka
**Kasthuri C. M.**, Student, Siddaganga Institute of Technology, Tumkur, Karnataka
**Pranjal Sharma**, Student, Siddaganga Institute of Technology, Tumkur, Karnataka
**Gururaj S. P.**, Assistant Professor, Siddaganga Institute of Technology, Tumkur, Karnataka

CarKart is a user-friendly futuristic android application with Machine Learning and Augmented reality capabilities. It enables the user to upload the image of the car which can be processed to detect the foremost probable car. The machine learning model is trained on the Stanford car dataset containing 196 classes of cars. Hence, this problem is categorized as a multi-label classification problem. Additionally, the users are going to be able to view various models of cars available within the market alongside their specifications and video feed, Fetch a list of nearby showrooms and repair centers, set service reminders, provide their feedback, survey on

© 2021, IJARIIT.COM All Rights Reserved

used cars, check their availability and costs, be able to contact car dealers, thereby introducing the concept of retail. The app also displays the live-size 3D prototype of certain selected car models using Augmented Reality. So, the user can consider all the essential factors before arriving at an informed decision as per their requirement.

**Keywords:** Machine Learning, Augmented Reality, Android Application

Read Full Paper · Download PDF · Back to index

---

## 143 Study showing the relationship between online food delivery platforms and revenue earned by restaurants in Mumbai.

Paper ID V7I4-1433 · Pages 691-695 · Commerce

**Prachi Malgaonkar**, Professor, M. L. Dahanukar College of Commerce, Mumbai, Maharashtra
**Ayudha Raul**, Independent Researcher, M. L. Dahanukar College of Commerce, Mumbai, Maharashtra

Online orders and doorstep delivery are one of the most significant developments in India in recent times. The customers are fortunate to select any food item of their choice from any of the listed restaurants at whatever time to any place. The main objective of this study is to collect information about online food platform and how it influences the revenue earned by restaurants in Mumbai. The data will be collected through the questionnaire distributed to 114 restaurants and 100 customers across Mumbai City who are using online food delivery platforms. Also, interviews will be conducted with the managers to know to analyze the cost and benefits of using an online delivery platform. Also, secondary sources of information like journals and research articles will be used for the purpose of the research. Data will be analyzed using SPSS Package, etc and the conclusion will be based on analyzed data.

**Keywords:** SPSS Package, Data, Restaurants

Read Full Paper · Download PDF · Back to index

---

## 144 Cost-effective social distance maintenance in primary schools

Paper ID V7I4-1402 · Pages 696-699 · Information Science And Engineering

**Joicy Castilino**, Student, New Horizon College of Engineering (Affiliated to VTU), Bangalore, Karnataka
**Vandana C. P.**, Student, New Horizon College of Engineering (Affiliated to VTU), Bangalore, Karnataka
**Harshitha Sundarvelu**, Student, New Horizon College of Engineering (Affiliated to VTU), Bangalore, Karnataka
**Helen Hephzibah**, Student, New Horizon College of Engineering (Affiliated to VTU), Bangalore, Karnataka
**Simran Fathima**, Student, New Horizon College of Engineering (Affiliated to VTU), Bangalore, Karnataka

During the COVID-19 pandemic, technological solutions are critical keep our cities functional, and truly the long-lasting impacts of engaging technologies on urban areas may occur beyond COVID-19. This Research Topic aims to research the sustainability, tolerability and reliability of IoT solutions in response to the COVID-19 pandemic. In India, most of the educational institutions shut down at the beginning of March 2020. Children and parents had thought that schools would open up after two or three months. But after one year, the schools remain closed. Also, some schools that did open are being poorly affected by the second wave of covid spread. An automatic hand sanitizer dispensing machine is automated, non-contact hand sanitizer dispenser, which

© 2021, IJARIIT.COM All Rights Reserved

finds its use in hospitals, work places, offices, schools and far more. Sanitizer is essentially a solvent, and also a really good disinfectant in comparison to soap or solid soap, also it doesdon't need water to scrub off since it is volatile and vaporizes instantly after application to hands. We are also included social distancing in our proposed system by using ultrasonic sensor which indicates the distance between the students and system so that contactless environment can be created in order to avoid spreading of Covid-19. The effectiveness of the proposed approach in terms of reliability, cost is measured and presented in this paper.

**Keywords:** Automatic Hand Sanitizer, Embedded C, Sensor, ,Microcontroller, Social-Distancing

Read Full Paper · Download PDF · Back to index

---

## 145 Automatic solar tracking and cleaning system

Paper ID V7I4-1411 · Pages 700-705 · Mechanical

**Rishikesh Sahebrao Dawange**, Student, S.N.D College of Engineering, Yeola, Maharashtra
**Pavan Rajendra Shelar**, Student, S.N.D College of Engineering, Yeola, Maharashtra
**Hemant Shamnath Khare**, Student, S.N.D College of Engineering, Yeola, Maharashtra
**Vishal Kisan Deore**, Student, S.N.D College of Engineering, Yeola, Maharashtra

Solar energy is the most abundant source of energy for all the forms of life on the planet Earth. But the solar technology has not developed to the extent of the conventional sources of energy. It faces lots of challenges such as high cost, erratic and unpredictable in nature, need for storage and low efficiency. This project aims at increasing the efficiency of solar panel which leads to increase in overall plant efficiency. This is the purposes to develop the “Solar Tracking and Cleaning System”. The Solar Tracking System is a power generating method from sunlight. This method of power generation is simple and is taken from natural resource. This needs only maximum sunlight to generate power. This project helps for power generation by setting the equipment to get maximum sunlight automatically. This system is tracking for maximum intensity of light. When there is decrease in intensity of light, this system automatically changes its direction to get maximum intensity of light. The cleaning system is using to remove the accumulated dust on its surface on a regular basis and maintain the solar panel output the system is robotic system which could have the nozzle from which the water is sprinkle on the panel and thus the panel get clean. This project also aims to reduce human involvement in the process of solar panel rotating and cleaning.

**Keywords:** Automatic Solar Tracking System, Automatic Solar Panel Cleaning System, Increased Efficiency of Solar Panels, Maintenance Free Solar Panel System

Read Full Paper · Download PDF · Back to index

---

## 146 Automatic classification of diabetic retinopathy using Convolution Neural Network

Paper ID V7I4-1445 · Pages 706-710 · Enggineering

**Pooja Pimpalshende**, Student, Wainganga College of Engineering and Management, Nagpur, Maharashtra
**Rahul Bhandekar**, Assistant Professor, Wainganga College of Engineering and Management, Nagpur, Maharashtra

Diabetic eye disease is a complexity that affects people having diabetes for a longer time. By affecting the

© 2021, IJARIIT.COM All Rights Reserved

blood vessels it can cause blurry vision or even blindness to the patients. Thus, detecting eye disease at an early stage can help many diabetic patients to get the required treatment and intern increases the survival rate. In the proposed system, the CNN algorithm of machine learning is used to detect diabetic eye disease by using thermal images. These images are pre-processed by converting them from RGB to GRAY based on which the required features are extracted. To detect diabetic retinopathy, here the Convolutional Neural Network is used to classify 5 stages of the diseased eye.

**Keywords:** AI, Machine Learning

Read Full Paper · Download PDF · Back to index

---

## 147 Remote administration of speed of an induction motor

Paper ID V7I4-1448 · Pages 711-716 · Electrical Engineering

**S. Bala Sai**, Student, Sreenidhi Institute of Science and Technology, Hyderabad, Telangana
**G. Sharath Kumar**, Student, Sreenidhi Institute of Science and Technology, Hyderabad, Telangana
**L. Sai Vivek**, Student, Sreenidhi Institute of Science and Technology, Hyderabad, Telangana
**Baira Raviteja**, Student, Sreenidhi Institute of Science and Technology, Hyderabad, Telangana

Induction motors are widely used in many industries and domestic applications. They are used commonly in many open-loop control applications due to their cost, size, efficiency, less maintenance, simplicity and easy manufacture. In the past traditional speed control methods were used to control the speed of the DC motors, But DC motors have commutator and brushes which require more maintenance and are hazardous. So Induction motors are more preferred in these fields. Since most of the industries use Induction motors , controlling of it plays a major role. This project deals with controlling the speed of Induction Motor using Android phone remotely through Bluetooth Technology. We are using android application which uses Bluetooth to connect to the Bluetooth modem of the control circuit. Bluetooth modem is interfaced with the AVR Microcontroller. The Bluetooth slave receives the commands from the Android phone, then The Bluetooth module sends the signal to the Microcontroller. It decodes the signal and generates the pulse width signals which activates its circuit and gives the change in speed of induction motor with respect to the change in firing angle of TRAIC. This way speed can be easily varied and maintained as per the required values. We are not only controlling the speed of the induction motor, we can also detect the temperature and voltage of it which can be displayed on the android phone. Therefore, this project will be helpful in households, commercial use, industries etc

**Keywords:** IoT, Induction Motor, Speed Control

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 148 A study to assess the effectiveness of structured teaching program on knowledge regarding revised immunization schedule among mothers of under-five age children in selected hospital at the selected city.

Paper ID V7I4-1406 · Pages 717-721 · Nursing

**Fulwanti Natwar Padvi**, Student, Aurangabad Nursing College, Aurangabad, Maharashtra
**Sandhya Bhimrao Wagh**, Lecturer, Aurangabad Nursing College, Aurangabad, Maharashtra

A study to assess the effectiveness of structured teaching programme on knowledge regarding revised immunization schedule among mothers of under five age children in selected hospital at selected city.”Objectives: To assess the existing knowledge of mothers regarding revised immunization schedule and to evaluate effectiveness of structured teaching programme on knowledge regarding revised immunization schedule. And To find out the association between pre-test knowledge score with selected demographic variables. Methodology: quantitative research approach was used with quasi experimental one group pre-test and post- test design. Population50 Mothers of under Five Age Children, Purposive Sampling Technique was used for data collection. Result: In the pre-test- 6 (12%) had inadequate knowledge, maximum 44 (88%) had moderately adequate knowledge and no one mothers of under five age children had adequate knowledge regarding revised immunization schedule. In post-test- maximum 47 (94%) Mothers of under-five age children were having adequate knowledge and no one mothers of under-five age children were having inadequate knowledge and remaining 3 (6%) Of mothers of under-five age children were having moderately adequate knowledge regarding revised immunization schedule.

**Keywords:** Structured Teaching Programme, Knowledge, Revised Immunization Schedule, Mothers of Under Five Age Children

Read Full Paper · Download PDF · Back to index

---

## 149 Adaptive traffic management system using traffic API

Paper ID V7I4-1365 · Pages 722-725 · Traffic Management Systems

**Soham Bhure**, Student, Vishwakarma Institute of Technology, Pune, Maharashtra
**Ritvik Patil**, Student, Vishwakarma Institute of Technology, Pune, Maharashtra
**Sanket Umredkar**, Student, Vishwakarma Institute of Technology, Pune, Maharashtra

Traffic congestion is rising in cities around the world. Contributing factors include expanding urban population, aging infrastructure, inefficient and uncoordinated traffic signal timings. According to researchers, Signal Timer issues (like out-of-sync timers) are at the top causing factors of traffic congestion along with a disproportionate number of vehicles and road-work/accidents. The purpose of this article is to illustrate one of the possible solutions to increase the efficiency of existing traffic signals by optimizing signal timings with the help of real-time traffic data using a traffic API. The proposed solution is bolstered by a mathematical equation that follows the principle of equity.

**Keywords:** Traffic Density, Traffic Flow, Traffic API, Traffic Congestion, Equity, Optimization

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 150 A study on various optimization algorithms for task scheduling in cloud computing

Paper ID V7I4-1414 · Pages 726-731 · Computer Science Engineering

**Gujjala Sai Lakshmi Namitha**, Student, SRM Institute of Science and Technology, Chennai, Tamil Nadu
**Bindu Madhavi Siraparapu**, Student, SRM Institute of Science and Technology, Chennai, Tamil Nadu

The prompt development of storage technologies, processing, and the internet's success has made the computing resources more available, more influential, and cheaper than before. This drift in the technological field has paved way for the realization of a new computational model which is Cloud Computing. One of the most challenging problems faced in cloud computing is task scheduling, where the clients want their tasks to be finished as per the deadline within the shortest time possible. Task scheduling in the cloud is done based on various parameters such as priority, cost, time, bandwidth, resource utilization, performance, etc. The current work focuses on providing a detailed review of various optimization algorithms for scheduling in the cloud. This study is useful in understanding various optimization algorithms that are used for task scheduling, the way they behave and function. The algorithms presented here are mainly focused to minimize the computational cost and execution time thereby increasing the overall efficiency.

**Keywords:** ACO Algorithm, BCO Algorithm, Cloud Computing, Genetic Algorithm, PSO Algorithm, Task Scheduling

Read Full Paper · Download PDF · Back to index

---

## 151 A study of Wireless Sensor Network security attacks and Intrusion Detection Techniques

Paper ID V7I4-1461 · Pages 732-740 · Networking

**Nitu Singh Gahlawat**, Research Scholar, BRCM College of Engineering and Technology, Bahal, Haryana
**Praveen Kantha**, Assistant Professor, BRCM College of Engineering and Technology, Bahal, Haryana

Nowadays, remotely impromptu sensor systems have gained popularity in both commercial and military situations. In any case, security is a critical problem for IoT systems due to its distribution in an open and unprotected environment. Also, because the encryption component is still insufficient to support the sensor protection from malicious attacks, a framework for detecting interruptions should be given. While interruption counteraction is an effective and successful strategy against attacks, there may be some assaults for which no established avoidance technique exists. Therefore, apart from protecting the framework against known attacks, the interruption detection framework collects critical data about attack strategies and aids in developing an interruption counteraction framework.

**Keywords:** Wireless Sensor Network, Intrusion Detection System, Sequential Design

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 152 Application for Donation Centers

Paper ID V7I4-1454 · Pages 741-744 · Computer Engineering

**Atul Satam**, Student, Atharva College of Engineering, Mumbai, Maharashtra
**Ninad Gavli**, Student, Atharva College of Engineering, Mumbai, Maharashtra
**Bhavna Arora**, Assistant Professor, Atharva College of Engineering, Mumbai, Maharashtra

The aim of this application was to look at how donations work and the way small-NGOs are adapting in terms of technology and also the growing crisis around Covid-19 and the way it's affected them adversely. The cross-platform application can facilitate NGOs to publish their desires and what has to be provided to the poor on pressing basis and also the donor will simply select based on their ability to present food, garments or commodities that they will present to those in want. The manual posts can facilitate the users select what they need to present rather than restricted selections. the appliance would be a linking bridge between unaware donors and NGOs searching for bound donors that may profit the necessitous.

**Keywords:** Donation, Cross-platform, NGOs, Donors

Read Full Paper · Download PDF · Back to index

---

## 153 Plague and death in the play Romeo and Juliet

Paper ID V7I4-1463 · Pages 745-747 · Literature

**K. Athira**, Student, Sathyabama Insititute of Science and Technology, Chennai, Tamil Nadu
**Dr. Sowmiya L. M.**, Assistant Professor, Sathyabama Insititute of Science and Technology, Chennai, Tamil Nadu

William Shakespeare was an excellent writer that changed the front face of the English language. Romeo and Juliet have been one of the best-known literary works. Through this paper, it can be understood how the external circumstances that had affected England and how Shakespeare has blinded this aspect to the theme of death in his tragedy Romeo and Juliet. The black death had directly and indirectly affected the life of the people as they could see mass destruction all around them and this could be partially evident through the play Romeo and Juliet.

**Keywords:** Plague, Quarantine, Death

Read Full Paper · Download PDF · Back to index

---

## 154 Sigmund Freud’s Journey from ‘Libido’ Theory to the ‘Unconscious’ Theory in Art

Paper ID V7I4-1451 · Pages 748-751 · Art

**Ridhi Sarraf Riddhima**, Raja Man Singh University, Gwalior, Madhya Pradesh

Freud tried to probe deeper into the unknown realm of the unconscious and was successful in this. Freud also conducted psychoanalytic studies on art and thus attempted to find unconscious factors within the artist's own psyche.

**Keywords:** Libido, Unconscious, art, theory, dreams, Singmud Freud

© 2021, IJARIIT.COM All Rights Reserved

Read Full Paper · Download PDF · Back to index

## 155 Fault Detection and Diagnosis in PV System Array

Paper ID V7I4-1284 · Pages 752-755 · Electronics And Telecommunication Engineering

**Vinit Koli**, Research Scholar, Sardar Patel Institute of Technology, Mumbai, Maharashtra
**Abhijit Shankar Iyer**, Student, Sardar Patel Institute of Technology, Mumbai, Maharashtra
**Aniket Kedare**, Student, Sardar Patel Institute of Technology, Mumbai, Maharashtra
**Vinayak More**, Student, Sardar Patel Institute of Technology, Mumbai, Maharashtra
**Milind Paraye**, Assistant Professor, Sardar Patel Institute of Technology, Mumbai, Maharashtra

Solar energy has procurement increasing attention in modernistic year. The power generation from solar source is always clean and free from pollution. In recent year, the price of solar PV panel is going downwards which increased the attention to use solar PV application in the recent years. Machine Learning techniques are employed in photovoltaic (PV) systems to make full utilization of PV array output power which depends on solar irradiation and ambient temperature. For such a large scale growing business it is necessary for it to be free of faults so that are ensured smooth and hassle free working.

**Keywords:** Faults, Detection, Solar, Arrays, Machine Learning

Read Full Paper · Download PDF · Back to index

## 156 Comparison of the presence of Comorbidities in Recovered and Expired patients with COVID-19 infection

Paper ID V7I4-1425 · Pages 756-759 · Covid-19

**Dr. Anjali Goyal**, Associate Professor, Smt. NHL Municipal Medical College, Ahmedabad, Gujarat
**Dr. Heta Patel**, Resident, Smt. NHL Municipal Medical College, Ahmedabad, Gujarat
**Dr. Chandni Gadara**, Resident, Smt. NHL Municipal Medical College, Ahmedabad, Gujarat
**Dr. Shachi Shah**, Resident, Smt. NHL Municipal Medical College, Ahmedabad, Gujarat
**Dr. Misha Antani**, Resident, Smt. NHL Municipal Medical College, Ahmedabad, Gujarat

Background The Covid 19 pandemic, has been reverberating across the globe with varying severity & disease presentations. The epidemiological factors associated with the disease included the age & the associated comorbidities like Hypertension, Diabetes Mellitus & Chronic heart & Lung diseases amongst others. Objectives To study the presence of Comorbidities in Covid 19 patients. Methods A retrospective observational study from the laboratory and medical records was conducted on consecutive 100 recovered & Expired patients admitted to a tertiary care centre. Results & Conclusions; The average age of the Recovered & Expired patients was 43.68 years & 58.71 years with a male female ratio of 58:42 & 74::26 respectively. An increase in the age with an increasing no of comorbidities was seen in both the groups. A significant male preponderance was seen showing an increase with increasing number of the associated comorbidities. Amongst other comorbidities, more than 50% of the expired patients were hypertensive compared to only 20% of the recovered patients. 38% of the expired patients were admitted with a history of Diabetes Mellitus compared to 23% of the expired patients. 70% of all patients having Hypertension & 63% of all having DM as the only comorbidity expired from the disease. 86% of all patients with a cardiac disease & 100% of all patients in the study having an associated

© 2021, IJARIIT.COM All Rights Reserved

kidney disease or immunocompromised expired from the disease. Hence a significant association was found between associated comorbidities & mortality in the patients.

**Keywords:** COVID-19, Comorbidities, Hypertension, Diabetes Mellitus

Read Full Paper · Download PDF · Back to index

---

## 157 Detection of macro based attacks in office documents using Machine Learning

Paper ID V7I4-1460 · Pages 760-764 · Cybersecurity

**Aishwarya**, Student, Siddaganga Institute of Technology, Tumkur, Karnataka
**Bhumica B.**, Student, Siddaganga Institute of Technology, Tumkur, Karnataka
**Sumit Suman**, Student, Siddaganga Institute of Technology, Tumkur, Karnataka
**Ravi V.**, Assistant Professor, Siddaganga Institute of Technology, Tumkur, Karnataka

With the rapid developments in internet, users share information through document files generated through online or offline office software. Due to implicit trust on the web and wide acceptance of these document files (such as PDF, DOC, Office Open XML), users share documents on the web by trusting third-party services which can be easily exploited by cybercriminals to inject malicious code (Malware) into the document files by various means of exploitations. These exploitations are undetectable and easily evaded on antivirus software which makes the problem of malware detection and classification even more complex. In recent years, the attacks that leverage office documents have gradually increased and thus harder to detect since malware authors use various ways to inject malicious code on to the office documents. They offer flexibility in document structure with numerous features for attackers to exploit. In this paper, a broad classification of macro based malicious document attack is provided along with a detailed description of the attack opportunities available using office documents. A hybrid malware analysis technique is proposed which thoroughly analyze the file for any macro attacks along with decision paradigms such as machine learning is used to detect and classify the malicious document present in Microsoft Office applications such as Word, Excel, Power point.

**Keywords:** Macros, Malwares, Random forest, Compound Binary Format

Read Full Paper · Download PDF · Back to index

---

## 158 College Kendra

Paper ID V7I4-1469 · Pages 765-772 · Computer Science Engineering

**Pranav Kongara**, Student, Andhra University College of Engineering, Visakhapatnam, Andhra Pradesh

The android app “College Kendra” is a package of unique features that a university/college need in their college life. There are 8 features in this android app namely Online Attendance, E-Passbook, Notice Board, Calculator, Anonymous Feedback, Automatic Silent Mode and Distress Alert. These might seem pretty common but they aren’t. This paper describes why in the coming sections. The main feature in this app, the Online attendance is made to save professor’s time on trivial attendance task. The amount of average time saved on daily basis will be 5 minutes. This is the time which will be wasted on taking attendance manually, which accounts over 10 hours per semester and 20 hours per year. Also, through this app we can 100% ensure that the student is really

© 2021, IJARIIT.COM All Rights Reserved

present in the class, thus eliminating proxies. What makes it completely efficient is the One-Time-Password based authentication (OTP). This particular Attendance feature totally eliminates the paper work too. With effective usage, any institute can apply this feature for conducting quick attendance and get better results in less time. The calculator feature I developed isn't any typical or regular calculator that everyone uses. It doesn't have the same usual operations. As graduation students use this, it'll have prime and big-league operations such as bit convertor. The other features help the students with college tasks and non-academic problems. The E-Passbook, Notice Board and Chat Room features included in the app will help with classroom tasks and work as communication media. The Anonymous feedback feature helps to report any issue in the classroom. The Automatic Silent Mode Turner will set the phone in the silent mode automatically when you are in the class. The Distress Alert option would help students to alert others during emergency or unusual situations with just a single click. This paper gives a complete understanding about all the features of our app, which is a complete means of help for a university/college.

**Keywords:** Android Studio, Java, XML, College Kendra, Online OTP Attendance, Calculator, E-Passbook, Online Notice Board, Chat Room, Anonymous Feedback, Automatic Silent Mode Turner, Distress Alert

Read Full Paper · Download PDF · Back to index

---

159

## Importance of Feature Selection in Model Accuracy

Paper ID V7I4-1470 · Pages 773-775 · Data Science And Analytics

**Pranjal Rawat**, Student, Uttaranchal University, Dehradun, Uttarakhand
**Nitin**, Student, Uttaranchal University, Dehradun, Uttarakhand
**Sameer Dev Sharma**, Assistant Professor, Uttaranchal University, Dehradun, Uttarakhand

As a dimensionality reduction strategy, feature selection attempts to select small set of most important features from primary features by eliminating obsolete, data-redundant and non-relevant noisy features. This process of choosing a set of the original variables such that a model based on data containing only these features has the simplest output is known as feature selection. Feature Selection eliminates over-fitting, increases model efficiency by removing redundant functions, and has the added benefit of maintaining the primary feature representation, resulting in improved accuracy. Good learning efficiency, results into higher machine learning model accuracy, lower cost of computation, and efficient model accuracy, is typically the product of feature selection. Recently, researchers in the area of computer vision, deep Learning, data mining, and other fields have shown that several feature selection algorithms resulted in the efficiency in their work through computational theory and research. This paper aims to examine the importance of feature selection in model accuracy. Feature selection is critical for various reasons, which include simplicity, performance, computational efficiency, and accuracy. It is often used in both supervised and unsupervised learning scenarios. These strategies can help boosting the productivity of various machine learning algorithms, as well as coaching. Feature selection decreases learning time and increases data consistency and comprehension.

**Keywords:** Feature Selection, Over-Fitting, Supervised Learning, Unsupervised Learning, Computer Vision

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 160 Clustering of JSON document using Derived X-Path Method

Paper ID V7I4-1473 · Pages 776-779 · Computer Science

**Kaushik I.**, Student, National Institute of Technology Karnataka (NITK), Mangalore, Karnataka

In this modern era where data creation is in abundance, handling that data is the biggest question researchers have been trying to solve for the past couple of decades. The data in any form needs to be stored in such a way that the retrieval and manipulation of the data are easier and simpler. In this paper, we look at how huge datasets in JSON format are being analyzed and made into clusters for an easier understanding of the documents that we are handling. This process is done by the first pattern analyzing the documents followed by clustering those documents one by one based on similarity of the attributes (arrays and sub-documents included). The clusters are then evaluated on an algorithm designed specifically for this purpose. To conclude, this paper lays out the model on how to cluster huge JSON documents with varying levels and types.

**Keywords:** JSON, Cluster, Schema, Attributes, Similarity, Decision Tree, X-Path

Read Full Paper · Download PDF · Back to index

---

## 161 Application of AI in drug discovery

Paper ID V7I4-1472 · Pages 780-782 · Computer Applications

**Mohit Singh Negi**, Student, Uttaranchal Institute of Management, Dehradun, Uttarakhand
**Anosh Singh**, Student, Uttaranchal Institute of Management, Dehradun, Uttarakhand

Target-driven drug discovery is a process in which a known target is used to search for small molecules that interfere with it or influence its role in cells. These methods function well for easily druggable targets with a well-defined structure and well-understood interactions within the cell. However, due to the complexity of cellular interactions and a lack of understanding of intricate cellular pathways, these methods are severely limited. By detecting novel associations and inferring the functional significance of various components of a cellular pathway, AI will conquer these obstacles. It extracts useful knowledge from a broad dataset using complex algorithms and machine learning techniques. QSAR modeling based on structure, de-novo drug design, automated synthesis planning is just a few of the cutting-edge applications available. Screening of the compounds along with optimizing the lead compound, goal validation and selection, nonclinical research and studies, and clinical drug trials are all places where AI is used extensively.

**Keywords:** Artificial Intelligence, Deep Learning, Drug Discovery, Machine Learning, QSAR

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 162 AI-based hexapod military robot

Paper ID V7I4-1481 · Pages 783-785 · Electronics And Communication Engineering

**Srividya C. R.**, Student, Global Academy of Technology, Bengaluru, Karnataka
**Shreya Adiga H.**, Student, Global Academy of Technology, Bengaluru, Karnataka
**Vaishnavi J. M.**, Student, Global Academy of Technology, Bengaluru, Karnataka
**Harshitha H. R.**, Student, Global Academy of Technology, Bengaluru, Karnataka
**Dipak Cumar V. C.**, Assistant Professor, Global Academy of Technology, Bengaluru, Karnataka

Hexapod walking robots have attracted considerable attention for several decades. However, only in the recent past efficient walking machines have been conceived, designed, and build with performances that can be suitable for practical applications. Nowadays many expenses are made in the field defense on adopting primitive security measures to protect the border from trespassers. Some military organizations take the help of robots in risk-prone areas which are not that effective when done by army men. These robots are confined with the camera, sensors, metal detectors, and video screen. The main objective of our system is to get automated gun targeting including some additional parameters like a Wi-Fi module for real-time data processing by the camera at the video screen and IR sensor to trace intruders. Thus, the proposed system using Wi-Fi reduces errors at defense and keeps the nation secure from the foe.

**Keywords:** Artificially Intelligent Robot, Military Robot, Surveillance, Raspberry Pi, Face Recognition System

Read Full Paper · Download PDF · Back to index

---

## 163 Evolution of research collaboration in Indian automobile industry– A Scientometric Analysis with Reference to SIAT during 2001 to 2017

Paper ID V7I4-1496 · Pages 786-791 · Library And Information Science

**Joshi Ashutosh Gopal**, Research Scholar, Mahindra Research Valley, Chengalpattu, Tamil Nadu
**S. Santhosh**, Research Scholar, Mahindra Research Valley, Chengalpattu, Tamil Nadu
**E. Priyan**, Research Scholar, Mahindra Research Valley, Chengalpattu, Tamil Nadu

The objective of this research paper on research productivity in the Indian Automotive Industry is to present the transformation of the research community of the Indian automotive Industry in a progressively responsible way, with reference to SIAT conferences held so far. It reveals the dynamic nature of automotive research in the country. The exhibit's research outcome is dominated by specific domains and specific organizations in a dynamic way. It is also elaborating the countries and scientists preferred to collaborate with and their impact on the Indian automotive Industry.

**Keywords:** Siat, Indian Automotive Industry, Research Publications, Technical Paper, Scientometrics

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 164 Discovery of Acoustify

Paper ID V7I4-1177 · Pages 792-794 · Computer Science

**Babitha Shetty K.**, Student, N. M. A. M. Institute of Technology, Nitte, Karnataka
**Dr. Surendra Shetty**, Professor, N. M. A. M. Institute of Technology, Nitte, Karnataka

Acoustify app is an app that is used to achieve this objective. With the Acoustify app, we can extract the streaming URLs embedded in a particular website using the URL of that website. By this, we can get the audio streamable URLs from that website, which can be processed further for enhancement of the user's listening experience.

**Keywords:** Streamable URL, Acoustify App

Read Full Paper · Download PDF · Back to index

---

## 165 Car resale value prediction

Paper ID V7I4-1492 · Pages 795-797 · Computer Science And Engineering

**Navaneeth M.**, Student, Siddaganga Institute of Technology,Tumkur, Karnataka
**I. S. Manoj Kumar**, Student, Siddaganga Institute of Technology,Tumkur, Karnataka
**Dharshan N.**, Student, Siddaganga Institute of Technology,Tumkur, Karnataka
**Gavini Hitesh**, Student, Siddaganga Institute of Technology,Tumkur, Karnataka
**H. K. Vedamurthy**, Assistant Professor, Siddaganga Institute of Technology,Tumkur, Karnataka

India is one of the biggest automobile markets. All over the globe every day many buyers tend to sell their cars after using them for few years. cars24.com, cardekho.com, and OLX.com provide buyers and sellers with an online platform where they can sell and buy used cars. But what should be the price of the car, this is the biggest question ever. Machine Learning algorithms can provide a solution to this problem. Using the history of previously used cars selling data and machine learning techniques such as Supervised Learning we can predict the price of the car. Here the machine learning algorithms such as Random Forest and Extra Tree Regression are used to predict the selling price of the used cars. The result has shown that both algorithms are highly accurate in prediction even the dataset is large or small, irrespective of the size of the dataset they give a precise result.

**Keywords:** Car, Price, Prediction, Machine Learning, Random Forest, ExtraTreeRegression

Read Full Paper · Download PDF · Back to index

---

## 166 <I>Lantana camara</I>: Conversion from soil destructor to constructive approach with green nanoparticles

Paper ID V7I4-1479 · Pages 798-806 · Microbiology

**Anmol Sidana**, Student, St. Aloysius College, Jabalpur, Madhya Pradesh
**Mamta Gokhale**, Assistant Professor, St. Aloysius College, Jabalpur, Madhya Pradesh

Lantana camara is considered to be a voracious and poisonous weed, as it spreads rapidly and chocks the native vegetation, spoils animal habitats, biodiversity, leads to shortage of fodder for herbivores, and exerts toxic effects when ingested by livestock, hence L. camara is regularly eradicated by the villagers.The present

© 2021, IJARIIT.COM All Rights Reserved

study was carried out to assses the Hazardous effect of Lantana camara on soil microflora. It is clear from results that Lantana camara possess adverse effect on soil microflora & thereby decreases fertility of nearby soil. The bare land development is final cause of growth of Lantana camara plant on waste / agriculture land . As we know presence of microbial population and their activity in soil is directly proportional to the fertility of soil. In cities & villages Lantana camara is growing in uncontrolled way on waste land and so that it also affect agriculture land via seed migration , resultate into the decrease in soil fertility of agriculture land. On the basis of our study we can suggest that Lantana camara plant growth should be controlled in village,cities & in agriculture land. However, present study advocates its uses by pharmaceutical industries for preparing plant-based antimicrobials drugs in addition to fungal nanoparticles, rather than to throw the eradicated plants as garbage.

**Keywords:** Antimicrobials Drugs, Fungal Nanoparticle, Lantana Camara, Soil Fertility, Soil Microflora, Spoil Biodiversity, Toxic Effects, Weed.

Read Full Paper · Download PDF · Back to index

---

167

## Fabrication of flexography machine with heterogeneous operating modes

Paper ID V7I4-1465 · Pages 807-812 · Printing And Mechanical

**B. N. Durga**, Student, Avinashilingam University, Coimbatore, Tamil Nadu
**D. Sowjanya**, Student, Avinashilingam University, Coimbatore, Tamil Nadu
**R. Abitha**, Student, Avinashilingam University, Coimbatore, Tamil Nadu
**N. Alagu Sundari**, Assistant Professor, Avinashilingam University, Coimbatore, Tamil Nadu
**R. Viveka**, Assistant Professor, Avinashilingam University, Coimbatore, Tamil Nadu

A commercial enterprise is important in an Indian financial system, it should give quality products to the consumers with cost-effectiveness. Now a day’s print-on-demand is playing a prominent role within the print industry. Cost per copy is high for printing short-run jobs in conventional flexo printing machines, which are largely supported design and construction, and these are best suitable for production. to beat these problems, fabricating one color mini flexo machine which may be a manual machine, no power supply is given to run the unit of measurement and with fewer sub-systems (Unwinder, unit of measurement, drying unit, and Rewinder). As flexographic inks are liquid inks that need a dryer to calm down the ink permanently on the substrate, so using Two twenty V A.C supplies for the drying unit alone. Therefore cost are going to be reduced for printed electronics, print-on-demand purposes.

**Keywords:** Print-on-Demand, Printed Electronics, Cost Effectiveness, Heterogeneous Operating Modes

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 168 What happens in the top athletes mind? a review study

Paper ID V7I4-1438 · Pages 813-820 · Neuroscience

**Sayed Abulqasem Baqeri**, Assistant Professor, Kateb University, Kabul, Afghanistan
**Parastou Kordestani-Moghadam**, Associate Professor, Lorestan University of Medical Sciences, Khorramabad, Iran
**Henk Koppelaar**, Professor, University of Delft, Delft, Netherlands
**Abbas Ali Ramuzi**, Associate Professor, Kateb University, Kabul, Afghanistan
**Gijs Segers**, Visual Performance Trainer, Visual Performance Center, Oosterhout, Netherlands
**Sayed Mohammad Baqeri**, Student, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran

During the last decades by the inception of Neuroscience and increasing experimental researches on catecholamine neurotransmission, the importance of Dopamine has been raised more than past. Dopamine is a crucial neurotransmitter with precursors (biosynthesis) –tyrosine, L-DOPA that is implicated in many neuropsychological disorders. Dopamine functions are also has engaged in body movement and as well it has a role in eye movements. Dopamine also has a role in cognitive and enhances visuomotor tasks such as playing baseball games via training by strobospectacle. Therefore, in this article, we explain its role and its architecture (i.e. receptors, basal ganglia, and striatum and their pathways). , and its role in influencing saccade and pursuit eye movements. Finally, we try to answer the main question how do strobotraining affect brain dopamine levels and coordination of athletes' movements?

**Keywords:** Dopamine, Saccade, Stroboscope Training, Visuo-Motor Skill

Read Full Paper · Download PDF · Back to index

---

## 169 Analysis of bank telemarketing data using Microsoft Azure machine learning

Paper ID V7I4-1484 · Pages 821-825 · Data Science

**Jaswanth Kankanala**, MODAK, Analytics, Gachibowli, Telangana
**Sravya Sri V.**, Caterpillar
**Venkatesh narahari**, KPMG

predict customers' responses to future marketing campaigns & increase the effectiveness of the bank's telemarketing campaign Here in this paper we will empower the bank to foster a more granular comprehension of its client base, foresee clients' reaction to its selling crusade and build up an objective client profile for future advertising plans. By investigating client highlights, like socioeconomics and exchange history, the bank will actually want to anticipate client saving practices and recognize which sort of clients is bound to set aside term installments. The bank would then be able to zero in its promoting endeavors on those clients. This won't just permit the bank to get stores all the more successfully yet in addition increment consumer loyalty by decreasing unwanted ads for specific clients.

**Keywords:** Bank Marketing, Telemarketing, Machine learning, Logistic regression

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 170 Design and fabrication of jig for angular drilling

Paper ID V7I4-1348 · Pages 826-831 · Mechanical Engineering

**Atharv Ajay Chikurdekar**, Student, Rajarambapu Institute of Technology, Islampur, Maharashtra
**Swaraj Suraj Pawar**, Student, Rajarambapu Institute of Technology, Islampur, Maharashtra
**Yash Sanjay Khulkarni**, Student, Rajarambapu Institute of Technology, Islampur, Maharashtra
**Shubham Dattatraya Mali**, Student, Rajarambapu Institute of Technology, Islampur, Maharashtra
**Kalyani Sudhir Kulkarni**, Professor, Rajarambapu Institute of Technology, Islampur, Maharashtra

In drilling process the tool and work piece both are perpendicular to each other means the drilling axis parallel and horizontal to machine axis, but in Vertical machine centre (VMC) the radial and angular drilling is easy task but in small machine shop and workshop we can not afford the VMC machines. For that we are trying to design and fabrication a fixture for angular drilling. This proposed method has to design and fabricate the Multipurpose Jig and Fixture, for that component Which has been to reduce the manufacturing cycle time

**Keywords:** Jig, Vertical Machine Centre

Read Full Paper · Download PDF · Back to index

---

## 171 Campus Buddy

Paper ID V7I4-1506 · Pages 832-834 · Web And Software Development

**Biswajit Sahoo**, Student, Sai Vidya Institute of Technology
**Bhagat Singh**, Student, Sai Vidya Institute of Technology
**Mishra Anupam Mukundkumar**, Student, Sai Vidya Institute of Technology
**Atul Singh**, Student, Sai Vidya Institute of Technology
**Abhijit Das**, Assistant Professor, Sai Vidya Institute of Technology

Every institute needs a place where everyone of their institute can communicate with each other so that while sharing some important information/data no one should be left behind. Thus, Making a web application and stand-alone application which can be used by every member of that education institute to get updated about institute activity and can share his/her opinion if required. Thus, binding everyone under one platform gives institute more boost and coordination among its members. Our Automation is accomplished through the medium of a Website and smart phone application. The front end of this system is built with Bootstrap. Bootstrap is the most popular HTML, CSS and JS framework which scales the website and application with a single code base, from phones to tablets to desktops with CSS media queries. The back end of this system is built with firebase. Fast, flexible and pragmatic, JAVA SCRIPT is a server scripting language that empowers some of the most popular websites. FIREBASE is the most popular database system used with JavaScript for storing information categorically. The whole project is also featured with the firebase services such as authentication, database, storage, hosting , messaging, etc.

**Keywords:** Timetable generation ,Attendance record, Academic record, Finance details, Passing of circulars.

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 172 House Price Prediction using Machine Learning

Paper ID V7I4-1498 · Pages 835-837 · Computer Engineering

**Mayur Manohar Patil**, Student, Shrama Sadhana Bombay Trust's College of Engineering and Technology, Jalgaon, Maharashtra
**Bhushan Ramkrushna Upasani**, Student, Shrama Sadhana Bombay Trust's College of Engineering and Technology, Jalgaon, Maharashtra
**Anup Sanjay Patil**, Student, Shrama Sadhana Bombay Trust's College of Engineering and Technology, Jalgaon, Maharashtra
**Janhavi Kailas Chaudhari**, Student, Shrama Sadhana Bombay Trust's College of Engineering and Technology, Jalgaon, Maharashtra
**Priti R. Sharma**, Assistant Professor, Shrama Sadhana Bombay Trust's College of Engineering and Technology, Jalgaon, Maharashtra

Machine learning plays a major role in past years in image detection, spam reorganization, normal speech command, product recommendation, and medical diagnosis. Present machine learning algorithm helps in enhancing security alerts, ensuring public safety, and improve medical enhancements. Machine learning system also provides better customer service and safer automobile systems. Designing an effective machine learning model for the prediction of regression and classification problems is a tedious endeavor. Significant time and expertise are needed to customize the model for a specific problem. A significant way to reduce the complicated design is by using Automated Machine Learning (AML) that can intelligently optimize the best pipeline suitable for a problem or dataset. This study utilizes machine learning algorithms as a research method that develops housing price-prediction models. In that point, a housing cost prediction model to support a house vendor or a real estate agent for better information based on the valuation of the house is recommended.

**Keywords:** Machine Learning, Automated Machine Learning

Read Full Paper · Download PDF · Back to index

---

## 173 COVID-19 cases detection using deep neural networks with X-Ray images

Paper ID V7I4-1493 · Pages 838-841 · Computer Science Engineering

**Dr. S. Usha**, Professor, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Anjali Rani**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Aparna Singh**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Khushi Mathur**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka

Mysterious sickness with flu-like signs became first located in Wuhan town of China. This sickness became resulting from extreme acute respiration syndrome coronavirus 2 (SARSCoV-2). Covid-19 introduced havoc internationally affecting each public fitness and the economy globally. And inflicting the biggest worldwide recession because of the Great Depression. With the fundamental replica variety (R0) ranging from 2-2.5, it's far vital to become aware of the effective instances and deal with them. There is a demand for auxiliary diagnostic tools. The information amassed the usage of the radiology imaging strategies offers exceptional data about the COVID-19 virus. Radiological photographs and superior synthetic intelligence(AI) strategies can work withinside the choice of a brief analysis of the infection. In this we examine, an automated version for COVID-19 detection the usage of chest X-ray photographs is rendered. The rendered version is advanced to cater stable

© 2021, IJARIIT.COM All Rights Reserved

diagnostics for binary category and multi-class category. Our version gave a category accuracy of 98.08 percentage for binary classes and 87.02 percentage for multi-magnificence instances. In our investigation, the Darknet version was used as a classifier for a YOLO (you only look once) real-time object identification system. We are using VGG-sixteen architecture and added filtering on every layer. Our version can be engaged to support radiologists withinside the preliminary screening, and also can be hired through cloud to immediately screen patients.

**Keywords:** COVID-19, Machine Learning, CNN

Read Full Paper · Download PDF · Back to index

---

## 174 Robotic arm to pick and place

Paper ID V7I4-1491 · Pages 842-845 · Technology

**Sai Krishna Aitha**, Student, Sreenidhi Institution of Science and Technology, Hyderabad, Telangana
**Y. Deepthi Reddy**, Student, Sreenidhi Institution of Science and Technology, Hyderabad, Telangana
**P. Mani Kumar**, Student, Sreenidhi Institution of Science and Technology, Hyderabad, Telangana

Robotics has emerged as a more important area in the current technological era. When compared to human labor, robots are more precise. This study presents a method for replicating a human arm by using a smartphone to operate it. A robotic arm is a mechanical device that has been programmed to carry out certain activities. This paper describes the creation of a robotic arm that can pick and place objects and is controlled through Bluetooth. The Android application serves as a transmitter, sending commands to the receiver to control the robotic arm's movement. The Bluetooth module establishes a connection between the phone and the robotic arm. After linking the robotic arm with the smartphone's Bluetooth, different moments of the robotic arm may be controlled with a single tap on the android application.

**Keywords:** 3D Printing, Bluetooth, Degrees of Freedom, End-Effector, Robotic ARM

Read Full Paper · Download PDF · Back to index

---

## 175 GEOGRAPHICAL POSITIONAL AND PREDICTIVE ACCURACY OF A SHOVEL BUCKET

Paper ID V7I4-1515 · Pages 846-852 · Mechanical Engineering

**Arko Banerjee**, Student, TECHANALOGY, Mumbai, Maharashtra
**Sahil Yadav**, Student, TECHANALOGY, Mumbai, Maharashtra

Excavators are increasingly being equipped with guiding and automation systems on modern building sites. Recent research has focused on comparing the bucket tip estimation results with the motion measuring method of the boom, stick, and bucket, as well as sensor selection. The method of measuring the cylinder length of the boom, stick, and bucket, as well as the method of measuring the cylinder length of the boom, stick, and bucket, were chosen for this study. The methods of measuring the cylinder length of the boom, stick, and bucket, as well as the method of directly measuring the boom, arm, and bucket, were chosen for this study. These methods are commonly used in guidance and automation systems. To apply the aforesaid methods to a commercial excavator, a low-cost sensor that can be mounted and detached in a modular manner

© 2021, IJARIIT.COM All Rights Reserved

was used. KS best fit predictive test has been conducted for predictive positioning .A default data sheet has been acquired. The entire model was prototyped and designed over a CAD model presented in Solid works.

**Keywords:** ndustrial Excavator, Shovel Positioning, inertial measurement unit, Wire drawn Sensor,KS best fit test, Solid works, Path projection

Read Full Paper · Download PDF · Back to index

---

## 176 Design and Development of Gas detection alert with SMS using Arduino

Paper ID V7I4-1502 · Pages 853-855 · Applied Science

**Pooja Dnyaneshwar Lambatkar**, Student, Yashoda Technical Campus, Satara, Maharashtra
**Kajal Ravikant Chavan**, Student, Yashoda Technical Campus, Satara, Maharashtra
**Tejashwini Atmaram Salunkhe**, Student, Yashoda Technical Campus, Satara, Maharashtra
**Dipali Maruti Pachangane**, Student, Yashoda Technical Campus, Satara, Maharashtra
**Vaishnavi Sunil Mohite**, Student, Yashoda Technical Campus, Satara, Maharashtra

The idea behind our project is to give a solution by power cut the gas provision as soon as a gas leakage is perceived apart from activating the sounding alarm. In addition to this, the authorized person will receive a message informing him about the leakage.

**Keywords:** Arduino, GSM module, LCD display, Arduino IDE

Read Full Paper · Download PDF · Back to index

---

## 177 Bikers Portal

Paper ID V7I4-1477 · Pages 856-859 · Machine Learning

**Ankit Bougal**, Student, New Horizon College of Engineering, Bengaluru, Karnataka
**Abhishek S. K.**, Student, New Horizon College of Engineering, Bengaluru, Karnataka
**Lakshminarayan**, Student, New Horizon College of Engineering, Bengaluru, Karnataka
**Chempavathy B.**, Assistant Professor, New Horizon College of Engineering, Bengaluru, Karnataka

© 2021, IJARIIT.COM All Rights Reserved

This is an online Bike and bike parts store that has listings of various bike along with their features. It also consists of Bike service Registration. This system allows user to buy bike, bike parts and inventory online. System allow user to check various articles submitted by user and even comment on them. Credit cardpayment facility is available. This system also consists of 'Rent a Bike' feature where user can ask admin forbike on rent. The visitor who visits the system must register himself by filling up personal details. Afterregistration user can login to the system with his username and password in order to access the system. Usercan check various bike listing and can view each bikes feature. User can also check the features of the bike aswell as inventory parts, and accessories. User may select the product and can add the product to shoppingcart. User can make payment through credit cards by clicking on credit card payment option. User mustregister himself for posting an article. This application is a combination of both sales and inventorymanagement of the bike and bike parts. User can easily purchase bike or bike parts by using this system userdoes not have to come manually to shop to purchase the product. He can view the bike and bike parts ineffective Graphical User Interface. User can view features of each product and can compare the products inorder to purchase a better product.

**Keywords:** Online Bike and Bike Parts, Bike Service Registration, Rent a Bike.

Read Full Paper · Download PDF · Back to index

---

## 178 Imperatives of AI in the classroom

Paper ID V7I4-1531 · Pages 860-864 · Ai

**Tanuja Anna**, Student, Uttaranchal University, Dehradun, Uttarakhand
**Deepansh Pandey**, Student, Uttaranchal University, Dehradun, Uttarakhand

Artificial Intelligence is a very vast field in computer science i.e intelligence in performing tasks that typically require human intelligence. This paper will describe how the education sector uses AI and how it will change the experience of learning for the student as well as for the teachers. The approach of the implementation of AI(Artificial Intelligence) on the education system. This paper also describes the AI technologies used in the education system and brings new changes and new platforms of learning and provides different standards of learning things. And how the education sector is readjusting AI technologies for a better learning experience.

**Keywords:** Artificial Intelligence, Personalized Assistant, AI-Powered Assistants, Virtual Learning Environment

Read Full Paper · Download PDF · Back to index

---

## 179 Design and implementation of All-Optical T-flip-flop using Photonic Crystals Waveguides

Paper ID V7I4-1525 · Pages 865-870 · Electronics And Communication Engineeringa

**D. Gowri Sankar Rao**, Assistant Professor, Godavari Institute of Engineering and Technology, Rajahmundry, Andhra Pradesh
**P. Rupa Anjali**, Student, Godavari Institute of Engineering and Technology, Rajahmundry, Andhra Pradesh
**M. V. V. Satya Sai**, Student, Godavari Institute of Engineering and Technology, Rajahmundry, Andhra Pradesh
**Haridasu Ankarao**, Student, Godavari Institute of Engineering and Technology, Rajahmundry, Andhra Pradesh

High-speed communication has a lot of limitations because of slow electronic components. As a solution to

© 2021, IJARIIT.COM All Rights Reserved

these limitations, optical components will be used for high switching speed, low power consumption and large bandwidth, instead of electrical components. We have developed a photonic crystal T-shaped waveguide design to implement T flip-flop. Utilizing optimized parameters such as silicon rod radius and refractive index, this design has been analysed and examined. To implement this structure, the optical interference effect is utilized at a wavelength of 1550 nanometers. This design operates at the refractive index of 3.46 and silicon rod radius of 0.114, giving the best output value with an 14.78dB contrast ratio. Using Finite Difference Time Domain (FDTD) and plane wave expansion, the designed flipflop is simulated

**Keywords:** Photonic Crystal Waveguides, All-Optical T flip-flop, Beam Interference Principle, FDTD Method, T-shaped waveguides

Read Full Paper · Download PDF · Back to index

---

## 180 Laboratory investigation on bituminous concrete mixture properties by modifying bitumen using waste plastic flakes

Paper ID V7I4-1530 · Pages 871-876 · Civil Engineering

**Supriya C. B.**, Research Scholar, Sri Siddhartha Institute of Technology, SSAHE University, Tumkur, Karnataka
**Prakash J.**, Research Scholar, Sri Siddhartha Institute of Technology, SSAHE University, Tumkur, Karnataka
**B. H. Manjunath**, Associate Professor, Sri Siddhartha Institute of Technology, SSAHE University, Tumkur, Karnataka
**T. V. Mallesh**, Professor, Sri Siddhartha Institute of Technology, SSAHE University, Tumkur, Karnataka

This paper presents the results of a laboratory study on how effectively the plastic waste could be utilized in bituminous concrete course to improve the properties of bituminous mixture. It has been shows that the addition of plastic waste flakes results in the improved Marshall Stabilities and flow value. The OBC for plain bitumen mixture was 5.33, while for plastic blended bituminous mixture for (i.e., bitumen+ plastic) 80%+20%, 60%+40% and 40%+60% was 6.67, 6.00 and 5.50 respectively. For all mix maximum stability, minimum flow, mean air voids and mean voids filled with bitumen were determined. It was observed that 80% Bitumen+20% Plastic blended mixture has shown very good increased stability value of 48% increase when compared to reference bitumen mixture. The overall result shows that, Marshall Stability value has increased with bitumen mixture modified with plastic waste and the flow value has decreased.

**Keywords:** Flow, HMA-Hot Mix Asphalt, Marshall Stabilities, OBC-Optimum Bitumen Content, Plastic Waste Flakes

Read Full Paper · Download PDF · Back to index

---

## 181 Network packet sniffing

Paper ID V7I4-1507 · Pages 877-881 · Information Technology

**Md Haroon**, Student, GNIOT Group of Institutions, Greater Noida, Uttar Pradesh
**Dr. Ramveer Singh**, Professor, GNIOT Group of Institutions, Greater Noida, Uttar Pradesh
**Vishant Sharma**, Student, GNIOT Group of Institutions, Greater Noida, Uttar Pradesh
**Lakshya Kaushik**, Student, GNIOT Group of Institutions, Greater Noida, Uttar Pradesh
**Alok Kumar Mishra**, Student, GNIOT Group of Institutions, Greater Noida, Uttar Pradesh

Packet sniffing is a technique for tapping each packet as it streams across the organization. It is a method in which a client sniffs information having a place with different clients of the organization. It is successful in both

© 2021, IJARIIT.COM All Rights Reserved

exchanged organizations and non-exchanged organizations. Packet sniffers can work as an authoritative apparatus or for vindictive purposes. It relies upon the client's goal. This paper examines how sniffing can be done if there should arise an occurrence of the center point and exchanged organization, different packet sniffing strategies, various techniques that AntiSniff uses to identify these sniffing programs are additionally talked about.

**Keywords:** Packet, Sniffing, Antisniff, Network, Traffic, Analyzer, ARP, Hubbing

Read Full Paper · Download PDF · Back to index

---

## 182 Breast Cancer Prediction using Machine Learning model

Paper ID V7I4-1539 · Pages 882-885 · Computer Science

**Sanath Kumar A.**, Student, N. M. A. M. Institute of Technology, Nitte, Karkala, Karnataka

Day by day the number of cancer cases around the world is increasing and it has become a common health issue. One of the most commonly seen cancer is Breast cancer. It has become one of the leading causes of death. in women Breast cancer can be mainly seen in women, but it can be seen in men too. There is a belief that men cannot get breast cancer, but it is not true. Cancer can be treated only if it is detected in the initial stages, if not then it will spread to various parts of the body and its effect is irreversible and it will cause a threat to life. But most of the time it is difficult to detect cancer and also sometimes people ignore the symptoms. In this matter, artificial intelligence can be of great help. Here we have collected a set and then we have built a prediction model to detect stroke based on the different algorithms that are available on machine learning.

**Keywords:** Breast Cancer, Machine Learning Model

Read Full Paper · Download PDF · Back to index

---

## 183 Imbalanced data handling using Machine Learning

Paper ID V7I4-1514 · Pages 886-889 · Machine Learning

**Kamal Raj T.**, Associate Professor, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Bhavana K.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Chandana M. R.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka

Machine learning algorithm applications still control Internet trade with their seemingly endless options for customization. Great fast data is continuously passed through socially important forecasts to improve online shopping. In the absence of analytical instruments to manage homogeneous data sets and outlines, unforeseen occurrences of data known as imbalanced data are unfortunately still overlooked. Rare cases of substance use are therefore still ignored, causing costly losses or even tragic circumstances. A number of methods have been successfully implemented to meet this challenge over the past 10 years. In many cases, however, there are significant disadvantages due to the non-uniformity of the relevant data when used for diverse application domains.

**Keywords:** System Testing, System Architecture, Existing System, Proposed System

**© 2021, IJARIIT.COM All Rights Reserved**

Read Full Paper · Download PDF · Back to index

## 184 Design of wheel rim by using design of experiments

Paper ID V7I4-1540 · Pages 890-896 · Engineering

**Mauli Vasant Jadhav**, Research Scholar, Padmabhooshan Vasantdada Patil Institute of Technology (PVPIT), Pune, Maharashtra
**V.C.MALI**, Associate Professor, Padmabhooshan Vasantdada Patil Institute of Technology (PVPIT), Pune, Maharashtra

There are many failures that occurred such as Defects occurred during manufacturing, Initiation of Crack, over-tightening of bolts, and Corrosion. Some of the people have used FEM methods in their Research. They all have worked only on the negative offset and zero offset wheel rims. In this paper, we are focusing more on the positive offset wheel rim as they consume less material as compared to negative offset and positive offset wheel rims. In this paper, we know the natural frequency and deformation of the original rim and we are going to design more than 2-3 designs for the wheel rim. Using those designs and analysis types such as Static, Modal, and mainly the Design of experiments we are going to produce the alternate design for the wheel rim which will be more sustainable and lesser in cost.

**Keywords:** FEM Methods, Wheel Rim

Read Full Paper · Download PDF · Back to index

## 185 Soil quality monitoring, automated irrigation system using machine learning and Blynk

Paper ID V7I4-1536 · Pages 897-902 · Iot And Machine Learning

**Kamal Raj T.**, Associate Professor, RajaRajeswari College of Engineering, Bengaluru, Karnataka
**Kavya G. S.**, Student, RajaRajeswari College of Engineering, Bengaluru, Karnataka
**Firdose Tabassum**, Student, RajaRajeswari College of Engineering, Bengaluru, Karnataka
**Reddy Nagadurga**, Student, RajaRajeswari College of Engineering, Bengaluru, Karnataka
**Keerthana Prakash Nayak**, Student, RajaRajeswari College of Engineering, Bengaluru, Karnataka

© 2021, IJARIIT.COM All Rights Reserved

India Ranks the second country in the world in farm output of 64% of cultivated land which depends on monsoons. Irrigation accounts for Fifty-five to seventy-five percent of water usage In the World. Also, nearly sixty percent of this water while irrigation is wasted. So now we have to conserve the water by making use of soil moisture sensors resulting in smart water management Another is an issue is people always focus on the crop yield whereas before the crop yield the other process such as soil quality and soil fertility, which crop to be grown and what fertilizers needed plays a very important role in the yield of the crop. So in our project, wehave focused on these factors such as irrigation, prediction for fertilizer, and which crop to be grown. Thisproject takes real-time data from the deployed sensors such as temperature, moister, NPK and ph values intoaccount and predicts the output in the IoT machine learning environment. The system implemented will beintroduced to the semi-supervised learning model where we will be applying algorithms such as KNN andrandom forest and SVM to predict fertility and whereas for the crop along with this we have considered otherfactors such as season and place.

**Keywords:** IoT, Soil Fertility, PH Values, Microcontroller, Semi-Supervised Learning, Crop Prediction, Fertilizer Prediction Smart Water Management

Read Full Paper · Download PDF · Back to index

---

## 186 Online interview based on facial expression

Paper ID V7I4-1518 · Pages 903-907 · Computer Science

**Kamal Raj T.**, Associate Professor, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Sourav P Kachwahe**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Tejas S.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Shashank C.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Sanjay H. S.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka

Facial expressions of humans carry more information visually than they do verbally. Human-machine interaction is a crucial part of facial expression recognition. The automated facial expression reputation system can be used for many purposes, including detection of intellectual issues and human behavior information. It is still difficult to recognize facial expressions using computers with high recognition charges. The most well-known techniques used in automatic FER systems are based on look and geometry. Normally, facial expression recognition works in four stages, which include preprocessing, face identification, Feature extraction, and Classification. We also used feature extraction and expression classification to identify the seven key human emotions.

**Keywords:** Haar Cascade, Face Detection, Recognition, Nice Face, Terrible Face

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 187 Computational Identification of Promoter Regions in Fungal Genomes

Paper ID V7I4-1532 · Pages 908-914 · Genomics

**Sudheer Menon**, Research Scholar, Bharathiar University, Coimbatore, Tamil Nadu
**Shanmughavel Piramanagakam**, Professor, Bharathiar University, Coimbatore, Tamil Nadu
**Gopal Agarwal**, Professor, Indian Institute of Technology, Delhi

Transcription is the mechanism through which proteins are formed and it is done at the promoter regions. The structural property and the stability of DNA (Deoxyribonucleic Acid) are due to the promoters and these promoters are used to distinguish them from other genomic sequences. Genomic expression patterns were determined in the yeast S.cerevisiae in response to the environmental fluctuations. To measure these changes, DNA Microarrays were used. It is revealed that the yeast genome contains a TATA box. Those genes associated with the TATA box show response mainly to stress conditions.

**Keywords:** Promoter regions, TATA box, Fungal genome, Promoters analysis, PPTase, Saccharomyces cerevisiae

Read Full Paper · Download PDF · Back to index

---

## 188 A scholastic review of procedural methods undertaking in piloting qualitative interviews

Paper ID V7I4-1534 · Pages 915-919 · Special Education

**Chow Sak Chin**, Student, University Pendidikan Sultan Idris, Perak, Malaysia

This paper presents the essence of a pilot study being conducted by the researcher on qualitative research in relation to the study on the use of adaptive technology amongst visually impaired students at tertiary institutions in Malaysia. The researcher carried out the pilot work as a ground work prior to undertaking the large scale study and to answer methodological question (Creswell & Poth, 2017). The definitive description and valuable operational functions of pilot studies in qualitative research studies are distinctly identified. Also, to outline the advantages of pilot work, it explicates the particular viable and methodological concerns appearing in the pilot exercise together with the amendments made for the main research study, as a result of the pilot work. This article describes four ways that proved the implementation of the pilot study is crucial. They are (i) finding obstacles and problems with regards to recruiting prospective participants, (ii) the Employing empathy techniques in which researcher is able to describe the experience from the participants' angle as well as engage himself from a phenomenological perspective, (iii)reflecting the essence of the research process such as the interviews, epoche and transcribing process, alongside its difficulty in carrying out phenomenological inquiry, and (iv) amending interview questions accordingly. It is, therefore, a useful and a fundamental part to undertake the Pilot study for interview in the course of carrying out qualitative research as it identifies the weaknesses and flaws prior to the full scale research study. This paper discusses the preponderance of pilot study, the methods procedural steps used and what educational aspects has the researcher gained during the course of the process.

**Keywords:** Qualitative, Pilot Study, Adaptive Technology, Visually Impaired, Interview

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 189 Advanced facial recognition attendance and behavioral feedback system

Paper ID V7I4-1538 · Pages 920-925 · Image Processing

**Shashidhar V.**, Research Scholar, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Amandeep Singh**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Satyam Sahay**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Shah Minhal Fida**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Vishveshwar Hiremath**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka

Manually maintaining an attendance system can be tedious and time-consuming. A smart, automated way to manage attendance can be created using biometrics. Facial recognition is just one example. The problems of proxies and fake attendance can be solved with this system. This system also helps overcome time wasted in calling attendance the traditional way. The previous attendance system that relied on face recognition was flawed. Face occlusion meant that some faces went unnoticed. Therefore, our system helps overcome these issues, makes the system more reliable and useful with various techniques like People Counter and Behaviour Analysis. The detection and recognition of faces are the two most important processes in this system. Following that, crosschecking the detected faces against the database of student's faces can be done. This smart system will allow students to keep track of their attendance and records. It also helps institutions get feedback about a class and helps save time on surveys and questionnaires.

**Keywords:** Facial Recognition, SVM, Facial Emotion Recognition, CNN

Read Full Paper · Download PDF · Back to index

---

## 190 IoT based smart home Automation System using ARM7 LPC2148 & GSM/GPRS

Paper ID V7I4-1476 · Pages 926-929 · Iot

**Priya Khillare**, Research Scholar, Terna Engineering College, Navi Mumbai, Maharashtra
**Dr. L. K. Ragha**, Principal, Terna Engineering College, Navi Mumbai, Maharashtra

The idea behind home automation is to have greater security, make people’s life easier and comfortable. In today’s life, IoT plays a vital role in automation, which offer people to control home appliances in a proficient manner over the internet by using the advanced communication technologies and automation system. The innovation in the electrical appliances industry that has introduced GPRS-enabled based home appliances in a market, which subsequently offers an alternative for implementing the automated smart home system at a reasonable cost. Considering the Energy management, security benefits of IoT, we have designed IoT-based collaborative affordable home automation and data gathering system to display the data on a web page using the internet via GPRS. The proposed system uses GSM or GPRS technology for controlling, monitoring home appliances & the atmosphere. The prototype is been implemented on ARM LPC2148 controller board, Relays, Bulbs, Motor, Sensors, and Embedded C.

**Keywords:** HA, ARM LPC2148 Controller, GSM/GPRS, Embedded C Language

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 191 Real-Time Voice Command/Alert Warning System

Paper ID V7I4-1497 · Pages 930-934 · Safety Devices

**Sachin B. C.**, Student, JSS Science and Technology University, Mysuru, Karnataka
**Dr. Srinidhi R.**, Professor, JSS Science and Technology University, Mysuru, Karnataka

The paper discussed vehicle safety devices where in-vehicle people will be getting notifications with the help of RTVCAWS. This could help the drive-in to take control of the car and provide voice notifications derived from the AI by using the Arduino IDE, it gives a remainder about multi aspects that may forget to remain in mind because of some urgency. This project concentrates on developing a voice alert notification about car conditions like what all the major things we want to know about radiator water coolant, brake fluid other turned on switches, voice commands for multiple operations and to get info of forwarding obstacles, it differs from the model of rear-end vehicle collision avoidance system that detects when obstacles are close enough to collide.

**Keywords:** Voice Command, Voice Alert, Arduino, Mishaps, Ultrasonic.

Read Full Paper · Download PDF · Back to index

---

## 192 Bitcoin Price Prediction

Paper ID V7I4-1553 · Pages 935-936 · Computer Science And Engineering

**N. M. Abhishek**, Student, New Horizon College of Engineering, Bengaluru, Karnataka
**Thimmana Gowda M. U.**, Student, New Horizon College of Engineering, Bengaluru, Karnataka
**Vidyananda Alur**, Student, New Horizon College of Engineering, Bengaluru, Karnataka
**Dr. Vinodha K**, Associate Professor, New Horizon College of Engineering, Bengaluru, Karnataka

In this Paper, Bitcoin Price is all focused is on, in recent times bitcoin has been one of the largest cryptocurrencies and if people are well known about the price of bitcoin in the near future then it may benefit many of them and keeping this in mind the price is predicted taking all the factors which affect bitcoin into consideration.

**Keywords:** Bitcoin, Decentralized System, Time Stamp.

Read Full Paper · Download PDF · Back to index

---

## 193 Home Automation with Arduino Uno

Paper ID V7I4-1528 · Pages 937-939 · Electronics And Communication

**Prakruthi S. H.**, Student, Independent Researcher
**Pooja S.**, Student, Independent Researcher
**Sheetal N. Gowda**, Student, Independent Researcher

The advancement in the field of technology provides innovative ways of doing work through various smart means. Automation is one such mind-blowing technology which is revolutionizing the present and future generation. In this paper we present a home automation system using Arduino uno and Bluetooth module and also the home appliances area unit connected to the input/output ports of the board through relays. The communication between the mobile phone and the Arduino is through hc 05 Bluetooth module which is low-cost, safe, fast and scalable technique permitting the user with remote control of various lights and appliances

© 2021, IJARIIT.COM All Rights Reserved

within their home.

**Keywords:** Automation, Arduino Uno, Bluetooth module

Read Full Paper · Download PDF · Back to index

---

## 194 Demand assessment of electric vehicles in public transport: A case of NDMC Area

Paper ID V7I4-1561 · Pages 940-945 · Electric Vehicle

**Vartika**, AECOM India Private Limited, Gurugram, Haryana

The hypothesis states that the DTC buses do not suffice the need of passengers in Delhi. A few reports suggest that by 2025 all the buses from DTC might run out. At current only 3760 buses are running, which are in a dilapidated condition. The buses' condition and the average frequency of the buses are as high as 20.76 minutes. So, under the FAME scheme, NDMC has purchased 20 electric buses to run on a pilot project. So the objective of the study is to identify routes to run the electric buses in the NDMC area. The approach adopted was to perform boarding and alighting surveys at the selected bus stops in NDMC. To identify the passengers traveling within NDMC. Therefore, to identify the route for electric buses to ply on the most frequent route traveled by passengers.

**Keywords:** Electric Vehicles, Public Transport, Route identification, DTC Buses, Electric Buses

Read Full Paper · Download PDF · Back to index

---

## 195 YOUCHAT: An End-to-End Secure Chat Application

Paper ID V7I4-1566 · Pages 946-948 · Information Technology

**Prakash Kumar**, Student, Greater Noida Institute of Technology, Greater Noida, Uttar Pradesh
**Manoj Kumar Chaurasiya**, Assistant Professor, Greater Noida Institute of Technology, Greater Noida, Uttar Pradesh
**Neelmani Keshav**, Student, Greater Noida Institute of Technology, Greater Noida, Uttar Pradesh
**Vikas Kumar**, Student, Greater Noida Institute of Technology, Greater Noida, Uttar Pradesh
**Vishwajeet Jaiswal**, Student, Greater Noida Institute of Technology, Greater Noida, Uttar Pradesh

A data security prototype needs to be developed through secret messages to disguise messages sent in the desktop chat application youChat. We propose a model to simulate the plaintext information first encrypted by a cryptographic system to replace the plaintext information with ciphertext. The plaintext or plaintext entered into the desktop system becomes ciphertext; the receiver can use a key similar to the sender to read the message. The weakness of this proposal is that the random message system is not directly placed in the chat application; therefore, a message is still needed to terminate the process from the password system to the YouChat application. The advantage of using this model is that the sent message will not be easily re-encrypted by hackers, and it can be used in the computing part of the client.

**Keywords:** Data Security, Secret Messages, Desktop Chat Application, Plaintext Information, Encrypted, Cryptographic System, Ciphertext

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 196 Building information modeling in green buildings

Paper ID V7I4-1545 · Pages 949-955 · Civil Engineering

**Omar Ahmed Khan**, Student, Heriot-Watt University, Edinburgh, Scotland

Building information modeling or shortly known as BIM is a procedure utilizing electronic patterns to assist Virtual Design Construction (VDC) that could be streamlining the progress of workflow to develop the performance of the construction. The use of BIM is to issue the features to the energy performance valuation and defensible estimation. This is called Green Building information modeling. Over the last few years, a BIM assumption has increased in many countries and cities. To investigate and to generate the efficiency of energy, BIM-based analyses of the energy can help the groups of the project design. A BIM-based strategy for green building may support the experts, in the result predictions of developments and to reduce its effect on the environment over the supply chains. The potentials of Green BIM are improved while useful facts with data were gathered then issued to facilities administrators including consumers of the building. The present paper described the main features of BIM, description of data needs, and innovations by using BIM. To upgrade the green buildings, other relevant technologies were also used.

**Keywords:** Building Information Modelling, Green Buildings

Read Full Paper · Download PDF · Back to index

---

## 197 A systematic study of building information modeling and its associated concepts.

Paper ID V7I4-1541 · Pages 956-961 · Civil Engineering

**Omar Ahmed Khan**, Student, R.V. College of Engineering, India

Construction projects involve the integration of various factors. The complex process and several aspects associated with building construction increase the demand for proper management. Building Information Modelling (BIM), comes as an aid and helps to control the technical and non-technical elements involved in the building construction process. It helps to design the features of the building, plan energy-effective mechanisms, making the building resilient to all sorts of natural disasters. Considering the efficiency of BIM, civil engineers started using this at the pre-construction, designing, planning stages and in most cases, it is used to control the entire life cycle of the project. BIM is used to design the entire process for the large-scale process while in the case of small-scale projects, it is only used to design a single or a couple of components. This study analyzes the research aspects related to BIM during 2010 -2021 and consolidates the broad research field under four categories to bet better insights.

**Keywords:** Building Information Modelling,Energy-Effective Mechanisms

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 198 Building information modeling and data generation

Paper ID V7I4-1544 · Pages 962-968 · Civil Engineering

**Omar Ahmed Khan**, Student, Heriot-Watt University, Edinburgh, Scotland

In the industry of construction, projects are increasing more day by day and are also become complex in the methods of construction technologies which are considered as rapidly developing. The construction projects generated several different kinds of data. Particularly, many input resources are required by the construction phase and it generated a multiple set of data. When so many Information Technology techniques are established for the management of information at the phase of construction, it measured for creating the databases for such data and for linking the various kinds of data jointly are still inadequate. This research aims for suggesting the database system about construction data depend upon the technology of BIM for enabling management of data site generated at the phase of construction. This research analyzed the data generated at the site of construction and then the system of categorization to structure the generated data with a model of the database for structured information storing. By these efforts, confirmations are done that this system of the database is utilized for the accumulation and construction data. It is supposed that, later on, continuous accumulation and construction management data will be allowed for the accumulation of corporate-level knowledge which opposes the accumulation of individual level.

**Keywords:** Building Information Modelling, Construction Data

Read Full Paper · Download PDF · Back to index

---

## 199 Software for implementing different dimensions of BIM in the construction project

Paper ID V7I4-1542 · Pages 969-974 · Civil Engineering

**Omar Ahmed Khan**, Student, Heriot-Watt University, Edinburgh, Scotland

Essentially standard set of building construction measures was reversed to the appropriate assignment program and arrangement for the proceeding project work at the construction site, which was bringing about imperfect observance for the complete cycle. The current investigation on the idea of Building Information Model (BIM) infers the objectives where whole data of each unique element of construction activity is incorporated basically. It helps the Constructors, Designers, and Engineers anticipating what should be created in the synthetic surroundings and to perceive potential plan, development, or operational issues. The system is expanded by BIM into drawings of 3 dimensional (3D) with three-dimensional depth (d), height(h), and width (b), with 4-dimensional time (4D), and with 5 dimensional (5D) time. For setting up the standard process, BIM displays a 5D model to save more amount and time. The project management activities are executed using the concept of BIM is presented in this paper. The BIM apparatus is to help particularly for configuration, characterizing the building capacity and structure, look over the expenses, execution of energy, and timing. Hence BIM is a construction management device

**Keywords:** Visualization, BIM, REVIT, Navisworks Manage, Microsoft Project, 5D

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 200 Coalitions politics in India: Challenges and its impacts on society

Paper ID V7I4-1556 · Pages 975-977 · Social Science

**Dr. Ashok Kumar V. Paled**, Assistant Professor, Davanagere University, Tholahunase, Karnataka

In comparison to other countries, India is pigeonholed by more ethnic and religious groups. Many thinkers regard India as a fascinating place where people of all communities and religions coexist together. The Indian population is polygenetic, with a fascinating mix of ethnicities and civilizations. There are eight "main" faiths, 15 languages spoken in diverse dialects, and a large number of tribes and sects, in addition to multiple castes. How does the coalition government affect the responsiveness of coalition parties to voters? We want to learn more about the relationship between political parties' participation in multiparty governments in this essay as well as their voter receptivity We propose that the divisiveness of policy problems inside the cabinet, as well as ministerial responsibility for policies, influence the amount to which coalition parties respond to voters' policy priorities. To test our hypotheses, we combine data from the Comparative Manifestos Project on issue attention of 55 coalition parties with data on government composition and voter policy priorities from the Comparative Study of Electoral Systems and various election studies from 1972 to 2011 in 45 elections across 16 European countries. Any party can win a majority in the lower house; if they do not, political parties create coalitions in order to secure a majority in the lower house and form a government. The nature, problems, and prospects of coalition governments in the Indian political process will be examined in this research paper. The study of the multi-party system, the emergence of regionalism, and its impact on the pattern of Centre-State interactions are important. Furthermore, because the national government was led by a coalition or minority administration for three decades, from 1989 to 2014, there was no national consensus on a parliamentary majority. Congress ruled from 1952 to 1977 and 1980 to 1989.

**Keywords:** Politics, Growth Of Regionalism, Challenges, Election, Society

Read Full Paper · Download PDF · Back to index

---

## 201 Study of seismic response between fixed and isolated bases in RC structure having plan irregularity

Paper ID V7I4-1558 · Pages 978-984 · Structural Engineering

**Rahul B. M.**, Student, Ramaiah Institute of Technology, Bengaluru, Karnataka
**B. Suguna Rao**, Assistant Professor, Ramaiah Institute of Technology, Bengaluru, Karnataka

The base isolation technique is one of the most widely used earthquake-resistant methods in designing structures. In this study, a G+15 RC structure is considered and modeled for the fixed base and isolated bases i.e., Lead Rubber Bearing (LRB) and High Damping Rubber Bearing (HDRB) using Etabs v19.1.0. The models are then analyzed and the seismic response of the structure is obtained by using equivalent static method and response spectrum method. The results, thus, obtained are compared and graphs of story displacement, story drift, storey shear, and storey acceleration are plotted for the fixed base and isolated bases. From this study, it is evident from the analysis that, the use of base isolation systems helps the structure from being majorly damaged, especially in higher seismic zones.

© 2021, IJARIIT.COM All Rights Reserved

**Keywords:** Lead Rubber Bearing (LRB), High Damping Rubber Bearing (HDRB), Storey Displacement, Storey Drift, Storey Shear, Storey Acceleration

Read Full Paper · Download PDF · Back to index

---

## 202 Browsing Issues in Large Displays

Paper ID V7I4-1573 · Pages 985-991 · Human Computer Interaction

**Alipta Ballav**, Independent Researcher, Independent Researcher

The internet access is increasingly shifting from the traditional desktop displays to high-resolution giant screen displays. While websites are not optimized for such giant screens, it often delivers a distorted, disconnected and annoying user experience. The challenge in a large display is related to content scaling and placing them on the predictable places to gain visibility. There is a limited research done in this area and we attempted a series of studies in establishing the challenges a user faces while browsing on a large display. We conducted 3 independent pilot studies to understand the problem and discussed the need to create web design guidelines for large displays.

**Keywords:** User Centered Design Issues; Large Displays; User experience guidelines

Read Full Paper · Download PDF · Back to index

---

## 203 Correlation of neck pain and low back pain with Physical activity among dentists in Latur City

Paper ID V7I4-1503 · Pages 992-995 · Physiotherapy

**Dr. Pallavi Dangat**, Professor, MIP College of Physiotherapy, Latur, Maharashtra
**Dr. Rafi Mohammed**, Professor, MIP College of Physiotherapy, Latur, Maharashtra
**Dr. Shyam Jungade**, Associate Professor, MIP College of Physiotherapy, Latur, Maharashtra

BACKGROUND: Back pain represents one of the most common diseases across various populations of workers worldwide. Musculoskeletal pain is related with dental practice, with lower back pain being the most commonly reported. This study analyzes the correlation and the severity of back pain, based on selected demographic variables, and relationship with physical activity among dentists. There is a substantial relationship between work-related back pain and sitting posture. No association was found between sex and existence of pain. METHODOLOGY: The study included 100 professionally active dentists,38 males 62 females, from MIDSR dental college and dental clinics in Latur city. Validated psychometric tools, namely;1) for evaluation of disability due to neck pain and back pain-neck disability index [NDI], oswestry disability index[ODI] respectively,2) for physical activity – international physical activity questionnaire[IPAQ] were used. CONCLUSION: The study findings confirm that the pain in neck and lumbar area represents a serious occupational problem in a large percentage of dentists. Limitation of physical activity leads to more frequent back pain.

**Keywords:** Dentists, Physical Activity, Back Pain, Neck Pain

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 204 Knowledge and perception on COVID vaccination among adults

Paper ID V7I4-1601 · Pages 996-999 · Nursing

**Starina Flower V. M.**, Research Scholar, St. Xavier's Catholic College of Nursing, Nagercoil, Tamil Nadu
**Dr. Reena Evency A.**, Principal, St. Xavier's Catholic College of Nursing, Nagercoil, Tamil Nadu

COVID is a devastating pandemic that we haven't dreamed of it in 21 st century. Being in this era, man couldn’t able to control its spread despite various researches and advanced technologies. At present, vaccines are the most effective means of health measures to protect the public from the pandemic. The present study is carried out to assess the knowledge and perception of Covid vaccination among adults. A Quantitative research approach with a descriptive design was adopted in this study. A structured knowledge questionnaire and 5-point Likert scale to assess perception on Covid vaccination are used to assess the knowledge and perception on Covid vaccination. The findings reveal that 54 % of participants had moderate knowledge, 33% had adequate knowledge and 13 % of them had inadequate knowledge on Covid vaccination. Regarding perception, 35% of the participants had medium perception, 27% of them had high perception, 29% of them had very high perception, 9% had low perception on Covid vaccination. A positive relationship (r=0.87, -1□ r □ 1)had been found between knowledge and perception on covid vaccination. Adequate awareness regarding covid vaccination among rural areas helps to improve the acceptance rate and thereby pandemics can be kept under control.

**Keywords:** Knowledge, Perception, Covid Vaccination

Read Full Paper · Download PDF · Back to index

---

## 205 Study on dimensional stones available in Southern Asia with specific reference to granite waste

Paper ID V7I4-1529 · Pages 1000-1007 · Civil Engineering

**Mayur Mewara**, Student, Poornima College of Engineering, Jaipur, Rajasthan
**Mansi Agarwalla**, Student, Poornima College of Engineering, Jaipur, Rajasthan
**Madhu Yadav**, Student, Poornima College of Engineering, Jaipur, Rajasthan
**Dr. Harshwardan Singh Chouhan**, Assistant Professor, Poornima College of Engineering, Jaipur, Rajasthan

Dimensional stones are used primarily in buildings and construction industry. Almost all the buildings exhibit stones that are shaped, cut or polished for the walls, floors, columns and steps. There are a large number of dimensional stones available in southern Asia such as sandstone, slate, marble, granite, gneiss, etc. which produces huge amount of waste in their manufacturing, cutting and polishing. This waste is dumped in the fields openly and it causes major environmental problems such as land infertility, loss of land infiltration, air pollution, problem in breathing, etc. India has large reserves of granite and huge amount of waste is produced that’s why we have worked on granite specifically. Granite is a coarse grained rock composed mostly of quartz, alkali, feldspar and plagioclase. Green granite is hard enough to resist abrasion, strong enough to bear significant weight, inert enough to resist weathering and it accepts a brilliant polish. Granite is an igneous volcanic rock having good compressive strength and it has always been used in the concrete as a replacement for fine aggregate. But in this research, we have replaced the granite with the cementitious material that is, the cement. For this, we have replaced the granite with cement by 0%, 5%, 10% and 15%. Detailed study has been done to investigate the fresh, mechanical and physical properties of granite waste powder, the compatibility of

© 2021, IJARIIT.COM All Rights Reserved

use of granite waste powder in concrete. Analysis of the fresh, mechanical and physical properties of concrete mixes designed with different mix proportioning quantities with the use of granite waste powder as a cementitious material.

**Keywords:** Dimensional Stones, Granite, Granite Waste, Concrete Mix Design, Partial Replacement, Cementitious Material

Read Full Paper · Download PDF · Back to index

---

## 206 A lightweight Remote user Authentication Scheme for IoT communication using Elliptic Curve Cryptography

Paper ID V7I4-1501 · Pages 1008-1013 · Cryptography

**Gudiwada Rajeswari**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Pilla Anuradha**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Suma Varada**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Sireesha Mallula**, Student, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**Dr. Esther Sunanda Bandaru**, Associate Professor, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh
**D. Sowjanya**, Lecturer, Andhra University College of Engineering for Women, Visakhapatnam, Andhra Pradesh

Internet of Things (IoT) has become a new era of communication technology for performing information exchange. With the immense increment of usage of smart devices, IOT services become more accessible. To perform secure transmission of data between IOT network and remote user, mutual authentication, and session key negotiation play a key role. User authentication is becoming crucial in accelerating the environment of internet of things (IOT).It is mostly used in several applications in management of surveillance, healthcare, security etc. In this project, the proposed model is based on ECC-based three-factor remote user authentication scheme that runs in the smart device and preserves privacy, and data confidentiality while communicating with the user.This model establishes a secure session between the user node and IOT node.Here three-factor authentication is performed between the remote user and the gateway as well as between the gateway and sensor node. ECC is a public key encryption technique based on an elliptic curve theory, in this model ECC is used to generate public key and private key at user, gateway and smart device and it is also conjunction with public key encryption techniques like ECDSA algorithm used to perform mutual authentication through digital signatures, ECDH used to create faster, smaller and more efficient symmetric keys in order to provide secure session environment. Finally, the computation and communication overheads of the proposed scheme are reduced to maximum extent to confirm that the proposed scheme is lightweight and secure. We prove the security strength of our proposed system using formal security analysis tool called AVISPA simulation tool. On implementing this tool, it determines that the proposed model is robust with holding various security threats like all active, passive attacks and then confirms its security in the presence of an intruder. It is found that our model holds all the security functionalities. Therefore, it can be concluded that the proposed scheme is secure against relevant existing security attacks and provides security.

© 2021, IJARIIT.COM All Rights Reserved

**Keywords:** Elliptic Curve Cryptography (ECE) for Private key and Public key generation, Elliptic Curve Discrete Logarithm Problem for Random Elliptic Curve point Generation, Elliptic Curve Digital Signature Algorithm (ECDSA) for Mutual Authentication, Elliptic Curve Diffie-Hellmen(ECDH) for Symmetric Key Generation, Advanced Encryption Standard Algorithm For Encryption/Decryption Secure Hash Function (SHA256) for one-way hashing, User datagram protocol for communication.

Read Full Paper · Download PDF · Back to index

---

## 207 BIM applications in risk management

Paper ID V7I4-1543 · Pages 1014-1022 · Civil Engineering

**Omar Ahmed Khan**, Student, Heriot-Watt University, Edinburgh, Scotland

Risk Management at the Architecture, Engineering, and Construction (AEC) manufacture is a global problem. The inability to overseen hazards isn't only lead to tasks while gathering project objectives additionally arranging the land-use impacts and further planning the metropolitan spatial plan later on for the urban area development. Due to quick advancement and the BIM-related computerized advances and BIM (Building Information Modelling) selection, and then the hazard management innovation utilization becomes a develop and examination of prompting pattern of interest to an intensive review of the development. This paper provided the overview of conventional risk management, with a complete and broad survey of distributed writing concerning the most recent endeavors of overseeing hazard utilizing innovations, like BIM, programmed rule checking, information-based frameworks, proactive and receptive IT (data innovation)- based security frameworks. The discoveries show that BIM was not only just be used to help the venture advancement measure as a planned risk management apparatus, however, performing further risk analysis instruments based on BIM was permitted. The greater part of the current endeavours have focused on enquiring specialized turns of events, and the administration of development staff security was the primary interest up until this point. In light of existing specialized constraints and the absence of ''human factor" examinations, BIM-based hazard management is not regularly utilized in genuine conditions. To survive this hole, future exploration is recommended that ought to be: (1) having a multi-disciplinary framework of thinking, (2) investigating execution techniques and cycles, (3) incorporate conventional management of risk with new advances, and (4) supporting the improvement interaction.

**Keywords:** Computerized Advances, BIM, Risk Management, Construction Safety Traditional Risk Management

Read Full Paper · Download PDF · Back to index

---

## 208 A State-of-the-Art Review on Differential Evolution (DE)

Paper ID V7I4-1474 · Pages 1023-1028 · Bio Inspired Algorithms

**Sanchari Majumdar**, Student, Narula Institute of Technology, Kolkata, West Bengal
**Sangita Roy**, Assistant Professor, Narula Institute of Technology, Kolkata, West Bengal

Proposing new mutation strategies and adjusting control parameters to improve the optimization performance of differential evolution (DE) are considered vital research studies. Therefore, in this paper, a short review of the most significant contributions on parameter adaptation and developed mutation strategies is presented.

© 2021, IJARIIT.COM All Rights Reserved

**Keywords:** Evolutionary Computation, Global Optimization, Differential Evolution, Mutation Strategy, Adaptive Parameter Control

Read Full Paper · Download PDF · Back to index

---

## 209 Traumatic brain injury during covid lockdown and relaxation of lockdown comparative study

Paper ID V7I4-1599 · Pages 1029-1031 · Medical

**Raj Kumar R.**, Assistant Professor, Madras Medical College, Chennai, Tamil Nadu

Road traffic accidents are the common cause of traumatic brain injury in civilian population covid lockdown had decreased head injury cases treated in a tertiary care center because of decreased traffic materials and methods traumatic head injury patients admitted in madras medical college during covid lockdown is compared with patients admitted after relaxation of lockdown by retrospective analysis.

**Keywords:** Covid Lockdown, Head Injury, Madras Medical College, Road Traffic Accident, Traumatic Brain Injury

Read Full Paper · Download PDF · Back to index

---

## 210 Multiplier and dual multiplier on BCC/weak BCC algebras

Paper ID V7I4-1610 · Pages 1032-1035 · Computer Science

**Arbind Prakash**, Student, Magadh University , Bodhgaya , Gaya (Bihar)
**Dr. Ram Lakhan Prasad**, Professor, Retd. University Prof. and Head , Department of Mathematics Magadh University, Bodh Gaya

Presenting some significant properties of multiplier and dual multiplier defined on BCC/Weak BCC algebras.

**Keywords:** BCC/Weak BCC Algebra, Multiplier, Dual Multiplier

Read Full Paper · Download PDF · Back to index

---

## 211 Microfinance -Succeed in influencing unbanked area

Paper ID V7I4-1608 · Pages 1036-1038 · Finance

**Kumaraswamy Manepalli**, Research Scholar, Annamalai University, Chidambaram, Tamil Nadu
**Dr. M. Ram Kumar**, Assistant Professor, Annamalai University, Chidambaram, Tamil Nadu

India’s limited success at drawing the unbanked into the formal economy reflects the challenges of drafting public policies that address complex, enduring societal problems like poverty, income inequalities, beneficiaries far away from financial services including Govt. schemes benefits, low level of financial literacy., etc. The vision of RBI Financial Inclusion Plans(FIPs) is providing universal access to banking services and improving the forms of credit delivery, especially for the weaker sections. The successful financial inclusion plan is Business Correspondents are employed to cover unbanked villages through branches. The microfinance sector is the heart core function of financial services in the non-banking finance industry(NBFI) with the coverage of weaker sections of the population which are neglected by bankers in the banking industry. The microfinance sector has

© 2021, IJARIIT.COM All Rights Reserved

grown rapidly over the past few decades and currently, it is serving around 102 million accounts (including banks and small finance banks) of the poor population of India. MFIs are financial companies that provide small loans to people who do not have any access to banking facilities.

**Keywords:** Unbanked, Financial Inclusion Plans(FIPs), Business Correspondents, Non-Banking Finance Industry(NBFI), Microfinance Institutions (MFIs)

Read Full Paper · Download PDF · Back to index

---

## 212 A study on the present status and performance of micro, small and medium enterprises in India

Paper ID V7I4-1517 · Pages 1039-1046 · Economics

**Vishwanath S. Pujari**, Lecturer, People tree Education Society's, Belagavi, Karnataka
**Jyoti Savanur**, Lecturer, People tree Education Society's, Belagavi, Karnataka
**Rashmi Mahendrakar**, Lecturer, People tree Education Society's, Belagavi, Karnataka

Micro, small and medium enterprises are playing a pivotal role in the development of the Indian Economy. MSME is an important sector in the Indian economy because of its enormous contribution to the socio-economic progress of the country. This sector is considered the backbone of the country. Micro, small and medium enterprises contribute about 30% of the country's gross domestic product (GDP) and 45% of the manufacturing output. MSMEs stand next to the agriculture sector in providing employment opportunities in the country. Approximately 110 million people are occupied in the MSME sector in India. MSMEs are an integral part of the supply chain and contribute about 45% of the overall exports made from India. MSMEs produce and manufacture a variety of products for both domestic as well as international markets. MSMEs are connected with the rural economy because more than half of the MSMEs operate in rural India. MSME sector is dominated by micro-enterprises. India has 6.33 crore MSMEs out of which 6.30 crore — 99.4 percent are micro-enterprises while 0.52 percent — 3.31 lakh are medium and 0.007 percent — 5,000 are medium enterprises. This paper attempts to study the present status, performance of MSMEs in India, and the support provided by the Government for the promotion and development of MSMEs in India.

**Keywords:** MSMEs, GDP, Government Support, Economic Growth, Employment

Read Full Paper · Download PDF · Back to index

---

## 213 Designing, deploying and managing cloud-native applications effectively using Docker, Jenkins, and Kubernetes.

Paper ID V7I4-1586 · Pages 1047-1058 · Cloud Computing

**Jyothi Koushik Paladugu**, Others, Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, Telangana.

From storing and retrieving information in databases online to delivering various services such as servers, and computing resources over the internet, cloud computing has brought tremendous advancements in the technological world. One of the major sectors of cloud computing is application development. A wide variety of applications are being developed which offer services for almost every working industry globally. Several

© 2021, IJARIIT.COM All Rights Reserved

debates and discussions have arisen on designing the application in the best way possible. Extensive research studies were done using various parameters such as resource usage, storage, efficiency to determine the most optimal method. Cloud-enabled applications were the primary type developed, followed by cloud-based applications. However, the demand for lightweight and flexible applications designed at the least cost possible rendered these approaches obsolete. That is where the cloud-native model came into the picture. This paper explores the model and presents how it is used to design, deploy, and manage cloud-native applications, including discussing the model's core elements and implementing them in making the application.

**Keywords:** Lightweight, Containers, Microservices, Scalability, Load balancer, DevOps

Read Full Paper · Download PDF · Back to index

---

## 214 Influence of social media marketing on sales revenue

Paper ID V7I4-1615 · Pages 1059-1063 · Marketing And Sales

**Vaddi Jahnavitha**, Student, Christ University, Bengaluru, Karnataka
**Nalla Aryan Reddy**, Student, Christ University, Bengaluru, Karnataka
**Kanikapati Himakar**, Student, Christ University, Bengaluru, Karnataka

Social Media these days is among the 'best accessible way' for a product or service to reach out to customers. Local social media sites are the strategy to associate socially. These new media creates confidence in clients by connecting with them at a more profound level. Social web-based promoting is the new mantra for a few producers and service providers since the early days. Advertisers are thinking about various web-based media potential outcomes and starting to apply new friendly tasks at a higher rate than any time in recent memory. Community online marketing and the companies that utilize it have become more sophisticated. One can't stand to have any presence on the social projects if the contender is making waves with its answers and things. Global organizations have distinguished web-based media advancement as a potential advancement framework, utilized them with upgrades to control their showcasing with web-based media advancement. This paper examines the thoughts of online media and web-based media advancement and different perspectives like the turn of events and benefits, viewpoint and significance of web-based media in advancement, web-based media advancement techniques. It's nothing but a framework-based web-media advancement in India.

**Keywords:** Social Media, Marketing, Sale, Revenue, Advancement, Online Media and Web-Based Media

Read Full Paper · Download PDF · Back to index

---

## 215 Forecasting air quality using Machine Learning techniques

Paper ID V7I4-1499 · Pages 1064-1066 · Air Pollution

**Rajeena R. R.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Dr. Usha S**, Professor, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Shalini.G**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Sharanya B**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Rekha S**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka

Air pollution, in general, implies to discharge of impurities into the atmosphere which is harmful to human life and the in-universe. It has the potential to be the most destructive menace humanity has always faced. It gives

© 2021, IJARIIT.COM All Rights Reserved

problems to animals, birds, yield, crops, and forests among other things. To overcome the difficulty, machine learning techniques must be used to anticipate air quality from pollutants. As a result, forecasting the quality of air monitoring and prediction of it has been a significant study area. The actual objective is looking for machine learning-based solutions for forecasting air quality with the highest level of accuracy. The entire dataset will be analyzed using machine learning techniques to calculate large bits of data which are variable identification, univariate analysis, and multi- variate analysis, also bi-variate analysis, missing value treatments, and data validation, data cleaning/preparing, and visualization. Our paper offers a detailed guide to model parameter risk assessment in terms of performance in forecasting air quality pollution calculating prediction accuracy. For presenting a technique using machine learning for reliably predicting the Air Quality Index value by comparing various classifying machine learning methods and producing calculation results in the type of highest accuracy. In addition, the outputs of several machine learning methods from the provided datasets will be compared and discussed, along with an estimation of the user interface which is GUI-based for forecasting air quality using attributes present in the datasets.

**Keywords:** Machine Learning Algorithms, Pollutant, Air Quality Index, Datasets, Data Visualization, Accuracy, Air Pollution, Prediction

Read Full Paper · Download PDF · Back to index

---

## 216 The Grand Mosque of Herat, a symbol of Islamic art and architecture

Paper ID V7I4-1355 · Pages 1067-1070 · Social Science

**Zalmai Hotak**, Assistant Professor, Kabul University, Kabul, Afghanistan

Afghanistan has been at the crossroads of many human civilizations throughout its glorious history. The magnificent and great works and monuments developed and constructed through its many historical eras represent the skillful and artistic taste and power of thinking of the people inhabiting this glorious ancient land. The Grand Mosque of Herat demonstrates the peak of Islamic art and architecture. It is one of the most beautiful mosques in the region, reflecting the beauty and artistic skills of Islamic art and architecture. The Grand Mosque of Herat is a living testament to Islamic history and culture that has reached its perfection in this corner of Asia.

**Keywords:** Grand Mosque Of Herat, Islamic Art and Architecture

Read Full Paper · Download PDF · Back to index

---

## 217 Tamper Detection of Social Media Images using CNN

Paper ID V7I4-1510 · Pages 1071-1073 · Machine Learning

**Gaurav Shetty**, Student, Sahyadri College of Engineering and Management, Mangalore, Karnataka
**G. S. Shrijitha**, Student, Sahyadri College of Engineering and Management, Mangalore, Karnataka
**Shravika Nempe**, Student, Sahyadri College of Engineering and Management, Mangalore, Karnataka
**Nandan N. K.**, Student, Sahyadri College of Engineering and Management, Mangalore, Karnataka
**Shwetha S. Shetty**, Assistant Professor, Sahyadri College of Engineering and Management, Mangalore, Karnataka

Images are often manipulated with the intent and purpose of benefiting one party. images are often seen as evidence of a fact or reality, therefore, fake news or any form of publication that uses images that have been

© 2021, IJARIIT.COM All Rights Reserved

manipulated in such a way has the greater capability and potential to mislead. The web permits clients to process any type of digital media within seconds all over the globe. With expanding utilization of digital multimedia contents like pictures and video, the techniques for detecting the digital image forgery have also increased parallelly. people tamper with images to make the image look more pleasant for appearance but it is susceptible if one changed someone's face within the image and misuses it. Hence this demands automatic tools for identifying the difference between authentic and tampered images. To detect such image falsification, a large amount of image data is required, and a model can process each pixel in the image. In addition, efficiency and flexibility in data training are also needed to support its use in everyday life. The concept of big data and deep learning is the perfect solution to this problem. Therefore, with an Error Level Analysis (ELA), Convolutional Neural Network (CNN)

**Keywords:** Digital Image Forgery, Photo Editing Software Tools, Image Tampering Detection, Convolutional Neural Network

Read Full Paper · Download PDF · Back to index

---

## 218 Seismic activity of overhead storage tank by fem analysis

Paper ID V7I4-1612 · Pages 1074-1079 · Engineering

**Pooja Khairnar**, Student, Mahatma Gandhi Mission's College of Engineering and Technology, Navi Mumbai, Maharashtra
**P. J. Salunke**, Professor, Mahatma Gandhi Mission's College of Engineering and Technology, Navi Mumbai, Maharashtra
**N. G. Gore**, Professor, Mahatma Gandhi Mission's College of Engineering and Technology, Navi Mumbai, Maharashtra

The overhead water tank consists of a tank supported by a scaffolding system composed of columns, braces, and foundations. Overhead water storage tanks have generally performed well in seismic zones. Even so, a large number of tank collapses have been discovered during earthquakes from, as early as the San Francisco earthquake (1906) to the Bhuj earthquake (2001). The observed damage in recent earthquakes shows that it is necessary to choose new methods for transformation while designing the structures. In many earthquake-prone countries, water tanks are continuously being retrofitted or build with control devices to decrease caused stresses, displacements, and base shear during seismic activity. A good perceptive of the seismic behavior of these important structures is necessary in order to meet up safety objectives while containing construction and maintenance. In this paper, we studied circular and rectangular overhead water tanks with different water levels. The static and dynamic analyses of time history were performed on the tanks. The different cases depending on water levels as 0%, 25%, 50%, 75%, and 100% filled were studied. In this project base shear variation, time period for different mode shapes, time history for different earthquakes were calculated by using SAP2000.

**Keywords:** Base Shear, Dynamic Analysis, Stresses, SAP 2000, Time History, FEM Analysis

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 219 Investigation of ferrocement composite beam

Paper ID V7I4-1614 · Pages 1080-1085 · Civil

**Akash Bholenath Mune**, Student, JSPM's Imperial College of Engineering and Research, Pune, Maharashtra
**Pallavi K. Pasnur**, Professor, JSPM's Imperial College of Engineering and Research, Pune, Maharashtra

Ferrocement is a thin, versatile construction material, with several unique properties and is suitable for a wide range of applications in Civil Engineering. Generally, concrete structures are designed for static loads but sometimes dynamic loads like blasts, etc. Prefabricated elements are used in the construction industry as an alternative system to overcome the formwork problems in addition to getting better quality control. The prefabricated elements made of reinforced concrete are extremely heavy and difficult to transport, placing in position, and construct. Because of its good structural performance and low-cost ferrocement is used in the construction industry. Ferrocement is suitable for the construction of roofing/floor elements, precast units, manhole covers, and the construction of domes, vaults, grid surfaces, and folded plates. So finding the flexural behavior of ferrocement is necessary. Therefore, the flexural strength is determined by varying the meshes in the U-section and varying the thickness of the beam. An experimental and finite element analysis on flexural behavior of ferrocement U-shape channel section reinforced with wire mesh with varying number of wire mesh layers is presented. A finite element analysis of the U-shape ferrocement channel was carried out. The finite element analysis (FEA) has been also used to model the ferrocement U-shape channel for various spans and thicknesses. Ferrocement U-shape channel with varies thickness and number of mesh layers analyzed in ANSYS.

**Keywords:** Ferrocement, U-Shape Channel Section, Flexure

Read Full Paper · Download PDF · Back to index

---

## 220 An analysis of usage of Integrated Marketing Communications by Political parties to Influence Voters in Tamil Nadu and Kerala in assembly elections 2021

Paper ID V7I4-1571 · Pages 1086-1091 · Polticial Marketing

**Sunitha B. K.**, Assistant Professor, Jain (Deemed to be) University, Bengaluru, Karnataka
**Dr. Sandeep Shashtri**, Professor, Jagran Lakecity University, Bhopal, Madhya Pradesh

Today it is necessary to take a fresh look at the communications process and strategy adopted by different political parties to reach out to their voters (consumers). Many political parties have developed a systematic approach to gain the support of voters. The process of reaching out to voters occurs not merely during the elections but is a process that goes on throughout the year. This research paper aims to analyze usage of Integrated Marketing Communications of Major Political Parties on Consumers (Voters) in Tamil Nadu and Kerala in recent assembly elections 2021

**Keywords:** Integrated Marketing Communications, Political Parties, Communications Process, Voters (Consumers)

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 221 Optimization of Sinter FeO at Sinter Plant, Tata Steel Kalinga Nagar

Paper ID V7I4-1605 · Pages 1092-1096 · Metallurgical Engineering

**Srijith Mohanan**, Tata Steel Limited, Duburi, Odisha
**Prajna Mohapatra**, Tata Steel Limited, Duburi, Odisha
**Arun Kumar C**, Tata Steel Limited, Jamshedpur, Jharkhand
**Vipul Mohan Koranne**, Tata Steel Limited, Jamshedpur, Jharkhand
**Sabuj Halder**, Tata Steel Limited, Jamshedpur, Jharkhand
**A.S. Reddy**, Tata Steel Limited, Jamshedpur, Jharkhand
**R.V. Ramna**, Tata Steel Limited, Jamshedpur, Jharkhand

The analysis presented herein shows that the impact of sinter FeO on BF fuel rate is more significant at higher productivity levels (greater driving rates) than sinter RDI. Since typical levers to control sinter RDI are not available (gangue content, etc.) at Tata Steel Kalinganagar (TSK) due to the significant proportion of sinter in the BF burden, controlling sinter RDI at present in TSK requires higher heat input during sintering, which, generally leads to higher sinter FeO. From the data analysis, the suggested band of operation for sinter FeO is 10.4 – 10.8%. In this band of sinter FeO, the RI value can be maintained at 73.5-75.5% with RDI ~ 28-32%. Considering the narrower band of sinter FeO that is preferable for blast furnace operation, there is a scope to reduce carbon rate by 3- 4 kg/t GSn (tonne of Gross Sinter) from its present level of operation (62 kg/t GSn to 58 kg/t GSn average) at the sinter plant.

**Keywords:** Sinter FeO, RDI, RI, Fuel Rate, K Value

Read Full Paper · Download PDF · Back to index

---

## 222 COVI SCAN (Face mask detection and social distancing violation detection)

Paper ID V7I4-1616 · Pages 1097-1100 · Covid Prevention

**Shaikh Muskaan**, Student, Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal, Karnataka
**Poojashree**, Student, Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal, Karnataka
**Preksha**, Student, Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal, Karnataka
**Rakshitha R.**, Student, Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal, Karnataka
**Manjunatha A. S.**, Assistant Professor, Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal, Karnataka

COVID-19 pandemic is a great humanitarian challenge faced by the world today. The pandemic has spread widely causing the world to halt and the number of cases continues to rise. Governments all around the world are working to slow down if not completely stop the spread of this pandemic. Many protocols have been implemented, crucial ones are face masks and social distancing. Since social distancing and wearing a mask are the only monitored ways to avoid the infection till vaccinations become accessible to all. Real times mask detection and social distance violation using computer vision and deep learning techniques. For face mask detection we collected a dataset consisting of with-mask and without-mask labels.

**Keywords:** Computer Vision, Deep Learning, OpenCV

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 223 Real driving emissions strategies in heavy-duty vehicles

Paper ID V7I4-1641 · Pages 1101-1107 · Automobile Engineering

**R. S. Shingnad**, Student, AISSMS College of Engineering, Pune, Maharashtra
**Dr S. J. Navale**, Assistant Professor, AISSMS College of Engineering, Pune, Maharashtra

Bharat Stage 6 Emission Norms will require Real Driving Emissions as an additional type approval requirement from April 2023 in India. There is a significant requirement for reduction in exhaust gas emissions from Bharat stage 4 to Bharat stage 6. Several changes in engine constructions, tuning of the engine, valve, and ignition timing need to be adjusted. Moreover, after treatment device such as catalytic converter, selective catalytic reduction, Diesel particulate filter, exhaust gas recirculation needs to be adopted to meet these norms. Real Driving Emissions takes into account the road profile, the ambient conditions, traffic situations, drivers' behavior, and their influence on emission values. This new test requires equipment called Portable Emission Measurement system which comprises of exhaust flow meter, exhaust gas analyzer, global positioning system, ambient temperature, and ambient pressure sensor, OBD data acquisition device, and connection with vehicle ECU. The overall trip duration shall be between 90-120 minutes which consists of urban, rural, and highway driving. Thus accurate planning of route is required to reduce test failure risk and consequently experimental cost. When the driving conditions like ambient temperature and altitude are changed in order to check for different and extended conditions then there is a change in test results which are called extended test results. In recent studies, it was found that NOx emission was relatively higher compared to the expected result in urban conditions. This is due to constant low speed, deceleration, and acceleration. Thus conformity factor for NOx emissions varies from one emission regulation to another. The aim of this paper is to present the basics of Real driving conditions.

**Keywords:** Real Driving Emissions, Driving Conditions, Ambient and Route

Read Full Paper · Download PDF · Back to index

---

## 224 Air pollution monitoring using IoT

Paper ID V7I4-1643 · Pages 1108-1110 · Electronics And Communication

**Ajay Suri**, Assistant Professor, ABES Engineering College, Ghaziabad, Uttar Pradesh
**Siddhant Sahu**, Student, ABES Engineering College, Ghaziabad, Uttar Pradesh
**Shivam Sharma**, Student, ABES Engineering College, Ghaziabad, Uttar Pradesh
**Shalu Rawat**, Student, ABES Engineering College, Ghaziabad, Uttar Pradesh
**Rishi Yadav**, Student, ABES Engineering College, Ghaziabad, Uttar Pradesh

As the world becomes more industrial to support the basic necessities and luxuries of life, adverse effects have been noticed in the environment. One of these adverse effects is air pollution. Air pollution has risen to such a level in certain regions of the world that it has started to cause health-related issues to all of the living beings dwelling in that region. The purpose of this paper focuses on designing and implementation an air pollution monitoring system based on the Internet of Things (IoT) that would read the levels of pollutants in the air and other air quality factors, and thereby transmit these readings via wireless communication to a smart cloud platform where all these readings can be displayed in a distinguished manner. Such a system is a vital need so as to check the atmosphere one life in, and thereby take precautionary measures to protect oneself and the

© 2021, IJARIIT.COM All Rights Reserved

surrounding nature.

**Keywords:** AQI, IoT, Sensor Data, Wifi

Read Full Paper · Download PDF · Back to index

## 225 Antibacterial activity of filter material based on garnet and silver vein graphite composite

Paper ID V7I4-1648 · Pages 1111-1116 · Water Filtration

**V. M. Rajindra Swarnamali**, Research Scholar, Uva Wellassa University, Badulla, Sri Lanka
**A. Sivapaln**, Student, Uva Wellassa University, Badulla, Sri Lanka
**K.P.S. Sudumenike**, Student, Uva Wellassa University, Badulla, Sri Lanka
**T.H.N.G. Amaraweera**, Lecturer, Uva Wellassa University, Badulla, Sri Lanka
**Y.M.S.S. Yapa**, Postgraduate Institute of Medicine, Unversity of Colombo

Disinfection of microbially contaminated water is an important part of water purification, aiming to inactivate pathogenic microorganisms in water. Silver nanoparticles have attracted tremendous interest for water disinfection because of their antibacterial efficiency. This study focuses on the use of garnet sand coated with silver-graphite composite in deactivating waterborne microbes. Graphite was purified by acid leaching, followed by surface modification with conc. HNO3. The silver-graphite composite material (SVG) was synthesized using AgNO3 as a precursor and trisodium citrate as a reducing agent. SVG was coated around garnet sand with the assistance of three types of clays namely montmorillonite, red clay, and kaolinite. Garnet sand was directly coated with silver nanoparticles to compare the durability and antibacterial efficiency. Garnet sand coated with SVG using red clay (75%) and montmorillonite (75%) showed a higher percentage coating than that used with kaolinite (25%). The antibacterial activity of coated garnet was tested using Escherichia coli. The results revealed that all coated garnet sand samples were able to decrease the concentration of E. coli from water, and no effect was observed from raw garnet sand. The antibacterial efficiencies were (13-70%), (15–57%), (38-67%) for kaolinite, red clay, and montmorillonite coated garnet sand, respectively. The garnet sand coated with silver nanoparticles showed the highest efficiency (96-100%) with the lowest percentage of coating. According to the results obtained, garnet sand coated with SVG using montmorillonite showed the highest antibacterial activity and the highest percentage of the coating. Therefore, this study, suggests that the filter system with the garnet sand coated with SVG using clays can be used as a potentially cost-effective alternative filtration medium for the disinfection of water.

**Keywords:** Graphite, Antibacterial Activity, Kaolinite, Red Clay, Montmorillonite

Read Full Paper · Download PDF · Back to index

## 226 Customer segmentation and prediction analytics in ERP for jewelry domain

Paper ID V7I4-1645 · Pages 1117-1130 · Data Science

**Mohammed Mafaz**, Student, Loyola College, Chennai, Tamil Nadu

Customers are the link to a business's success. Any organization must focus on a huge number of customers, for this customer satisfaction and loyalty should be incorporated along with the long-term goals of the

© 2021, IJARIIT.COM All Rights Reserved

organization. As the backbone for all marketing activities, customer analytics comprises techniques like predictive modeling, data visualization, information management, and segmentation. Customer analytics is becoming critical. Customers have access to information anywhere, any time – where to buy, what to shop for, what proportion to pay, etc. The deeper the understanding of customers' buying habits and lifestyle preferences, the more accurate your predictions of future buying behaviors are going to be – and therefore the more successful you'll be at delivering relevant offers that attract rather than alienate customers. Generally, organizations spend a lot of money to acquire new customers but they do not realize that the majority of the sales and profits come from their existing customers. In this thesis, the existing customers are analyzed and given a customer lifetime score, and based on this score, the customers are nurtured by the sales team to increase the profits. In order to maximize sales and conversions, customer segmentation and product recommendation engine is used effectively. Customer segmentation is the process of dividing the customers into many groups that supported common characteristics so companies can market to every group effectively and appropriately. Segmentation is performed using k means clustering. Segmentation allows marketers to raised tailor their marketing efforts to varied audience subsets. It is important to predict the customer segment for any new customer which can be done using supervised classification algorithms such as Logistic Regression, Naïve Bayes, Random Forest, K Nearest Neighbour, and Support Vector Classifier.

**Keywords:** Customer Analytics, Customer Value Analysis, Customer Lifetime Score, Customer Value and Satisfaction, Customer Segmentation, Customer Loyalty, K Means Clustering, Logistic Regression, Naïve Bayes, Random Forest, K Nearest Neighbour, and Support Vector Classifier.

Read Full Paper · Download PDF · Back to index

---

## 227 Indian Online Art Athenaeum

Paper ID V7I4-1665 · Pages 1131-1133 · Software Engineering

**Yazhini Gopalakrishnan**, Student, Vellore Institute of Technology, Vellore, Tamil Nadu

Creating an Online Art Athenaeum application that provides all end-users to view and purchase exotic Art items from the comfort of their home. The application provides high security for the end-users by enclosing all their personal details. The application has an additional Auction facility for Users to purchase rare art collections.

**Keywords:** Athenaeum, Application, Auction facility, Security, End-Users

Read Full Paper · Download PDF · Back to index

---

## 228 Surveillance Bot with real time object detection

Paper ID V7I4-1659 · Pages 1134-1137 · Computer Vision

**Aman Agrawal**, Student, ABES Engineering College, Ghaziabad, Uttar Pradesh
**Ajay Suri**, Professor, ABES Engineering College, Ghaziabad, Uttar Pradesh
**Akshay Goel**, Student, ABES Engineering College, Ghaziabad, Uttar Pradesh
**Aman Varshney**, Student, ABES Engineering College, Ghaziabad, Uttar Pradesh

Computer Vision is a subset of programs and software programs in computer science that can see and understand pictures. Computer Vision has different characteristics, such as image recognition, object detection, processing of images, image processing, etc. Face recognition, car detection, pedestrian counting, online

© 2021, IJARIIT.COM All Rights Reserved

imaging, surveillance systems and self-driving cars are commonly used for object detection.

**Keywords:** YOLO, HAAR, Cascade, OpenCV, COCO

Read Full Paper · Download PDF · Back to index

---

## 229 Survival analysis of heart failure patients using Machine Learning on an imbalanced dataset

Paper ID V7I4-1655 · Pages 1138-1141 · Data Science

**Mohammed Mafaz**, Student, Loyola College, Chennai, Tamil Nadu

In this paper, we have focused on the survival analysis of heart failure patients. The number of individuals diagnosed with coronary failure is increasing and projected to rise by 46 percent by 2030, leading to quite 8 million people with coronary failure. The reason for the increase in heart failure is due to an increase in the number of cases involving high blood pressure, valve disease, thyroid disease, kidney disease, and diabetes [1]. With the growth of machine learning, data mining, statistical analysis, data-modeling predicting whether the person will survive [2] or not after heart failure is possible and it becomes very crucial.

**Keywords:** SMOTE, Random Forest, Confusion Matrix

Read Full Paper · Download PDF · Back to index

---

## 230 Identifying defects during semiconductor manufacturing using Machine Learning

Paper ID V7I4-1638 · Pages 1142-1144 · Semiconductor Manufacturing

**Nandini G.**, Assistant Professor, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**K. G. Ashwin Krishnan**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Harshith R.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Dileep Kumar Simhadri**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Gummalla Akhil Kumar Reddy**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka

This Project is about identifying defects in the equipment that manufactures semiconductors by using various required parameters. Semiconductor manufacturing is a very delicate process and all the equipment that manufactures semiconductors needs to function properly, and any error in this equipment will cause major damage to the manufacturing process. In this project, we have used various machine learning algorithms and implemented the best one which has more accuracy in identifying defects during the manufacturing of semiconductors.

**Keywords:** Semiconductor, Manufacturing, Equipment's, Delicate, Machine Learning, Algorithms

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 231 Detection and estimation of heavy mineral accumulation in coastal areas

Paper ID V7I4-1651 · Pages 1145-1149 · Electronics

**Yaswanth Reddy Putta**, Student, Sri Sivasubramaniya Nadar College of Engineering, Chennai, Tamil Nadu
**Reventh M. S.**, Student, Sri Sivasubramaniya Nadar College of Engineering, Chennai, Tamil Nadu
**Sanjay S.**, Student, Sri Sivasubramaniya Nadar College of Engineering, Chennai, Tamil Nadu
**B. S. Sreeja**, Student, Sri Sivasubramaniya Nadar College of Engineering, Chennai, Tamil Nadu

To develop a conventional sensor-based system for monitoring the estimation of on-shore heavy mineral accumulation. The existing technology involves an analytical procedure using acidic solutions which is only possible under laboratory testing. Our proposed idea involves the development of an ultrasonic sensor system along with an infrared and moisture sensor module for the estimation of heavy mineral accumulation. The principle of sensor development involves the ultrasonic absorption and infrared absorption capability of specific minerals as each mineral will have a different absorption capacity. The tested samples from the laboratory are further subjected to sensor tests and the data will be evaluated. The data obtained from the sensor will be compared with laboratory test results to observe the relationship between the mineral present and the data obtained. Finally, a prototype model for real-time investigation will be developed. The main advantage of the proposed idea includes the time-efficient process accompanied by instant results which will reduce cost and procedures needed for estimation

**Keywords:** Mineral, Coastal, Sensors, Infrared, Model.

Read Full Paper · Download PDF · Back to index

---

## 232 Identification of Jewelry Article using Transfer Learning and Image Repository

Paper ID V7I4-1656 · Pages 1150-1160 · Data Science

**Mohammed Mafaz**, Student, Loyola College, Chennai, Tamil Nadu

“IDENTIFICATION of jewelry ARTICLE USING TRANSFER LEARNING AND IMAGE REPOSITORY” maybe a project that aims to automate, boost and revolutionize the task of recognizing Jewellery articles for tagging before adding the article into the inventory. the aim of this project is to optimize the task of stock entry and to scale back the manual work of tagging each and each article. The project involves creating an image repository of varied Jewellery articles by manually clicking the pictures, label the pictures supported the classes, train the model, and eventually classifying the articles in real-time using live camera feed using Transfer Learning, and OpenCV. Once the article is recognized, the model will pass the worth vectors including the name of the article, the image of the article, and a number of pieces of a specific article skilled the live camera. this complete process will help in boosting up the manual process of adding Jewellery articles to inventory, will reduce manpower, be less erroneous, and can economize for the stakeholders during the end of the day.

**Keywords:** Transfer learning, YOLO, Darknet, LabelImg, Computer Vision

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 233 Treatment of landfill leachate by using membrane filtration

Paper ID V7I4-1652 · Pages 1161-1163 · Civil Engineering

**Vidyashree G. Walikar**, Student, Basaveshwar Engineering College Bagalkot, Bagalkot, Karnataka
**M.Y.Ganiger**, Assistant Professor, Basaveshwar Engineering College Bagalkot, Bagalkot, Karnataka

The rapid increase in population and industrialization lead to a huge generation of solid waste throughout the country with landfilling as the most common practice for the management of solid waste. There are many methods available like physical, chemical, biological, and membrane filtration. Membrane filtration can be defined as the separation of solid immiscible particles from a liquid or a gaseous stream based primarily based on the size difference. By study it is concluded that as compared to all methods membrane filtration is very efficient, Hence, in this study membrane filtration technique is applied. In this review, the membrane is prepared with readily available materials. We have used Cellulose acetate which is a renewable, biodegradable, bio-based polymer & it is cheap material. Initial characteristics of leachate and after treatment final characters are again determined and compared. Removal efficiency is found.

**Keywords:** Landfill Leachate, Membrane Filtration, Cellulose Acetate

Read Full Paper · Download PDF · Back to index

---

## 234 Analyzing tweets to classify the opinions of people living in Chennai with respect to the city

Paper ID V7I4-1657 · Pages 1164-1171 · Data Science

**Mohammed Mafaz**, Student, Loyola College, Chennai, Tamil Nadu

This project helps to analyze the public opinion in social media towards Chennai city by the people who live in the city. It presents a comprehensive review of local people who tweet, retweet, like on Twitter about Chennai. For completeness, it includes introductions to social media web scraping, storage, data cleaning, and some sentiment analysis tools. This project also provides a comparative study where we use three different sentiment analysis tools: Naive Bayes, Bert, and Neural Network. Analyzing social media, in particular, Twitter feeds for sentiment analysis, has become a major research activity due to the availability of web-based APIs provided by Twitter services. This project provides a review of leading software tools and how to use web scraping, cleanse using Bert and comparing the tweets with three different tools and showing them in graph and finding out which gives the best accuracy and presenting it to the CHENNAI SMART CITY LTD which comes under the GREATER CHENNAI CORPORATION. The data retrieval techniques that are presented in this paper are valid at the time of doing this project (April 2021), because they are subject to change since social media web scraping APIs are rapidly changing.

**Keywords:** Social Media, Sentiment Analysis, Web Scraping, Naive Bayes, Bert, Neural Network

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 235 Automatic Alphanumeric recognition using Python and OpenCV- A new approach of ANPR

Paper ID V7I4-1671 · Pages 1172-1174 · Information Technology

**Syed Shafat Adil**, Student, GNIOT Group of Institutions Greater Noida, Uttar Pradesh
**Shiv Shankar Pal**, Lecturer, GNIOT Group of Institutions Greater Noida, Uttar Pradesh
**Prashant Kumar**, Student, GNIOT Group of Institutions Greater Noida, Uttar Pradesh
**Mehul Anand**, Student, GNIOT Group of Institutions Greater Noida, Uttar Pradesh
**Sumit Gaurav**, Student, GNIOT Group of Institutions Greater Noida, Uttar Pradesh

Alphanumeric recognition is a computer aspect that recognizes any digital Image automatically fed from an external source. This system initiates from obtaining digital images, localizing concerned alphanumeric areas, truncating characters and OCR from given alphanumeric characters. This system is intended to be designed and developed for helping in image processing and algorithms to identify the area from where given alphanumeric digits can be identified. These characters in a segmented way are identified with the aid of Open Source Computer Vision Library ( OpenCV) and programmed in python language. In the given source image KNN (k-Nearest Neighbor) algorithm is used to find all possible alphanumeric characters.

**Keywords:** Alphanumeric Character, OpenCV, KNN Algorithm, Optical Character Recognition (OCR), ANPR

Read Full Paper · Download PDF · Back to index

---

## 236 Fast fashion – Consumer perception and buying practices

Paper ID V7I4-1639 · Pages 1175-1178 · Fashion

**Nikita Daniel**, Student, National Institute of Fashion Technology, Kangra, Himachal Pradesh
**Jinny Maria Sebastian**, Student, National Institute of Fashion Technology, Kangra, Himachal Pradesh
**Jyoti Rawal**, Student, National Institute of Fashion Technology, Kangra, Himachal Pradesh
**Nishtha Verma**, Student, National Institute of Fashion Technology, Kangra, Himachal Pradesh

The fast fashion industry has changed the way we consume fashion today. The garment industry has continued to neglect the ongoing environmental crisis. Fast fashion focuses on the production of cheap clothing, while completely disregarding its impact on the environment and the labor involved. The concept of green marketing as well as greenwashing play a huge role in understanding how brands portray themselves as “sustainable”, to cater to consumers that value ethical consumption. This research analyzes the primary reason fast fashion is appealing to consumers, their perception and buying practices, through interviews and surveys. The descriptive research elaborates on its impact on the supply chain and the concept of greenwashing. The results suggest that the respondents are reluctant to switch to sustainable alternatives since fast fashion helps them keep up with the latest trends at an affordable price.

**Keywords:** Fast Fashion, Sustainable Practices, Agile Supply Chain

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 237 A study of micro-teaching approach and its effect on behavior modification of pupil teachers of teachers training institutions of west Bengal

Paper ID V7I4-1666 · Pages 1179-1186 · Teacher Education

**Md Towhid Islam**, Research Scholar, Department of Education, Aligarh Muslim University, Aligarh, Uttar Pradesh
**Bejarul Karim**, Student, Atal Bihari Bajpayee Viswa Vidyalaya, Bilaspur, Chhattisgarh

Microteaching is a technique through which the pupil-teacher chooses a single concept of content to deliver a short lesson to a small group of pupils for a short period of time-based on a single teaching skill. In this study, the researchers investigated the effect of the micro-teaching approach on the behavior modification of pupil teachers at the secondary level of education. For this study, the researchers developed the 'Teaching Skills Observation Scale' to analyze pupil teachers' teaching behavior. The study found a positive effect of the micro-teaching approach on the behavior modification of pupil teachers. Significant differences have been found between the mean scores of science stream pupil teachers and social science stream pupil teachers at the first and final observation. The study also found that the mean scores of female pupil teachers were much higher than the mean scores of male pupil teachers at both the first and final observation.

**Keywords:** Micro Teaching, Teachers Training Institution, Teaching Skill, Pupil Teacher, Behaviour Modification

Read Full Paper · Download PDF · Back to index

---

## 238 Minimart a marketplace using dapp on the ethereum blockchain

Paper ID V7I4-1650 · Pages 1187-1191 · Blockchain

**Archana A.**, Student, Global Academy of Technology, Bengaluru, Karnataka
**Harshitha Raj**, Student, Global Academy of Technology, Bengaluru, Karnataka
**Yashaswini R.**, Student, Global Academy of Technology, Bengaluru, Karnataka
**Ashwini C.**, Professor, Global Academy of Technology, Bengaluru, Karnataka

As the developments in blockchain technology is drastically growing, led to the creation of smart contracts. Smart contracts are code which are stored and self-executed on blockchain. Due to this, it is possible to implement distributed, decentralized applications with their frameworks to be developed and implemented easily. A proof-of-concept system that implements a distributed online marketplace using the Ethereum framework, where buyers and sellers can engage in e-commerce transactions without the need of Intermediary. Performance is usually measured in terms of gas count. It was determined that costs are significantly less than any other online marketplace. Hence, Ethereum is proving much more significant as a distributed on-chain market.

**Keywords:** Blockchain, Ethereum, Marketplace, Smart Contract, Decentralized, E-Commerce

Read Full Paper · Download PDF · Back to index

---

## 239 Drug and Cosmetics Act, 1940

Paper ID V7I4-1658 · Pages 1192-1194 · Drug And Cosmetics Act

**Varatha Ravindra Menon**, Student, Symbiosis Law School, Nagpur, Maharashtra

© 2021, IJARIIT.COM All Rights Reserved

The drugs and Cosmetics Act 1940 is an act of the Parliament of India that regulates the import, manufacture and distribution of drugs in India. The main objective of this law is that drugs and cosmetics sold in India are safe, effective and meet state quality standards. The relevant drugs and cosmetic regulations of 1945 include regulations for the classification of drugs according to a specific program, with instructions for storage, sale, labelling and prescription for each program. . After obtaining approval from the Governor on April 10, 1940, the Ministry of Health The Ministry of Health came into effect on April 1, 1947.

**Keywords:** Drug and Cosmetics Act

Read Full Paper · Download PDF · Back to index

---

## 240 PV-Based MPPT for standalone DC Micro Grids using Fuzzy Logic

Paper ID V7I4-1565 · Pages 1195-1201 · Electronics And Communication

**Ram Kumar**, Student, GGS College of Modern Technology, Mohali, Punjab
**Harkamal Deep Singh**, Assistant Professor, GGS College of Modern Technology, Mohali, Punjab

Due to the large variations in production and demand, stand-alone green energy management systems are becoming more important for power sharing and voltage regulation tasks. Traditionally used power management methods use maximum energy factor monitoring (MPPT) algorithms and depend on batteries in the event of a power surge or shortage. However, in order to maintain a constant current-constant voltage (IU) charging regime and extend the life of batteries, energy management methods must be more adaptable with regard to power curtailment. The article offers a technique for battery management of a hybrid solar photovoltaic and wind energy device for stand-alone applications. Due to the non-linear nature of battery charging, which is time-varying with a large time delay, it is challenging to obtain the optimum energy management performance using conventional control methods. The article analyses a fuzzy manipulates method for battery charging and discharging in a renewable energy production system. To extend the battery's life, fuzzy control maintains the appropriate level of charge (SOC). A fuzzy logic-based controller is suggested for use in manipulating the battery state of charge of the intended hybrid system, and its performance is validated in contrast to a conventional PI controller.

**Keywords:** MPPT, PI controller, Renewable Energy Sources, Energy Consumption

Read Full Paper · Download PDF · Back to index

---

## 241 Kidney stone detection using Machine Learning techniques

Paper ID V7I4-1668 · Pages 1202-1204 · Machine Learning

**Lepakshi T. V.**, Student, Alvas Institute of Engineering and Technology, Tenkamijar, Karnataka
**Dhamini C. L.**, Student, Alvas Institute of Engineering and Technology, Tenkamijar, Karnataka
**M. V. Ramya**, Student, Alvas Institute of Engineering and Technology, Tenkamijar, Karnataka
**Rachana C. Hulikatti**, Student, Alvas Institute of Engineering and Technology, Tenkamijar, Karnataka
**Aneesh Jain M V**, Assistant Professor, Alvas Institute of Engineering and Technology, Tenkamijar, Karnataka

In nowadays individuals are experiencing different infections. Kidney infections are one of the significant illnesses among them which are expanding day by day like the development of blisters and stones,

© 2021, IJARIIT.COM All Rights Reserved

contamination, tumor, change in kidney position and appearance and so forth We can't disregard kidney-related issues since kidney breaking down can place life in hazard Consequently, to forestall such sort of kidney anomalies in patients, early recognition and avoidance is required. This paper presents an audit on the discovery and acknowledgment of kidney anomalies. The data can be helpful to distinguish and find the kidney infections in the previous stages to play out the careful activity to fix them effectively. Thus, it has a repetitive application space that incorporates PC supported finding framework which assists with identifying kidney anomalies and give a conclusion of likely infection. In addition, a CT picture has numerous issues like low differentiation, spot commotion, gaussian clamor, and different ancient rarities. In this way, there is a major need for better picture quality than remove related highlights. To conquer this test, suitable picture handling procedures as pre-preparing and order strategies have been portrayed. The examination work presents the outline of the different strategies for the discovery and acknowledgment of kidney irregularities. Besides, the goals of these strategies and their presentation are clarified.

**Keywords:** Computed Tomography, Stone, Morphological Transformation, Thresholding

Read Full Paper · Download PDF · Back to index

---

242

## Law of torts and sports litigation

Paper ID V7I4-1703 · Pages 1205-1226 · Law Of Torts

**Avinash Pandey**, Student, Kirit P. Mehta School of Law, Mumbai, Maharashtra

The research paper talks about the relation between the Law of Torts and the Field of Sports and how important it is to establish the Law of torts in the Field of Sports. The research paper portrays the relation between Law of torts and sports litigation. The thesis includes various case laws, research papers,s and references from online articles. The evolution of sports in the country has called for proper implementation of laws for the industry and as the of Law of torts in India is still not properly established it is very hard for the sportsperson to claim for damages in a situation where they suffer injury. The transparency of the federal sports authorities in India has also not been fair and transparent as more and more frauds and scams have been disclosed in recent years. The proper establishment of the Law of torts would help the Indian judiciary as determining cases under the Law of torts would be simpler and finding out who is entitled to a claim for legal damages would also become easier. The research portrays different types of torts, cases of sports under the said torts, and the possible remedies that can be provided to the players. The research paper is on the topic of the Law of Torts and Sports Litigation. Secondary research conducted on the topic reveals that proper implementation of the Law of torts, as well as laws made by the Sports Federation of India, is required.

**Keywords:** Law of Torts, Sports Litigation, Sports Federation of India, Claim for Damages

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 243 Gauging the proportion and impact of drug-drug interactions in the prescriptions of geriatric patients on medications affecting the cardiovascular system

Paper ID V7I4-1706 · Pages 1227-1230 · Medicine

**Dr. Manoj Kumar A S**, Resident, Dr. B. R. Ambedkar Medical College and Hospital, Bangalore, Karnataka
**Dr. Srihari G. Kulkarni**, Resident, Dr. B. R. Ambedkar Medical College and Hospital, Bangalore, Karnataka
**Dr. N. Bhaktavatchalam**, Professor, Dr. B. R. Ambedkar Medical College and Hospital, Bangalore, Karnataka

Background: Cardiovascular ailments belong to some of the most important contributing factors for the mortality and reduction in quality of life in developing nations. Patients on prescriptions with many medications are at a heightened risk for the development of adverse reactions especially resulting from drug-drug interactions. This study aimed at assessing the pattern, proportion and impact of such Drug-Drug Interactions (DDIs) in patients with various cardiovascular and non-cardiovascular co-morbidities. Methods: This study was conducted in the Department of Internal Medicine of a tertiary care center. The prescription of 200 patients was analysed for demographic information like gender, age, comorbidities and drugs prescribed. DDI was assessed using Micromedex software. Results: This study included 200 prescriptions of people aged 60 years and above. A total of 324 DDIs were identified among which, 24 (7.4%)were major and 127 (39.2)were moderate. The antiplatelet and anticoagulant group of drugs were responsible for the majority of DDI, followed by hypertension medications and diabetic medications Conclusions: It can be concluded from this study that the incidence of DDI rises with the rise in the number of medications in the prescriptions and there is an increase in the number of drugs in the prescription with the increase in the number of co-morbidities.

**Keywords:** Cardiovascular drugs, Drug-drug interaction, Major interaction, Moderate interactions

Read Full Paper · Download PDF · Back to index

---

## 244 Student evaluation and stress detection system using Machine Learning

Paper ID V7I4-1692 · Pages 1231-1234 · Computer Science And Engineering

**Srinivasa R.**, Assistant Professor, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**T. J. Shashank Uthkarsh**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Ravindranath**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Tejashwini K**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Chidan**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka

In this project, we propose a stress recognition algorithm using face images and face landmarks. In the case of stress recognition using a biological signal or thermal image, which is being studied a lot, a device for acquiring the corresponding information is required. In order to remedy this shortcoming, we proposed an algorithm that can recognize stress from images of the students in the classroom acquired with a general camera. We also designed a deep neural network that receives facial landmarks as input to take advantage of the fact that eye, mouth, and head movements are different from normal situations when a person is stressed and also we can identify the emotion of the student, there will conclude that whether the students understanding the concepts or not. Experimental results show that the proposed algorithm recognizes stress more effectively.

© 2021, IJARIIT.COM All Rights Reserved

**Keywords:** CNN, OCR, Student Performance, Technology Social Factors, Academic Reports, Machine Learning

Read Full Paper · Download PDF · Back to index

---

## 245 Modeling and simulation of the electric vehicle coupled with battery and ultracapacitor

Paper ID V7I4-1718 · Pages 1235-1237 · Electric Vehicles

**Yeshas Raghu Gowda**, Student, JSS Science and Technology University, Mysore, Karnataka

Electric vehicles boom in the market started after the improvement in the battery technology but the improvement needs to be enhanced further. An Electric Vehicle has zero greenhouse gas emissions compared to conventional ICE vehicles or Hybrid Electric Vehicles and hence is a better alternative. An Electric Vehicle has a longer charging time which is a drawback. Hence using Ultracapacitor for fast charging purposes can be coupled with a battery to overcome the drawback. Therefore, improving the transient power capabilities of the battery to satisfy the road load demand is critical. This research studies integration of Ultra-Capacitor (UC) to Battery. The objective is to analyze the effect of integrating UCs on the transient response of the BEV powertrain. UCs have higher power density which can overcome the slow dynamics of batteries. An energy management strategy utilizing a peak power-sharing strategy is implemented. The goal is to decrease the power load on batteries and operate Ultracapacitor in its most efficient region. A complete model to simulate the physical behavior of UC-Integrated BEV is developed using MATLAB/SIMULINK. This increases the life of the battery since its protected from overcurrent. which increases the health of the battery based on the number of charge/discharge cycles.

**Keywords:** Ultracapacitor, SOC, OCV, Powertrain, Regen power

Read Full Paper · Download PDF · Back to index

---

## 246 Review on the effect of preparative parameters of spray pyrolysis technique on optical and electrical properties of Zinc Oxide thin film

Paper ID V7I4-1682 · Pages 1238-1244 · Thin Film

**Nikam S. V.**, Research Scholar, Yashavantrao Chavan Institute of Science, Satara, Maharashtra
**B .T. Jadhav**, Director, Rayat Institute of Research and Development, Satara, Maharashtra

The spray pyrolysis technique is one of the most widely used, simple, and inexpensive techniques to deposit thin films of various materials. The physio-chemical properties of these thin films are depending upon preparative parameters such as concentration of precursor solution, dopants, substrate temperature, spray rate, post-annealing treatments, etc. In this paper, an intensive review of the effect of preparative parameters on the optical and electrical properties of ZnO thin films deposited by the spray pyrolysis method has been presented. These properties of the thin film can be precisely controlled by optimizing the preparative parameters. ZnO due to its attractive optical and electrical properties plays an important role in various electronics, optoelectronics, biomedical and sensing applications.

**Keywords:** Spray Pyrolysis Technique, ZnO Thin Film, Preparative Parameters, Optical And Electrical Properties

**© 2021, IJARIIT.COM All Rights Reserved**

Read Full Paper · Download PDF · Back to index

## 247 Electronic Voting Machine Based on IRIS Authentication

Paper ID V7I4-1700 · Pages 1245-1249 · Engineering

**M. K. Sivaranjani**, Student, VSB Engineering College, Karudayampalayam, Tamil Nadu
**S.Santhiya**, Student, VSB Engineering College, Karudayampalayam, Tamil Nadu
**S.Swathika**, Student, VSB Engineering College, Karudayampalayam, Tamil Nadu
**P.Ramya**, Student, VSB Engineering College, Karudayampalayam, Tamil Nadu
**G.Mohanavel**, Associate Professor, VSB Engineering College, Karudayampalayam, Tamil Nadu

In every election, the commission is facing plenty of troubles and problems throughout the election. The foremost and familiar issue faced by the commission is inappropriate confirmation with relevance to the arrangement of casting the votes, duplication or illegal casting of votes. In this paper, a secure and new electoral system is developed to enhance the present legal system using iris recognition. Iris, one amongst the foremost secure biometric of person identification. The counting of vote is going to be immediately which makes voting process efficient, fast, and secure. There by can reduce the proxies drained the election system or electoral system and elect the right candidates as rulers. All details are updated to web server through IOT. The main goal of this article is to avoid duplication of casting votes.

**Keywords:** IRIS, Recognition, Feature Extraction, Matching, IOT

Read Full Paper · Download PDF · Back to index

## 248 Asthma prediction using Machine Learning

Paper ID V7I4-1680 · Pages 1250-1253 · Machine Learning

**Manasa G. V. Kumar**, Assistant Professor, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Yogesh R**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Soumya ranjan nayak**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Vinod R**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Shreyas M S**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka

Patient telemonitoring brings about a conglomeration of huge measures of data about quiet illness direction. Notwithstanding, the possible utilization of this data for the early expectation of asthma in grown-ups has not been methodically assessed. The point of this examination was to investigate the information for building AI calculations that anticipate asthma before they happen. The investigation dataset involved 278847 records presented by grown-up asthma patients. Prescient displaying included readiness of preparing informational indexes, prescient component choice, and assessment of coming about classifiers. AI classifiers are utilized to foster these prescient models; including Random Forest, Logistic Regression, Decision Tree, and Naïve Bayes strategy. Of the multitude of classifiers carried out, strategic relapse classifier brought about the most elevated expectation precision. Our investigation showed that AI methods have huge potential in creating customized choice help for ongoing illness telemonitoring frameworks. Future examinations may profit with a far-reaching prescient system that consolidates information with different elements influencing the probability of creating asthma. Approaches carried out for cutting edge asthma expectations might be stretched out to early

© 2021, IJARIIT.COM All Rights Reserved

mediation of persistent ailments in patients

**Keywords:** Decision Tree, Random Forest, NaïVe Bayes, Logistic Regression

Read Full Paper · Download PDF · Back to index

---

249

## Anomaly detection in pharmaceutical pills using image processing

Paper ID V7I4-1717 · Pages 1254-1257 · Image Processing

**Kaushik T. S.**, Student, NIE Institute of Technology, Anagahalli, Karnataka
**Chandan Prasad**, Student, NIE Institute of Technology, Anagahalli, Karnataka
**Prajwal V.**, Student, NIE Institute of Technology, Anagahalli, Karnataka
**Dr. Manjula A. V.**, Associate Professor, NIE Institute of Technology, Anagahalli, Karnataka

There are various kinds of technologies available in the market for categorizing and packaging in the production line. Our project here discusses various image processing techniques and their shortcomings in the process. Our aim is to categorize the defective tablets based on their color shape missing tablets, color changes due to oxidation. The images of the tablet strip are captured using the camera. The features are extracted for a defect-less tablet strip. The input image is compared with the reference image present in the database, the amount of features that can be compared with the pre-loaded reference image is compared for a threshold value and is discarded if found to be less by separating them, and rest are allowed to pass for packaging.

**Keywords:** Template Matching, Feature Descriptors, Feature Matching

Read Full Paper · Download PDF · Back to index

---

250

## A speculation technique for the stock market using time series

Paper ID V7I4-1715 · Pages 1258-1261 · Computer Science Engineering

**Rajesh K. S.**, Professor, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**B. S. Darshith**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Amaresh A. Channad**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Amaresh R. Vasisth**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**G. Jayavardhan**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka

© 2021, IJARIIT.COM All Rights Reserved

Using ARIMA (Auto-Regressive Integrated Moving Average) which is a model, this research study presents a method for anticipating stock market values. To begin, historical stock price data is gathered and pre-processed. Pre-processing is a subcategory of Data Mining in which raw original data is processed into a specified format so that the model can use it. Pre-processing is done to fill in the missing values and arrangethe data based on the qualities required for developing the prediction model because the raw data to beprocessed is partly partial or inconsistent with certain errors and missing values. After the data has beenfiltered and classified, it is standardized by transforming it into a common format that can be used to train theprediction model. The obtained data is then divided into two data - training and testing data, with the majorityof the data being used to train the model. And using the variables linked with the stock price, the testing datais fed to the ARIMA model to predict the corresponding stock price on a particular date. The results are used todetermine the model's accuracy.

**Keywords:** Machine Learning, Dicky Fuller Test, NSE India, Data Extraction, L-Jung Box Test

Read Full Paper · Download PDF · Back to index

---

## 251 Forensic podiatry evidence and admissibility in court

Paper ID V7I4-1721 · Pages 1262-1269 · Forensic Science

**Harendra Nath Singh**, Forensic Science Laboratory, Kolkata, West Bengal

Daubert standard is a set of criteria used to determine whether expert testimony is admissibility in Court. Under the Daubert standard, the trial judge serves a role as the “gatekeeper” who determines whether expert testimony is considered reputable and relevant. Similarly, the judge employs a Dubert test to verify whether the testimony of the expert is based on scientifically valid reasoning and whether it has been properly applied to the facts of the issue [1][2]. The procedure of scientific examination that fails to comply with the Daubert standard may result in the rejection of any expert testimony in the court. In the matter of footwear impression evidence examination, the evidence of footwear impression identification was first accepted in court in 1786 in the Richardson case at Kirkcudbright in Scotland [3]. Footwear impression evidence has been accepted in the US Court since the 1930s. The techniques and methods used in footwear evidence examination are widely accepted in several forensic science communities and the ACE-V methods have been described in numerous forensic journals, books, and seminars around the world. Evidence of footwear impression is regularly accepted in courts in the United States, Canada, and Europe as well as other many countries in the world but so far several Indian courts have ruled that the footprint and footwear impression evidence is a “rudimentary science” and they cannot be safely relied upon. [4][5][6]

**Keywords:** Daubert Standard, Forensic Podiatry, Footprint, Footwear Impression Evidence, Expert Witnesses

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

252 **Advancement in filtration techniques of air purifier**

Paper ID V7I4-1685 · Pages 1270-1273 · Bio-medical Engineering

**Rima Nandurkar**, Smith Pharmaceuticals, Nagpur, Maharashtra
**Pallav Kumar Gopal**, Smith Pharmaceuticals, Nagpur, Maharashtra

The air purifier industry has seen growth in terms of demand and sales. All credit goes to massive industrialization in developing and developed countries. As a result, a lot of research has been focused on the various methods of purifying the air. The effect of air pollution on health is complex and their individual impact varies from one another. It is not only the ambient air quality in the cities but also the indoor air quality in the rural and urban areas that are causing concern. In fact, in the developing world, the highest air pollution explosion occurs in an indoor environment. This paper deals with a sterilizer that integrates multiple layers of filtration, purification, sterilization, and air freshening. This air sterilizer consists of multiple layers of filters. It is capable of purifying indoor pollutants like particulate matter PM1.0, PM2.5, microparticles, smoke, the peculiar smell in the air and reduces hazardous materials such as benzene, amici, fungi, molds, and formaldehyde, etc. also at the same time it can kill bacilli and organic substances in the air. It also destroys air-borne viruses and infecting germs like TB, Influenza, Dengue, Allergies, etc.

**Keywords:** Air Pollution, PM1.0, PM2.5, Air Purifiers, Semi-Conductor

Read Full Paper · Download PDF · Back to index

---

253 **Smart crop protection system from wild animals and birds using IoT**

Paper ID V7I4-1724 · Pages 1274-1276 · Iot

**Sumana P. B.**, Student, Global Academy of Technology, Bengaluru, Karnataka
**Sanjana.R**, Student, Global Academy of Technology, Bengaluru, Karnataka
**Sharanya.M**, Student, Global Academy of Technology, Bengaluru, Karnataka
**Harish.N.J**, Assistant Professor, Global Academy of Technology, Bengaluru, Karnataka

In forest zone and agricultural fields human-animal conflict is a major problem. Due to those attacks, people lose their crops, livestock, property, and sometimes their lives. So this zone is to be monitored continuously to prevent the entry of wild animals. With regard to this problem, we have made an effort to develop a system which will monitor the field. The system will detect intrusion around the field using a camera that will capture the image of the intruder and sends notifications to farm owners and forest officials using Message. India is an agricultural country. Agriculture has always been India’s most important economic sector. Wildlife tracking involves acquiring information about the behavior of animals in their natural habitat. This information is used both for scientific and conservation purposes. The primary form of information that needs to be obtained is the location of the animal at certain points in time and this is generally referred to as tracking or radio–tracking.

**Keywords:** IoT, PIR Sensor, Arduino Uno, Python Anaconda, GPS module, Twilio Messaging Service

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 254 Web-based system for face mask detection and face recognition

Paper ID V7I4-1684 · Pages 1277-1281 · Computer Science

**Pranjal Rane**, Student, Vishwakarma Institute of Technology, Pune, Maharashtra
**Ritvik Patil**, Student, Vishwakarma Institute of Technology, Pune, Maharashtra
**Ojas Natu**, Student, Vishwakarma Institute of Technology, Pune, Maharashtra
**Prahlad Pore**, Student, Vishwakarma Institute of Technology, Pune, Maharashtra
**Pranay Shridhar**, Student, Vishwakarma Institute of Technology, Pune, Maharashtra

Even though people are now getting vaccinated, it might still take time for things to come back to normal. Until then, wearing masks and social distancing is the most effective preventive measure against the spread of COVID-19. This leads to the necessity of a system that will detect face masks in real-time video streams. Our solution detects whether a person is wearing a mask or not. If he/she is not wearing a mask then his/her photo would be captured and given as input to a face recognition system that will identify the person. The solution further provides the person's information to the administrator and allows him to take any further action if needed. The above solution is implemented using neural networks to detect masks and the website is created using the Google Flutter framework. The 'Web-Based System for Face Mask Detection and Face Recognition can be used to ensure the safety of people by implementing it in the large crowd gathering places like college campuses and offices.

**Keywords:** Mask Detection, Deep Metric Learning, Real-Time, Face Recognition, Resnet Neural Network, Dlib, Web App, Firebase

Read Full Paper · Download PDF · Back to index

---

## 255 Study on heat transfer analysis of AC condenser by varying materials and refrigerants

Paper ID V7I4-1720 · Pages 1282-1291 · Thermal Engineering

**Vemula Nagarjuna**, Student, Malla Reddy Engineering College(Autonomous), Hyderabad, Telangana
**Vasili Srinivas**, Associate Professor, Malla Reddy Engineering College(Autonomous), Hyderabad, Telangana

An AC condenser is a vitally important part of an air conditioning system that performs much of the cooling function. The condenser causes latent heat rejection by the refrigerant. The design of the condenser can vary from system to system. One of the most commonly used designs is the finned tube design. The material of the tubes and the fins, become the decisive factor in the rate of heat rejection and ultimately in the performance of the condenser. In this work, an air-cooled finned tube condenser is designed for a vapor compression cycle-based air conditioning system. The modeling is done using Solidworks and the fluid flow and heat transfer analysis are done in Ansys. To evaluate the effects of different materials on the performance of the condenser, copper is used as the tube material while, Aluminium alloys, 1060, 6060, and 7050 are used for fins. Two different types of refrigerants, namely, R32 and R134a have been used for analysis. Thermal analysis is done to determine the temperature distribution and heat flux for different sets of materials and different refrigerants. By comparing the results obtained with different combinations, the optimal combination can be determined.

**Keywords:** Condenser, Fins, Aluminium Alloys 1060, 6060, 7050, Refrigerants R32, R134a, Thermal Analysis, and Heat Flux

© 2021, IJARIIT.COM All Rights Reserved

Read Full Paper · Download PDF · Back to index

## 256 Fundamental Frequency estimation and analysis of speech signal

Paper ID V7I4-1681 · Pages 1292-1294 · Engineering

**Mahesh M. Kamble**, Student, PVPIT, Budhgaon, Sangli (affiliated to Dr. Babasaheb Ambedkar Technological University) Maharashtra
**Tejal S.Bandgar**, Assistant Professor, PVPIT, Budhgaon, Sangli (affiliated to Dr. Babasaheb Ambedkar Technological University) Maharashtra

The fundamental frequency is a critical component in speech signal processing analysis. The fundamental frequency (fo) is the rate at which the vocal cords vibrate, and the fundamental frequency range for a person is 120 to 400 Hz. This basic frequency varies depending on the size and form of the vocal cords, and it might differ for males, females, and children. Different time domain and frequency domain pitch detection techniques are utilized. The time-domain methods include autocorrelation and AMDF (Average Magnitude Difference Function), whereas the frequency domain algorithm is Cepstrum. The fundamental frequency may be determined by pitch preprocessing and extraction.

**Keywords:** Autocorrelation Function, Speech Recognition System, Center-Clipping Pitch

Read Full Paper · Download PDF · Back to index

## 257 Social distancing monitoring system using computer vision and YOLOv3

Paper ID V7I4-1676 · Pages 1295-1298 · Computer Vision

**Devanshi Gupta**, Student, Bharati Vidyapeeth Deemed University College of Engineering, Pune, Maharashtra
**Saumya Srivastava**, Student, Bharati Vidyapeeth Deemed University College of Engineering, Pune, Maharashtra
**Sonali P. Dash**, Assistant Professor, Bharati Vidyapeeth Deemed University College of Engineering, Pune, Maharashtra

In the fight against COVID-19, social separation has proven to be an extremely successful strategy for slowing the disease's transmission. People are being motivated to limit their interactions with one another to reduce the risk of the virus spreading through physical or close touch. In the past, AI/Deep Learning has shown promise in solving a variety of everyday problems. We shall see a full explanation of how we may utilize Python, Computer Vision, and Deep Learning to detect social distancing in public spaces and workplaces in this suggested system. By analyzing the real-time video streams from the camera, the social distancing detection tool can determine whether people have kept a safe distance from each other in public settings and the workplace. We can integrate this tool into their security video systems to check if people at work, in factories, and in stores are keeping a safe distance from one another.

**Keywords:** COVID-19, Social Distancing, Computer Vision, Birds Eye View, Camera Calibration

Read Full Paper · Download PDF · Back to index

© 2021, IJARIIT.COM All Rights Reserved

## 258 Production, assay, and optimization of Chitinase enzyme produce by bacterial isolates from fish waste dumped soil

Paper ID V7I4-1704 · Pages 1299-1315 · Microbiology

**K. Shameem Rani**, Professor, MSS Wakf Board College, KK Nagar, Tamil Nadu
**S. Kulandaivel**, Assistant Professor, VPMM College of arts and Science, Krishnankoil, Tamil Nadu

The effective chitinase enzyme reducing organisms were isolated from prawn shell dumped soil. The isolates were named as FS1 &FS2. The chitinase enzyme was produced only when the organisms was grown on medium containing the prawn shell powder. Optimizations of enzyme production (pH, temparture, substrate concentration) were carried out. In this study both FS1(46.7U/ml) FS2 (77.8U/ml) bacterial strain produced maximum chitinase at pH 7.0. maximum chitinase enzyme was obtained in 0.5% substrate concentration (140U/ml) in 96hrs by FS1 and in 0.8% in substrate concentration (93.3U/ml) in 72 hrs. This enzyme was highly used for antifungal activity.

**Keywords:** Chitin, Prawn Shell, N-acetyl-D-Glucosamine

Read Full Paper · Download PDF · Back to index

---

## 259 Prediction of the stock price using Machine Learning techniques

Paper ID V7I4-1686 · Pages 1316-1318 · Online

**Apoorva Y.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka

As people's interest in forecasting stock prices has been increased in recent years, research on stock price analysis using big data and artificial intelligence. In this paper, we performed sentimental analysis by this work by creating and analyzing a sentimental vocabulary using news items. We can get the positive index of news stories using the sentimental dictionary. We can get the positive index of news stories for each date using the emotive dictionary. We can get the positive index of news stories for each date using the emotive dictionary. We can confirm the utility and possibility of sentimental analysis in the stock market by examining the correlation value between the positive index value and the stock return value.

**Keywords:** Stock Price Analysis, Sentimental Analysis, Sentimental Dictionary, Positive Index Value, Stock Return Value

Read Full Paper · Download PDF · Back to index

---

## 260 A SEARCH FOR THE SOURCE AND ORIGIN OF WHITE PEBBLES/SILICA PEBBLES FOUND AT LONAR CRATER, BULDHANA DISTRICT, MAHARASHTRA, INDIA.

Paper ID V7I4-1672 · Pages 1319-1324 · Maharashtra

**Harishchandra Bala Mali**, Independent Researcher
**Raju D. Jadhav**, Independent Researcher

White pebbles of Silica origin, found in large quantities at Lonar Crater has been reported, though the source and origin of these pebbles as well as big boulders and basaltic rocks appearing white in color is not yet understood still. Research papers on Lonar Crater has not reported the abundance of pebbles and boulders present in Lonar Crater affected area, so far river pebbles and Lonar Crater pebbles exhibits similar in

© 2021, IJARIIT.COM All Rights Reserved

characteristics, physically and in chemical compositions, but boulders of big size are not found in any other water body or wetland water body. It has been reported through this paper of such big boulders and concluding that Lonar pebbles and big size boulders are not Lonar Crater origin. They have been transported by human activity and natural calamity. Boulders and pebbles may not be the evidence of meteorite impacted at Lonar Crater. They are not related to meteorite impact or volcanic eruption. They are not formed from the impacts of meteorites or volcanic eruptions.

**Keywords:** River Pebbles, Lonar Crater, Lake Periphery, White Pebbles/Silica Pebbles, Big Size Boulders

Read Full Paper · Download PDF · Back to index

---

## 261 Object segregation using R-CNN

Paper ID V7I4-1511 · Pages 1325-1328 · Convolutional Neural Network

**Nihal Kumar Singh**, Student, RajaRajeswari College of Engineering, Bengaluru, Karnataka
**Aakash Singh**, Student, RajaRajeswari College of Engineering, Bengaluru, Karnataka
**Ashish Prasad**, Student, RajaRajeswari College of Engineering, Bengaluru, Karnataka
**S. Usha**, Professor, RajaRajeswari College of Engineering, Bengaluru, Karnataka

Computer vision is the science of computers and pack-age systems that can also recognize how images and scenes are perceived. PC Vision consists of a variety of solutions that include image recognition, object recognition, image generation, super-resolution of images, and much more. widely used in facial recognition, vehicle recognition, pedestrian counting, network mapping, security systems, and autonomous cars, but here we have a tendency to specialize in completely different sensible objects, those with different kinds of fruits, buttons, coins, etc. In this project, we use extremely correct object recognition algorithms and methods like RCNN, FastRCNN, FasterRCNN, Mobilnet, and fast but extremely correct methods like SSD. If we understand frameworks by using dependencies like TensorFlow, OpenCV, etc., we can recognize every single object in the image through the realm object in a highlighted area and determine every single object and assign its label to the object. This also includes the precision of every technique used to distinguish between objects.

**Keywords:** Object Detection, Tensorflow, Opencv, Python, Tensorboard, R-CNN

Read Full Paper · Download PDF · Back to index

---

## 262 A novel approach to acquiring communication through ‘LSRW’ skills

Paper ID V7I4-1500 · Pages 1329-1330 · English Language Teaching

**Dr. S. R. Kannan**, Professor, Kathir College of Engineering, Coimbatore, Tamil Nadu

Language learning and communication are skill-building activities, which can be developed and acquired by doing…doing…doing a lot of practice. If we talk about language learning and communication, everyone should remember about the four key skills – Listening [L], Speaking [S], Reading [R] and Writing [W]. Without the acquisition of these major skills, it is impossible for anyone to be competent enough to converse in English with others.

**Keywords:** Acquisition, Communication, Listening, Speaking, Reading, Writing

© 2021, IJARIIT.COM All Rights Reserved

Read Full Paper · Download PDF · Back to index

## 263 Progressive collapse analysis of steel frame structure in different earthquake zones

Paper ID V7I4-1740 · Pages 1331-1344 · Civil Engineering

**Mohammed Aamair Ameen**, Student, Trinity College of Engineering and Research, Pune, Maharashtra
**Jitesh Jagannath Dhule**, Assistant Professor, Trinity College of Engineering and Research, Pune, Maharashtra

The progressive collapse of structures is initiated by the loss of one or more load-carrying members. As a result, the structure will seek alternate load paths to transfer the load to structural elements, which may or may not have been designed to resist the additional loads. Failure of overloaded structural elements will cause a further redistribution of loads, a process that may continue until stable equilibrium is reached. Equilibrium may be reached when a substantial part of the structure has already collapsed. The resulting overall damage may be disproportionate to the damage in the local region near the lost member. Loss of primary members and the ensuing progressive collapse are dynamic nonlinear processes.

**Keywords:** Progressive Collapse, Alternate Load Path, ETABS

Read Full Paper · Download PDF · Back to index

## 264 Psoriasis stages detection through image processing

Paper ID V7I4-1516 · Pages 1345-1348 · Machine Learning

**Prabaharan J**, Assistant Professor, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Srihari U.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Sharath C**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**ThanujKumar V**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Vishal S**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka

Air Pollution can have numerous unfavorable impacts on the skin. In thickly populated regions, skin infections are more normal. These infections can effectively affect lives and make an extraordinary requirement for determination. This proposition centers around precise analysis utilizing picture handling. This strategy intends to identify skin infections by looking at the information picture. This includes separating the info picture to eliminate clamor and changing it over to grayscale. At last, picture division is performed. To diminish the information that should be prepared by the classifier, highlight extraction is utilized. To recognize skin illnesses, the SVM (Support Vector Machine), is utilized for picture grouping. Innovation has made it simpler to analyze and treat sickness rapidly. The proposed technique can recognize skin conditions, for example, rosacea and melanoma with a high precision speed of 89%

**Keywords:** Image Processing, Skin Disease

Read Full Paper · Download PDF · Back to index

© 2021, IJARIIT.COM All Rights Reserved

## 265 Smart waste management system

Paper ID V7I4-1702 · Pages 1349-1354 · Electronics And Communication Engineering

**Ankitha A.**, Assistant Professor, Vemana Institute of Technology, Bengaluru, Karnataka
**Ramya S M**, Student, Vemana Institute of Technology, Bengaluru, Karnataka
**Geetha B V**, Student, Vemana Institute of Technology, Bengaluru, Karnataka
**Supriya K V**, Student, Vemana Institute of Technology, Bengaluru, Karnataka

India is the second most populated country in this world. Waste produced daily is huge due to this reason waste management has been an unsolved problem for many years in our country. As we step into digitalization and urbanization, we need to take a smart step to curb waste in our country. The system aims at contributing to the smart city by better managing the waste generated. It is one of the many solutions in dealing with the waste generated on daily basis using modern technologies. Major issues of waste management in our city are overfilled garbage bins, improper disposal of waste, and delayed cleaning process. The system addresses these issues using various sensors and other components controlled by RASPBERRY PI 3B+ which helps in detecting and notifying the authorities once the waste is discarded into the garbage bin. With the help of the developed system overfilled garbage bins can be resolved by real-time monitoring of the bins. It also specializes in dealing with improper waste disposal. Through continuous monitoring, the system updates the data to the cloud which can be accessed by the respective authorities and the private sector companies which are collaborated. The system majorly aims at managing waste by implementing modern technologies like Internet of Things and Embedded Systems. The model is a culmination of components like sensors, microcontrollers, motors, etc. The developed system also caters to global problems like pollution, land fillings, and foul smell. Finally, this paper finds a complete survey of solution for waste management problems and helps in keeping our city clean and provides hygienic environment to citizens.

**Keywords:** RASPBERRY PI 3B+, Internet of Things, Embedded System, Sensors

Read Full Paper · Download PDF · Back to index

---

## 266 Emotion-based media player

Paper ID V7I4-1744 · Pages 1355-1360 · Computer Science Engineering

**Dr. Rajesh K. S.**, Professor, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Heba Farheen B.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Hemalatha K.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Indhu V. S.**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
**Sadiya Banu**, Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka

Currently, people will overall dynamically have more pressing factors since of the awful economy, high regular expenses, etc Paying thoughtfulness regarding tune is a key development that assists with diminishing pressing factors. Regardless, it may be silly if the music doesn't actually gauge up for the current sensation of the crowd. Additionally, there is no music player which can pick tunes subject to the customer's feelings. To deal with this issue, this endeavor proposes an inclination-based music player, which can suggest songs reliant upon the customer's sentiments; hopeless, happy, fair-minded, and irate. The application gets a facial picture from a web camera. It then uses the request methodology to recognize the customer's inclination. Then, the application returns tunes that have a comparative perspective as the customer's inclination. The test outcomes

© 2021, IJARIIT.COM All Rights Reserved

show that the proposed approach can precisely mastermind the happy inclination considering the way that the beat extent of this inclination is wide.

**Keywords:** Music Player, Emotion, Heart Rate

Read Full Paper · Download PDF · Back to index

---

## 267 Analysis on cost-effective cloud server provisioning for the predictable performance of big data analytics

Paper ID V7I4-1734 · Pages 1361-1364 · Cse

**R. Sumathi**, Student, S. K. University, Anantapur, Andhra Pradesh
**U. Dhanunjaya**, Lecturer, S. K. University, Anantapur, Andhra Pradesh

Because of server over-supply, cloud data centers are underused. Cloud providers are offering consumers the option of run king workloads like BID analysis of under-used resources as cheap yet revokable transition servers to increase their use of the data center (e.g., EC2 spot instances, GCE preemptible instances). Although at very low pricing, large data analysis can drastically impact work performance on unreliable cloud transient servers due to instance revocations. This study offers a cost-effective transient server delivery mechanism, iSpot, to address this issue by focusing on Spark as a model of the large-format data analysis system (DAG)-style Directed Acyclic Graph (DAG). First of all, a precise long-term short-term memory (LSTM) pricing prediction approach detects the stable cloud transient servers during the workflow execution. By employing automated work step profiling, Spark's DAG data acquisitions may create the iSpot Supply Strategy to ensure task performance on steady transient servers and develop an analytical model and provide Spark with a lightweight crucial data control mechanism. Extensive EC2- and GCE-instance prototype studies reveal that while saving workplace costs up to 83:8% as compared to state-of-the-art server supply policies, iSpot is able to ensure the performance of large-data analytics running on cloud transient servers. The overhead overtime is still acceptable.

**Keywords:** Directed Acyclic Graph (DAG), Long-term Short Term Memory (LSTM), BIG Data Analysis (BID)

Read Full Paper · Download PDF · Back to index

---

## 268 Crime Prediction using Naïve Bayes Algorithm

Paper ID V7I4-1713 · Pages 1365-1370 · Machine Learning

**Mohammad Tahir**, Student, Raja Rajeswari College of Engineering, Bengaluru, Karnataka
**Md Asif Anwar**, Student, Raja Rajeswari College of Engineering, Bengaluru, Karnataka
**Ruma Afsha Sultana**, Student, Raja Rajeswari College of Engineering, Bengaluru, Karnataka
**Manjunath S. R.**, Assistant Professor, Raja Rajeswari College of Engineering, Bengaluru, Karnataka
**Fardeen Khan**, Student, Raja Rajeswari College of Engineering, Bengaluru, Karnataka

This paper presents the detection of the crimes happening in India. The criminal offenses lead to certain punishment according to the Indian Penal Code (IPC). For particular crimes, particular sections are assigned to punish the criminal or convicts with jail terms and fines. On these pre-processed data sets, by applying the Naïve Bayesian algorithm we create a predictive model which analyzes the data and helps to predict the crime

© 2021, IJARIIT.COM All Rights Reserved

type in a near future. We are using a dataset to apply the Naïve Bayes algorithm to predict crimes in India.

**Keywords:** Naïve Bayes Algorithm, IPC, Text Classification, Real-Time Prediction

Read Full Paper · Download PDF · Back to index

---

## 269 Modeling and CFD simulation of double pipe heat exchanger with different mass flow rates

Paper ID V7I4-1743 · Pages 1371-1380 · Thermal Engineering

**Koduri Nithesh**, Student, Malla Reddy Engineering College, Hyderabad, Telangana
**Vasili Srinivas**, Associate Professor, Malla Reddy Engineering College, Hyderabad, Telangana

In this study, the efficiency of a double pipe heat exchanger with the plain tube as well as coil insert tube is investigated by using water and various nanofluids mixed with water. Silicon Oxide and silver nanofluid are the nanofluids mixed with water at volume fractions of 0.35 percent. The properties of nanofluids are determined by theoretical calculations, which are then used as inputs for analysis. CATIA parametric software is used to build a 3D model of the double pipe heat exchanger (plain and coil insert tube). At different mass flow rates of 0.32, 0.52, and 0.72 kg/sec, CFD analysis is performed on the double pipe heat exchanger with water, silicon oxide, and silver nanoparticle. Furthermore, theoretical calculations on the double pipe heat exchanger were performed.

**Keywords:** CFD, Nano Fluid, CATIA, Coil Inserts, and Mass Flow Rates

Read Full Paper · Download PDF · Back to index

---

## 270 Heart disease clustering using K-Mean analysis

Paper ID V7I4-1730 · Pages 1381-1383 · Data Science

**Gomanth D Reddy**, Student, SRM University, Chennai, Tamil Nadu

Clustering is a method of grouping records in a database based on certain criteria. One method of clustering is K-Means Clustering. K-Means Clustering divides data into multiple data sets and can accept data inputs without class labels. This research uses the K-Means Clustering method and implements it on the Heart disease dataset. In this paper, the risk factors that cause heart disease are considered and predicted using the K-means algorithm and the analysis is carried out using publicly available data for heart disease. The dataset holds 209 records with 8 attributes such as age, chest pain type, blood pressure, blood glucose level, ECG in rest, heart rate, and four types of chest pain. To predict heart disease, a K-means clustering algorithm is used along with data analytics and visualization tool. The paper discusses the pre-processing methods, classifier performances, and metrics. In the result section, the visualized data shows that the prediction is accurate.

**Keywords:** Clustering, K-Means Clustering

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 271 Measurement of service quality in the banking system -A case study of State Bank of India (SBI)

Paper ID V7I4-1727 · Pages 1384-1393 · Engineering

**Levi Ptang Uny Cheworei**, Student, Andhra University, Visakhapatnam, Andhra Pradesh

The rapid growth in population and technology in India has led to rapid development in the service industry in the country. The aim of this study is to establish the aspects of the customer's view on the service quality offered at the State Bank of India (SBI). To place customer's needs into the quality dimension, a Survey questionnaire is developed to obtain customers' responses on the level of quality of services offered. Then, Factor analysis (FA) was carried out on the customer responses obtained through a questionnaire survey. Analytic Hierarchy Process (AHP) basically helps to establish the weights of the banking service quality dimensions. Technique for Order Preference Similarity to Ideal Solution (TOPSIS) is employed to obtain the ranking of different branches basing on the weights of quality dimension obtain from AHP.

**Keywords:** The Survey Questionnaire, Service Quality, Factor Analysis (FA), Analytic Hierarchy Process (AHP), Technique for Order Preference Similarity to Ideal Solution (TOPSIS)

Read Full Paper · Download PDF · Back to index

---

## 272 The Current Status of Folk Theatre and Traditional Folk Theatre forms of Odisha

Paper ID V7I4-1711 · Pages 1394-1400 · Art

**Ajita Kumar Muni**, Research Scholar, Utkal University of Culture, Bhubaneswar, Odisha

The theatrical tradition of Odisha has been flowing through various streams of theatre like Classical Sanskrit Theatre, Folk Theatre, Traditional Folk Theatre and Modern Odia Theatre. Basically the tradition of Folk Theatre and Traditional Folk Theatre has been playing a vital role in the performing art medium of Odisha as well as India since its origin to till today. But subsequently many changes have been occurred in these forms of theatre arts due to the impact of Modernity and Globalization. Some of them have already been died and others are struggling for their survival. So this study aims to identify the exhaustive list of Odia Folk Theatre and Traditional Folk Theatre and its current status.

**Keywords:** Folk Theatre, Traditional Folk Theatre, Exhaustive list of Folk Theatre and Traditional Folk Theatre Forms of Odisha, Origin, Development, Content, Style of presentation, Performance and literary aspects, Current Status and conclusion.

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 273 Development in pervious concrete by using the green concept

Paper ID V7I4-1436 · Pages 1401-1404 · Civil Engineering

**Amruta Banne**, Student, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra
**Pratiksha Patil**, Student, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra
**Harshali Jadhav**, Student, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra
**Priti Salunke**, Student, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra
**Rohini Jamadar**, Student, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra
**Vaibhavi Khatake**, Student, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra
**Ankita Bura**, Student, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra
**Ameer Husain Jamdar**, Professor, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra

Pervious concrete or No fineness concrete is a conventional concrete that is used in foreign countries for draining stormwater and increasing the groundwater level. This project is mainly based on the investigation and increasing the strength characteristics of Pervious concrete. The mix design is designed considering only cement and coarse aggregate since the concrete is a “NO FINENESS CONCRETE”. The mix ratio is considered as 1:6 and the water-cement ratio is taken from 0.4-0.45. The admixtures are added in % of cement for Nano silica & % of concrete for polypropylene. The final outcome to be received is an increase in the strength of pervious concrete by improving their characteristics and make them utilized for Road pavements.

**Keywords:** Pervious Concrete, Nano Silica

Read Full Paper · Download PDF · Back to index

## 274 Remote locking system for secure examination using MQTT protocol

Paper ID V7I4-1755 · Pages 1405-1407 · Iot

**Kavya R.**, Assistant Professor, Vidya Vikas Institute of Engineering and Technology, Nadanahalli, Karnataka
**Sahana B. R.**, Assistant Professor, Vidya Vikas Institute of Engineering and Technology, Nadanahalli, Karnataka
**Geethashri K. V.**, Assistant Professor, Vidya Vikas Institute of Engineering and Technology, Nadanahalli, Karnataka

At every level of education in our system, we have to face examinations to check our knowledge on the curriculum exams designed on our domain basis. Frequently we have heard the news regarding the online exams question paper dropouts which will be a very bad drawback effect in the life of the students hence in our proposed system by using the Remote Locking system the Human intervention is completely removed thus it protects the examination paper dropouts at a maximum level. In the Remote locking system if the lock is released from the authenticated person, then only the paper can be taken printout for the conduction of the exam.

**Keywords:** Paper Locking System, Question Paper Dropouts, Remote Locking With Zero Human Intervention

Read Full Paper · Download PDF · Back to index

© 2021, IJARIIT.COM All Rights Reserved

## 275 Inappropriate construction equipment delay factors a Structural Equation Modelling (SEM) approach

Paper ID V7I4-1723 · Pages 1408-1417 · Civil Engineering

**Salih Mahdi**, Student, Andhra University, Visakhapatnam, Andhra Pradesh

Construction equipment improvement is a trend in the market, and it has several advantages. Inappropriate construction equipment, on the other hand, creates delays in construction projects, harming the firm's reputation. A lot of studies on overall delay have been undertaken around the world. NonethelessHowever, there is a scarcity of studies on construction delays induced by inefficient construction equipment. The purpose of this article is to look into the reasons that cause construction equipment delays and how they affect the firm's reputation. The issues identified in the focus group interviews and the literature survey were used to create a report. To determine the impact of these factors on the progress of Indian building projects, a questionnaire survey was undertaken. The main constraint was that all 300 replies had to be gathered in person from building professionals in order to avoid skewed results. The positive strength of each factor's link was determined using Pearson correlation coefficients. To check if there was a significant difference between the respondents' firm categories, a t-test was utilized. The effective association between the causes of delays due to improper construction equipment and the effects on the company's reputation was validated using structural equation modeling (SEM). The improper construction equipment elements are associated among themselves and combined to influence the company's reputation, according to all of the components investigated by the SEM analysis. To overcome the ineffective equipment delay issues, recommendations are offered.

**Keywords:** Construction Delay, Inappropriate Equipment, Management, Inventory, Equipment Selection Equipment Replacement

Read Full Paper · Download PDF · Back to index

---

## 276 Prediction of future terrorist activities using Machine Learning algorithm

Paper ID V7I4-1754 · Pages 1418-1422 · Machine Learning

**Santhosh Kumar S.**, Assistant Professor, KS School of Engineering and Management, Bengaluru, Karnataka
**Akshatha M. N.**, Student, KS School of Engineering and Management, Bengaluru, Karnataka
**Arun Malle**, Student, KS School of Engineering and Management, Bengaluru, Karnataka
**Aishwarya Bhat**, Student, KS School of Engineering and Management, Bengaluru, Karnataka
**H. Sai Rohit**, Student, KS School of Engineering and Management, Bengaluru, Karnataka

The exponential increase in internet users has led people to start using technology-based development for carrying out activities against the law. According to the studies made from previous knowledge and experiences it can be found out that, cyber terrorism puts out stress and anxiety, increases feelings of intrusion, threat and hardens the political frame of mind. Therefore, it is important to identify the fact that cyber terrorism has had a very awful and shocking effect on our society. Thus, With the use of a Machine learning model, it helps us to predict the possible future terrorist activities by detecting the instigating text messages in social network platforms. The proposed system aims to develop a method for of prediction of future terrorist activities using a machine learning algorithm that will help the system in detecting potential

© 2021, IJARIIT.COM All Rights Reserved

terrorist attacks and in providing safeguards and strengthening defense for required areas consequently lessens the loss of life and property. Along with that it also provides Fast detection to illegal activity, improving information accuracy. It has the ability to distinguish between instigating (terrorism-related) messages and non-instigation (non-terrorism-based) messages. This method also helps in identifying the user responsible for sending such messages and also recognize the specific messages and also shows the best machine learning algorithm that best fits and that can be used for prediction based on the accuracy analysis of the algorithms.

**Keywords:** Decision Tree, RFA (Random Forest Algorithm), NBC (Naïve Bayes Classifier), K-NN algorithm, Training phase, Testing Phase

Read Full Paper · Download PDF · Back to index

---

## 277 Effect of honey mixture therapy on obesity among adolescent girls residing in selected hostels

Paper ID V7I4-1739 · Pages 1423-1426 · Nursing

**Sini Neeruzhi**, Professor, Al Shifa College of Nursing, Perintalmanna, Kerala
**Surumi K. A.**, Student, Al Shifa College of Nursing, Perintalmanna, Kerala

The present study was conducted to assess the effect of honey mixture therapy on obesity among adolescent girls. Objectives: Assess the degree of obesity among adolescent girls, Assess the effectiveness of honey mixture therapy on obesity among adolescent girls, Find the association between obesity and selected demographic variables of adolescent girls. Methodology: Quantitative approach was used for the study and a pre-experimental one-group pre-test post-test design was selected. This study was based on the Penders health promotion model. Data were collected from 30 obese adolescent girls residing in selected hostels at Perinthalmanna using a nonprobability purposive sampling technique. Semistructured interview schedules on sociodemographic data and physiological methods were used to obtain baseline pre-test measurements. Honey mixture therapy was administered for 45 days and post-test measurements were also collected. The data were analyzed and interpreted by using descriptive and inferential statistics. Results; the mean post-BMI score (27.79) is less than the mean pretest score(28.20). The obtained t value is 0.85 and the p-value is 0.40. The mean difference is not statistically significant. The study also revealed that there is a significant association of obesity with the availability of pocket money. Conclusion; the study concluded that there is a nonsignificant reduction in BMI followed by administration of honey mixture therapy for a period of 45 days.

**Keywords:** Honey Mixture Therapy, Obesity, Adolescent Girls, BMI

Read Full Paper · Download PDF · Back to index

---

## 278 Domain-agnostic Customer Sentiment Analysis Platform for MSMEs in E-Commerce

Paper ID V7I4-1750 · Pages 1427-1434 · Computer Software And Machine Learning

**Veer Kejriwal**, Student, Jamnabai Narsee International School, Mumbai, Maharashtra
**Aqsa Temrikar**, Professor, JBCN International School, Mumbai, Maharashtra

This paper aims to tackle the problem of MSMEs being unable to gauge customer sentiment through text-based

© 2021, IJARIIT.COM All Rights Reserved

reviews on e-commerce platforms. The paper suggests a front-end algorithmic solution to the problem which is simple yet impactful in that it allows MSMEs to understand consumer behavior and psyche with minimal or no resources. The platform, which can be adopted by any e-commerce enterprise, uses web scraping frameworks and natural language processing-based sentiment analysis to extract, demystify, and present various metrics and actionable insights essential to analyze underlying sentiment. The proposed end-to-end solution aids MSMEs in fostering sustainable customer relationships and boosting business growth and prosperity.

**Keywords:** MSME, E-commerce, Web-Scraping, Sentiment Analysis, Natural Language Processing

Read Full Paper · Download PDF · Back to index

---

## 279 Does Anganwadi make a difference in the nutritional status of children?

Paper ID V7I4-1779 · Pages 1435-1438 · Health And Nutrition

**Kamalakanta Tripathy**, Associate Professor, Fakir Mohan University, Balasore, Odisha

ICDS centers, commonly known as Anganwadi Centres (AWC) started in the year 1975 mainly to fulfill the nutritional requirement of children along with essential integrated health services. The objective of this research is to know “how Anganwadi centers are working for improving the nutritional status among children”. Methods: The secondary data collected through the National Family Health Survey is used to analyze the effectiveness of Anganwadi Centres on child nutrition. Both bivariate and multivariate analyses have been carried out for this paper. Results: Over the years, the proportion of children accessing supplementary food from the Anganwadi/ ICDS has been declined. Further, recent data shows that percentage of children receiving food is high among poor households as compared to better-off households. However, the results of both bivariate and multivariate analyses show that there is no substantial difference in nutritional status of children between ICDS-covered and non-covered areas. Conclusion: There is no significant positive impact of supplementary nutrition through Anganwadi Centres on the malnutrition status of children. Therefore, the government should take steps for regular monitoring to ensure quality services through the Anganwadi centers. Then only, all the children will access adequate supplementary food and that would definitely make a change in the nutritional status of children.

**Keywords:** Nutrition, Anganwadi, Children, Supplementary Food

Read Full Paper · Download PDF · Back to index

---

## 280 IoT based string failure detection and monitoring system

Paper ID V7I4-1787 · Pages 1439-1440 · Engineering

**Srijeyanthi P.**, Student, V. S. B Engineering College, Karur, Tamil Nadu
**Sivakumar R.**, Associate Professor, V. S. B Engineering College, Karur, Tamil Nadu
**Cebu A.**, Student, V. S. B Engineering College, Karur, Tamil Nadu
**Karthick C.**, Student, V. S. B Engineering College, Karur, Tamil Nadu
**Rajeshwaran M.**, Student, V. S. B Engineering College, Karur, Tamil Nadu
**Subhash S.**, Student, V. S. B Engineering College, Karur, Tamil Nadu

To harness reliable energy efficiently, the photovoltaic string system must remain in its best condition. This

© 2021, IJARIIT.COM All Rights Reserved

requires continuous maintenance and monitoring. However, in the case of weather dependable energy yield change. We proposed a novel real-time monitoring system utilizing a small but efficient artificial neural network that is adequate to run on a low-cost system. To get the desired electrical output in various environmental conditions, it is required to analyze the faulty, or shaded, or dust-covered string, and maintain it with an intelligent monitoring system. The proposed string monitoring system can identify if the string exhibit degradation due to fault conditions.

**Keywords:** String Fault, Arduino, Solar, Dust Sensor, Energy Yield

Read Full Paper · Download PDF · Back to index

---

## 281 Insights of IPL: 2008 to 2020 and why it is interesting

Paper ID V7I4-1780 · Pages 1441-1445 · Data Mining And Analysis

**Rakshit Patel**, Student, G H Patel College of Engineering and Technology, Anand, Gujarat
**Mihir Brahmbhatt**, Student, Navrachana University, Vadodara, Gujarat

Cricket runs through every Indian’s blood; without Cricket one cannot imagine India. Cricket is also the most famous outdoor sport in India as there is a huge craze of it in every age group of people. Also, India has been very much the pioneer of modern-day cricket that is the T20, it can be said that because of the Indian Premier League the advent of T20 started in the world. In the modern era with such high technologies available in every sport, one of the most important things is statistical data. This research paper mainly focuses on the results of the matches taking various factors into consideration such as the toss analysis, season-wise number of matches, team performances, and also the venues where the matches were played.

**Keywords:** Statistical Data, Factors, Analysis

Read Full Paper · Download PDF · Back to index

---

## 282 Light Fidelity Trident

Paper ID V7I4-1769 · Pages 1446-1448 · Network Engineering

**Keerthan Gowda B. M.**, Student, Jain Pre-University College, V V Puram, Bengaluru, Karnataka

All around the world, the internet continues to transform how we connect with others, organize the flow of things, and share information. With its growing influence on individual consumers and large economies alike, the internet has become an increasingly vital part of our day-to-day lives. In the era of IoT (internet of things) security, speed and cost are the major problems that are to be solved in the world. The current wireless networks that connect us to the Internet are very slow when multiple devices are connected. Also with the increase in the number of devices which access the Internet, the availability of fixed bandwidth makes it much more difficult to enjoy high data transfer rates and to connect a secure network. The solution to this problem is the light fidelity trident technology which ensures high security, speed and a much broader spectrum for transmission compared to the existing technology. The IoT devices can be made compatible and in-sync with Light fidelity trident, for a more enhanced functioning. Light fidelity trident can conveniently accommodate multiple access points, as it is required by IoT connectivity, by using simple light bulbs as terminals. Light fidelity trident concept is similar to Light fidelity but uses the concept of RGB multiplexing scheme to produce

© 2021, IJARIIT.COM All Rights Reserved

white light spectrum. Each color carries different data, so the speed is ten times better than conventional Light fidelity. Light fidelity trident is not only faster than the existing light fidelity but also thrice more secure. Light fidelity trident is the future of data communication.

**Keywords:** Internet, IoT (Internet of Things), Bandwidth, Light Fidelity Trident, Light Fidelity, RGB(Red, Green, Blue), Light Spectrum, Data Communication

Read Full Paper · Download PDF · Back to index

---

## 283 The phenomenal growth and mastering the tradition of Bharatanatyam

Paper ID V7I4-1783 · Pages 1449-1451 · Fine Arts

**S. Sophia**, Research Scholar, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Chennai, Tamil Nadu
**Dr. S. Subbulakshmi**, Professor, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Chennai, Tamil Nadu

A concept of framing work to approach the Bharatanatyam recital which incorporates a variety of dance compositions set in Bharatanatyam is Margam. Through the element of Margam, the theme of the evolution of the self/ spirit on the spiritual path is put forth. “The traditional order of the Bharatanatyam from alarippu to thillana is the sequence for revealing the spiritual through the corporeal. Typically a sequence of Bharatanatyam recitals consists of an invocatory piece, a central piece, an abhinaya piece, and a culminating piece. Today this art evolving and changing the scenarios from a pure ritual art of the temple to the performance sequences on the stage.

**Keywords:** Bharathanatyam, sculptures, Badami, Aihole, Vijayanagar, Halebid, Belur, Chinayya, Ponnayya, Shivanandan, Vadivelu, Tanjore quartet, Marga (format) to the Bharatanatyam, Jetti Taayamma, Kōlar Tradition, Mysūru tradition, Mūgur tradition, Nañjangud tradition, Thodayamangalam / Pushpanjali / Mallari / Kautuvam / Allaripu Jatiswaram, Shabdam, Varnam / Swarajati, Padam / Javali, Astapadi, Kirtanam, Tillana, Slokam, Mangalam

Read Full Paper · Download PDF · Back to index

---

## 284 Child malnutrition: Rural-urban disparities in Jabalpur district

Paper ID V7I4-1786 · Pages 1452-1453 · Child Malnutrition (food And Nutrition)

**Samiha Tiwari**, Research Scholar, Govt. M.H. College of Home-Science and Science for Women (Autonomous.), Jabalpur, Madhya Pradesh
**Dr. Nandita Sarkar**, Professor, Govt. M.H. College of Home-Science and Science for Women (Autonomous.), Jabalpur, Madhya Pradesh
**Dr. Meera Viadya**, Professor, Govt. M.H. College of Home-Science and Science for Women (Autonomous.), Jabalpur, Madhya Pradesh

Malnutrition among children under five has remained a major public health challenge in developing countries and has constituted a long-time barrier to a healthy life and a constant threat to human capital development. It is widely noted that children raised in urban areas are generally healthier than in rural areas. Therefore to know the gap between rural-urban children under five years a study was conducted in Jabalpur District. To find the prevalence of malnutrition, a house-to-house survey was conducted. Gomez classification was used to classify

© 2021, IJARIIT.COM All Rights Reserved

children on the basis of weight for age. Results showed that 53.44% of children were malnourished in urban areas while a maximum of 66.67% of children was found malnourished in rural areas.

**Keywords:** Child Malnutrition, Rural-Urban, Under Five Years

Read Full Paper · Download PDF · Back to index

---

285

## Casestudy of drainage line improvement at Kumar chowk, Solapur

Paper ID V7I4-1798 · Pages 1454-1457 · Civil Engineering

**Shubham Devidas Hibare**, Student, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra
**Ashwini Shrirang Bhosale**, Student, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra
**Viresh Rajshekar Swami**, Student, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra
**Lalita Sudarshan Dussa**, Student, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra
**Bhavana Satish Burla**, Student, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra
**VIJAYRAJ KURMADAS PATIL**, Student, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra
**Rajeshwari Ambadas Bidave**, Student, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra
**Sanjay R. Bugade**, Professor, Vidya Vikas Pratishthan Institute of Engineering and Technology, Solapur, Maharashtra

This study is carried out to review various research works carried out by researchers on the effects of poor drainage on road pavement. Poor drainage causes early pavement distresses leading to driving problems and structural failures of roads as pointed out by researchers. To prevent or minimize premature pavement failures and to enhance the performance of the road, it is imperative to provide adequate drainage, the review covered: the importance of highway drainage systems in road construction, requirements of the highway drainage systems, and effects of the bad drainage systems on roads. The research pointed out areas of concern for drainage designers and road engineers that are of great importance during road construction to ensure that, the constructed road is put to use without failure before the actual design life. The review concluded that the effect of poor drainage conditions on a road is very adverse. It causes the failure of roads in different ways and as well economic hardship on inhabitants of affected communities with the devastating effect of sicknesses as a result of breeding of mosquito especially on streets in towns with poor drainage capacity. Proper drainage system provided to the road at its early edge. Therefore effective engineering practices should be considered necessary during the design, construction, and management of roads and drainage channels.

**Keywords:** Drainage, Roads

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 286 Effect of rebar coating in the prevention of corrosion in RC structure

Paper ID V7I4-1773 · Pages 1458-1461 · Civil Engineering

**Thejus H. R.**, Student, RajaRajeshwari College of Engineering, Bengaluru, Karnataka
**Sanjay B. N.**, Student, RajaRajeshwari College of Engineering, Bengaluru, Karnataka
**Ravikumar R.**, Student, RajaRajeshwari College of Engineering, Bengaluru, Karnataka
**Santhosha G.**, Student, RajaRajeshwari College of Engineering, Bengaluru, Karnataka
**Shalini G. V.**, Assistant Professor, RajaRajeshwari College of Engineering, Bengaluru, Karnataka

Corrosion of the reinforcement in concrete structures had been realized to be a serious problem worldwide in the 60s & 70s & the number of damages still increased considerably in the 80s. Corrosion in steel reinforcement is one of the most significant factors in the deterioration of Reinforced Concrete Structures Rebars Corrosion carbonation of Concrete & Chloride Attack Affects almost 50% The Durability of concrete structures. Earlier studies Indicated the Reinforced Concrete structures Remain durable for the whole of their design life, Approximately more than 60 years, Even maintenance-free. The purpose of this study is to evaluate and compare the relative merits of the two coating systems for reinforcing bars in concrete. Also, this study helps to know the nature and characteristics of both epoxy coated and Zinc Coated Steel for use as reinforcement in concrete. Also presented is an overview of the results from recent experimental work on the comparative corrosion behavior of uncoated Steel, epoxy-coated steel, and Zinc Coated Steel in concrete.

**Keywords:** Rebar, Corrosion, Epoxy, Zinc, Reinforcing Steel

Read Full Paper · Download PDF · Back to index

---

## 287 S-Pay (Secure Payment system for students)

Paper ID V7I4-1751 · Pages 1462-1465 · Computer Science

**Vaishnav G.**, Student, Marian Engineering College, Kazhakkoottam, Kerala
**Megha M. S.**, Student, Marian Engineering College, Kazhakkoottam, Kerala
**Sandra Sivaprasad**, Student, Marian Engineering College, Kazhakkoottam, Kerala
**Nishley Elizabeth Joseph**, Assistant Professor, Marian Engineering College, Kazhakkoottam, Kerala

S-Pay proposes a cashless transaction system for small-scale organizations such as schools and colleges, by designing an RFID terminal device and database server. The designed system consists of an RFID card as e-money which will be implemented in an ID Card, terminal transaction device, and database server. RFID acts as a unique ID owned by the user to identify themselves to authorize their transactions. The main objective of this project is to reduce the amount of human effort in dealing with cash inside campuses and also making it easy for students to purchase items inside the campus without compromising safety. Each transaction will be authorized by a PIN that is only known to the owner of the card. A website is developed from which students can log in to their account and know their current balance, see their transaction log and also change their PIN if required. Moreover, students won't be able to spend this money outside the college campus as the money is credited to their account which in turn is credited to a database that is not valid outside the campus, it is more like a currency that is only valid inside the campus.

**Keywords:** RFID, Raspberry Pi, Database

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 288 Studies on diversity of medicinal plants in Dnyanganga wild life sanctuary of Buldhana district (Maharashtra)with reference to animal uses

Paper ID V7I4-1799 · Pages 1466-1469 · Life Science

**Dr. Rasika N. Patil**, Assistant Professor, Shri Shivaji College of Arts, Commerce, and Science, Akola, Maharashtra

India in the world is known for its indigenous biodiversity. As per India is concerned, medicinal plants have prime importance in the Indian religion, tradition, and Ayurveda. Buldhana district is a remote and small city in the Vidarbha region covering 966 thousand hectares area situated at 19.51N' and 75.57 E -76 .40 E. Climate is dry, cold and the forest type is dry and deciduous with rainfall of 685mm. the forest coverage is 1168 sq.km., which is 12% of the total area. It harbors relatively rich plant diversity of flowering plants, timber trees, and medicinally important species. The significant information about these plants is collected from the local tribals, Ayurveda, and authentic publications.

**Keywords:** Biodiversity, Medicinal Plants, Forest, Ayurveda, Etc

Read Full Paper · Download PDF · Back to index

---

## 289 Role of rural credit in the socio-economic development of Himachal Pradesh

Paper ID V7I4-1785 · Pages 1470-1476 · Commerce

**Shilpa Chauhan**, Research Scholar, Himachal Pradesh University, Shimla, Himachal Pradesh
**Usha Sharma**, Professor, Himachal Pradesh University, Shimla, Himachal Pradesh

In India, rural development is contemplated as a prerequisite for fastening the pace of economic development and the welfare of the common masses. Rural development environs all the objectives of advancement and amelioration of the overall quality of the rural life through the provision of minimum needs and livelihood, adequate development of manpower resources, and infrastructural facilities. Thus, the present paper makes an attempt to analyze the need and the importance of credit for rural households. The detailed analysis of factors that highlight the role of rural credit and its contribution towards enriching the economy in rural areas has also been discussed here.

**Keywords:** Rural Credit, Development, Need, Role of Credit

Read Full Paper · Download PDF · Back to index

---

## 290 An ekistical approach towards impact of water on human settlements

Paper ID V7I4-1795 · Pages 1477-1479 · Architecture

**Abdul Razzaq**, Independent Researcher, Faculty of Architecture and Ekistics, New Delhi, Delhi

In the present scenario, the issues related to water, such as water stress, water scarcity, water quality are gaining much importance as these real-life problems are increasing day by day. It has been known that once pollution has come up in the environment, it may remain concealed for many years and makes the water resources unsuitable for consumption and other uses. The rate of degrading groundwater levels and depletion of water quality (both surface and groundwater) is of major concern in major cities and towns in the country. Thus, a metropolitan city must be selected as a study area, which is facing a severe problem of water pollution

© 2021, IJARIIT.COM All Rights Reserved

and its management.

**Keywords:** Water Pollution, Human Settlements, Ekistics, Impact

Read Full Paper · Download PDF · Back to index

---

## 291 Prevalence and risk factors of urinary incontinence among geriatrics residing in old age home in Kanyakumari district, India

Paper ID V7I4-1800 · Pages 1480-1484 · Nursing

**P. C. Christal Joyce**, Research Scholar, Apollo College of Nursing, Chennai, Tamil Nadu
**Dr. S. S. Sharmila Jansi Rani**, Professor, Christian College of Nursing, Neyyoor, Tamil Nadu
**Dr. Vijayalakshmi K.**, Professor, Apollo College of Nursing, Chennai, Tamil Nadu

Urinary Incontinence (UI) is a loss of bladder control and most often it is considered an embarrassing problem. Most of the people who are affected with urinary incontinence will not come out with their problem unless it is investigated. This study was conducted to assess the prevalence and risk factors of Urinary Incontinence among geriatrics residing in old age homes in Kanyakumari District, India Methods: This was a cross-sectional study conducted among 47 females aged above 50 years residing in old age homes who were selected using purposive sampling technique, in 2020-21 in Kanyakumari district, Tamilnadu, India. Each participant gave consent and was subjected to screening for urinary incontinence using the International continence society female urinary incontinence questionnaire. Result: The prevalence of urinary incontinence among study participants was 81% (30/37). Urinary Incontinence was significantly associated with age, parity, type of delivery, and history of UTI. Conclusion: Urinary Incontinence is highly prevalent among the geriatric population. Urinary Incontinence is significantly associated with Age, Marital Status, Religion, Education, Family type, Previous Occupation, Source of income, Reason for joining the old age home, Duration of stay at old age home, Mobility level, Activities of daily living, Frequency of exercise, History of medical illness, Previous diagnosis of Urinary Incontinence, History of gynecological surgery, Parity, Type of delivery, Body Mass Index, History of urinary tract infection, Visit by family.

**Keywords:** Geriatrics, Urinary Incontinence, Associated Factors

Read Full Paper · Download PDF · Back to index

---

## 292 Water turbidity assessment in parts of Ganga River in Allahabad Region (Prayag) during Kumbh Festival

Paper ID V7I4-1775 · Pages 1485-1488 · Remote Sensing

**Anju Bajpai**, Regional Remote Sensing Centre-Central, Nagpur, Maharashtra
**Dr. G. Sreenivasan**, Regional Remote Sensing Centre-Central, Nagpur, Maharashtra
**Dr. C. S. Jha**, National Remote Sensing Centre, Hyderabad, Telangana

Turbidity can be defined as the opaqueness of water due to presence of suspended materials. The higher the amount of total suspended solids in the water, the higher the measured turbidity. Causes of turbidity include soil erosion, waste discharge, urban runoff, and algal growth. Turbidity is also defined as the reduction of clarity in water due to the presence of suspended or colloidal particles. Monitoring of turbidity becomes extremely

© 2021, IJARIIT.COM All Rights Reserved

important during events like Kumbh Mela which causes a sudden rise in river turbidity. Remote sensing obtains an optical measure of water turbidity in terms of Backscattering Units. Remotely sensed image from satellite has the potential to provide crucial information to offer considerable advantages for the study of large areas, determination of current and circulation patterns, and monitoring of sedimentation, water productivity, and eutrophication. WHO, The World Health Organization, establishes that the turbidity of drinking water should not be more than 5 NTU, and should ideally be below 1 NTU. But Ganga river flowing through Allahabad shows a sudden increase in turbidity up to 13-14 BU during the Kumbh mela Event. Turbidity increase results in harming the habitat areas for fish and other aquatic life. Turbid Particles also provide attachment places for other pollutants, notably metals and bacteria which makes the water contaminated and not suitable for drinking.

**Keywords:** Turbidity, Water quality, Pollution, monitoring, assessment, Ganga, Allahabad, Prayag, Triveni Sangam, Kumbh mela, River water

Read Full Paper · Download PDF · Back to index

---

## 293 A modified approach in shortest path algorithm

Paper ID V7I4-1770 · Pages 1489-1493 · Graph Theory

**Dr. Siva Prasad Behera**, Assistant Professor, C.V. Raman Global University, Bhubaneswar, Odisha
**Dr. Debdas Mishra**, Professor, C.V. Raman Global University, Bhubaneswar, Odisha
**Dr. Subarna Bhattacharjee**, Assistant Professor, Ravenshaw University, Cuttack
**Prasanta Kumar Raut**, Research Scholar, C.V. Raman Global University, Bhubaneswar, Odisha

In most graph theory problems, the shortest path problem or SPP is the problem of determining a distance between two nodes (or vertices) in a weighted graph in order that the sum of the weights of its constituent edges is minimized. In a connected graph there exists at least one path between every pair of vertices. In a weighted graph, the path between a pair of vertices for which the sum of the weights of the constituent edges is minimum is called the shortest path between them. Here in this paper, we developed a new algorithm to determine the shortest path of a weighted graph which is an improvement over Dijkstra’s algorithm so as to obtain all the shortest paths of a given weighted graph. Let us first recollect Dijkstra’s algorithm so as to easily comprehend our result

**Keywords:** All-Pairs Shortest Path, Adjacency Matrix, Binary Heap, Dijkstra's Algorithm, Single-Destination Path, Time Complexity

Read Full Paper · Download PDF · Back to index

---

## 294 Indus Civilization

Paper ID V7I4-1796 · Pages 1494-1495 · Anthropology

**Bishal Kumar Bhuyan**, Student, Dibrugarh University, Dibrugarh, Assam

Indus civilization was established along with Mesopotamia and Egyptian civilization somewhere near 1600 BC. It was the hub for urban development yet the script that was used has not been identified, yet remains a mystery. Seals played an important role in trading whereas the Symbols depict a mythical sense.

© 2021, IJARIIT.COM All Rights Reserved

**Keywords:** Indus Valley Civilization, Mohenjo Daro, Harappa

Read Full Paper · Download PDF · Back to index

---

295 **Reasons for the success and failure of airlines in India and abroad**

Paper ID V7I4-1767 · Pages 1496-1502 · Marketing

**Krisha Shah**, Student, Narsee Monjee Institute of Management Studies, Mumbai, Maharashtra
**Madhav Abrol**, Student, Narsee Monjee Institute of Management Studies, Mumbai, Maharashtra
**Kartikay Sharma**, Student, Narsee Monjee Institute of Management Studies, Mumbai, Maharashtra
**Madhav Khandelwal**, Student, Narsee Monjee Institute of Management Studies, Mumbai, Maharashtra
**Keertiman Garodia**, Student, Narsee Monjee Institute of Management Studies, Mumbai, Maharashtra

The civil aviation industry in India is one of the fastest-growing industries in the world with the private sector accounting for more than 75% of the market share and currently ranks at the 3rd position globally. It is expected to become the largest air passenger and transport market by 2024 after overtaking the UK. However, this growth is only limited to certain airlines and many have succumbed in front of their huge losses. This paper aims to identify the reasons for such phenomenal growth in some airlines and at the same time understand what went wrong with the others due to which they faced losses and ultimately had to be shut down. This paper is curated after rigorous research and study - both primary and secondary in order to get a true and fair picture of the scenario in India as well as abroad with regards to the aviation industry and to understand the consumer preferences for the same.

**Keywords:** Aviation Industry, Airlines, Consumer Preferences

Read Full Paper · Download PDF · Back to index

---

296 **Effect of positive self talk training on competitive anxiety: an intervention study on male and female**

Paper ID V7I4-1801 · Pages 1503-1510 · Sports Psychology

**Dr. Sonia Kapur**, Assistant Professor, Guru Nanak Dev University, Amritsar, Punjab
**Jyoti Devi**, Student, Guru Nanak Dev University, Amritsar, Punjab

© 2021, IJARIIT.COM All Rights Reserved

This study was aimed to examine the effect of positive self-talk training on the competitive anxiety of anxious athletes. Methods: Participants were 52 team sports players (n=26 females and n=26 males), aged 18-23years, randomly assigned into the experimental group (13 males and 13 females) and control group (13 malesand 13 females). The experimental group received positive self-talk training for 30 days and the control waswithout any type of treatment. The dependent variables (competitive anxiety, general fear of failure) wereassessed before and after the intervention. It was expected that positive self-talk reduces competitive anxiety,general fear of failure and increases self-confidence. Results: As expected, positive self-talk training decreasedthe level of competitive anxiety and general fear of failure and increased the self-confidence of theexperimental group. Conclusion: the present study provides preliminary evidence that positive self-talk trainingfor a period of 1 month can be used as an effective tool to reduce competitive anxiety and general fear offailure and enhance self-confidence.

**Keywords:** Competitive Anxiety, Positive Self-Talk

Read Full Paper · Download PDF · Back to index

---

297

## Detecting DDoS attack with AI/ML models

Paper ID V7I4-1809 · Pages 1511-1516 · Cyber Security- Machine Learning

**Arun Narayanan N.**, Student, REVA University, Bengaluru, Karnataka
**Dhruv Kalaan**, Lecturer, OLX India Pvt Ltd , Gurgaon, Haryana

The enormous evolution of web-based applications on the public Internet has accomplished universal communication among billions of Smart IoT (Internet of Things) devices and such smart devices communicate with each other through the network. Simultaneously, cyber-attackers have gained enough knowledge on attacking the Internet and information on Secured systems. Distributed Denial of Services evolved as a serious threat for organizations, these attacks must be mitigated immediately for preventing damages to the business. In Information and Cloud Security, DDoS attack is one of the main concerning successful attack procedures. Since DDoS attack can deny and disturb the service of one or more IoT nodes simultaneously, which causes the loss of data for any company. In other words, this will be a serious threat to the organization. ML models are implemented for resolving various Cybersecurity related problems such as Malware detections, spam mails, vulnerabilities in software, detection of an anomaly, biometric and facial recognition, and many other areas. It is essential to simulate the discrete event DDoS attack model to evaluate the efficiency of the detection model for in-house study on DDoS attacks and preventions. This paper proposes a model to analyze the impact of DDoS (Distributed Denial of Service). The implemented model was developed using Mininet and POX controller on open source. The resultant network traffic is generated as the dataset. The values of the dataset were compared and plotted with various Machine learning methods for the prediction of DDoS attacks.

**Keywords:** DDoS Attack, SDN, Mininet, AI/ML and DDoS Attack, Cyber Security and AI/ML

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 298 Implementation of google firebase in Android app development

Paper ID V7I4-1810 · Pages 1517-1520 · Computer Science And Engineering

**Rahul Kumar**, Student, Raffles University, Neemrana, Rajasthan
**Rajendra Singh**, Professor, Raffles University, Neemrana, Rajasthan

The web application has gotten increasingly more dependent upon the enormous measure of the information base and disorderly information, for example, recordings, pictures, sound, text, documents, and other subjective sorts. It is hard for Relational Database Management System (RDBMS) to deal with unstructured information. Firebase is a somewhat new innovation for dealing with a huge measure of unstructured information. It is extremely quick when contrasted with RDBMS. This paper centers around the utilization of Firebase with Android and targets acclimating its ideas, related wordings, benefits, and impediments. The paper likewise attempts to exhibit a portion of the highlights of Firebase by creating an Android application.

**Keywords:** Firebase, Android, RDBMS

Read Full Paper · Download PDF · Back to index

---

## 299 Evolution of MTP act and ambiguous women’s rights in India: A critical review

Paper ID V7I4-1813 · Pages 1521-1525 · Public Health

**Dr. Jaya Bhargavi Paladugu**, Student, University of Hyderabad, Hyderabad, Telangana

In India, the Medical Termination of Pregnancy (MTP) act 1971 has evolved a lot, to an extent that it has brought much liberty to women with some interim to the basic sexual and reproductive health rights. In the latest MTP 2021 amendment, the legal time of MTP has been extended from 20 weeks to 24 weeks, which was the need of the hour. Even after this amendment, women's basic reproductive rights aren’t assured due to the trends and acceptance of society which again has a long way to go. The system runs more as a doctor-centric rather than a women's rights-based framework. In this article, we have discussed the detailed chronology of evolution, comparison of the original act of 1971 with the latest amendment 2021; Women's reproductive rights, a few modifications that can be done to further improve the objectives, people’s social awareness, and acceptance to MTP. Many more gaps are discussed thoroughly, and required modifications are suggested.

**Keywords:** Evolution of MTP, Reproductive Rights, Sexual Health Rights, Social Awareness on MTP.

Read Full Paper · Download PDF · Back to index

---

## 300 Evolution and growth of rural credit in India: A review

Paper ID V7I4-1784 · Pages 1526-1532 · Commerce

**Shilpa Chauhan**, Research Scholar, Himachal Pradesh University, Shimla, Himachal Pradesh
**Dr. Usha Sharma**, Professor, Himachal Pradesh University, Shimla, Himachal Pradesh

It has been aptly reiterated that “by providing finance, development follows” as finance is the lifeblood of economic development. Credit plays a significant role in the Indian economic system also. Indian economy is agriculture-based where agriculture is regarded as the cornerstone that provides a source of livelihood to its

© 2021, IJARIIT.COM All Rights Reserved

rural population. The credit is a synergist that even out the process to stimulate the farm and non-farm sector development including rural industrialization business and service segment of the economy. This paper attempts to review the evolution of rural credit in India and study its status and growth hitherto. Analyzing the background policy interventions in the Indian rural financial system will help in understanding the various phases of credit delivery patterns. The paper also throws light on whether people in rural areas are actually depending on formalized credit for meeting their financial needs or are still dependent upon informal sources.

**Keywords:** Evolution, Growth, Policy interventions, Rural Credit

Read Full Paper · Download PDF · Back to index

---

## 301 Studies on a new species of Genus Senga (Dollfus, 1934) Cestoda: Ptychobothridae, from freshwater fish Mastacembelus armatus at. Wakadi Dam, Dist. Parbhani (M.S.) India

Paper ID V7I4-1764 · Pages 1533-1538 · Zoology

**R. G. Pradhan**, Associate Professor, Lal Bahadur Shastri Junior and Senior College, Partur, Maharashtra
**R. R. Dandawate**, Associate Professor, Arts Commerce and Science College, Ahmadnagar, Maharashtra

The present discussion deals with the study of Genus Senga wakadii sp. nov. collected from freshwater fish Mastacembelus armatus at. Wakadi dam, Dist Parbhani (M.S.) India. The present cestode parasite's character comes closer to the earlier known species of Genus Senga but also having some differentiating remarkable characters. Scolex is vessel shaped with two bothria, the inner portion of bothridia is convoluted, overlapped internally in the middle, and extends up to the posterior part of the scolex. Rostellar hooks are arranged in a circular manner, rostellar hooks are 30-35 in numbers. Mature segment two to three times broader than long, testes 55-65 in number, the cirrus is a thin tube, within the cirrus pouch. Vas deferens is a thin slightly curved. The vagina arises from the posterior side of the cirrus pouch as a short narrow tube. Ovary large, bilobed, located at the posterior side of the segment, Uterus starts from ootype, median, balloon-shaped, and vitellaria are granular

**Keywords:** Senga, Mastacembelus Armatus, Hooks, Wakadi

Read Full Paper · Download PDF · Back to index

---

## 302 Cellular agriculture: The way ahead for food, textile, and cosmetic industries

Paper ID V7I4-1765 · Pages 1539-1546 · Biotechnology

**Poorvi Kamble**, Student, Thadomal Shahani Engineering College, Mumbai, Maharashtra
**Rujul Tamhane**, Student, Thadomal Shahani Engineering College, Mumbai, Maharashtra
**Ishita Tarnekar**, Student, Thadomal Shahani Engineering College, Mumbai, Maharashtra
**Shikhaa Sushil**, Student, Thadomal Shahani Engineering College, Mumbai, Maharashtra
**Swarangi Samant**, Student, Thadomal Shahani Engineering College, Mumbai, Maharashtra
**Sruthi Menon**, Assistant Professor, Thadomal Shahani Engineering College, Mumbai, Maharashtra

Cellular agriculture, an alternative to animal-based proteins, is an emerging field of biotechnology that aims at

© 2021, IJARIIT.COM All Rights Reserved

developing sustainable products. Harvesting of animal products from cell cultures rather than animals is a promising technology that draws together different disciplines ranging from industrial biotechnology, synthetic biology, materials science, and tissue engineering to social sciences, history, philosophy, and design. Tissue engineering and fermentation are the two major approaches to cellular agriculture. This review extensively discusses some prominent applications of cellular agriculture, namely in the meat, fish, leather, silk, and cosmetic industries. It incorporates the procedures, drawbacks, challenges, and the current market progress of these environment-friendly alternatives. Further research in technological advancements, bioreactor designs, cell scaffolding, bioprinting, and other modern methods will pave a path to large-scale production. Cellular agriculture is the future of diverse industries. With growing research, it will overcome various challenges and limitations of conventional animal farming. The products formed are advantageous and will be valued for their environmental, ethical, health, and safety benefits over the animal-derived versions.

**Keywords:** Cellular Agriculture, Sustainable, Fish, Meat, Leather, Artificial Silk, Cosmetics

Read Full Paper · Download PDF · Back to index

---

## 303 Effects of different circuit training methods on agility and speed ability: A comparative study

Paper ID V7I4-1812 · Pages 1547-1551 · Physical Education

**Sk Saha Alam**, Research Scholar, Jadavpur University, Kolkata, West Bengal
**Dr. Sudip Sundar Das**, Professor, Jadavpur University, Kolkata, West Bengal

The intention of the present study was to investigate the effects of continuous and interval circuit training on the agility and speed ability of secondary-level school students. Total of 60 boy students, age level 13 to 16 years were randomly selected as samples from the Purulia district of West Bengal, India. Samples were equally divided into three groups: continuous circuit training group (CCT), interval circuit training group (ICT), and Control group (CG). CCT and ICT groups participated in a specific training program for three days per week; the training was composed for 12 weeks. On the other hand, CG was on normal life activity. The data was collected before and after the application of training protocol on agility and speed. ‘t’ test and ANOVA were used to find out the statistical significance. The level of significance for the study was selected as 0.05. The investigation concluded that interval and continuous circuit training does have a significant positive effect to enhance Physical fitness components' speed and agility even after 12 weeks of training on secondary level school students.

**Keywords:** Sports Training, Circuit Training, Interval Training, Continuous Training, Speed, Agility

Read Full Paper · Download PDF · Back to index

---

## 304 Sustainable Municipal Solid Waste Management through 3R Initiatives in India: Lessons to be learned from the success stories

Paper ID V7I4-1816 · Pages 1552-1557 · Sustainable Solid Waste Management

**Priyamvada Singh**, Research Scholar, Jamia Millia Islamia, New Delhi, Delhi

With the rising quantity of waste on a global and national level and more serious projections in the coming

© 2021, IJARIIT.COM All Rights Reserved

future all over the world, sustainable solid waste management practices and initiatives have become a necessity like never before. Rampant Increase in population urbanization and resultantly more consumption is adding to the already existing load of waste. It has become a compulsion thus that solutions to these problems are timely thought of and practices and initiatives that reduce the burden of waste are put into place. This paper thus attempts to understand the dynamics of the 3R perspective in sustainable waste management in the Indian context. It tries to understand the principles of 3R and then find out the scope of applying these principles in India and the challenges that it faces in the present scenario. This paper attempts to discuss the successful initiatives that have been taken by a number of cities in India to reduce, reuse, and recycle. The study mainly relies on available online and Secondary data and successful case studies in 3R in India. It tries to explain what are the efforts taken to keep the socio-economic dimension in India that can make SWM sustainable in India and what future steps can be taken to make it a reality.

**Keywords:** Solid Waste, 3R, Sustainable, Initiatives

Read Full Paper · Download PDF · Back to index

---

## 305 Improved corpus base English to Hindi language translation sequence-based deep learning approach

Paper ID V7I4-1825 · Pages 1558-1564 · Deep Learning

**Manmeet Kaur**, Student, Punjabi University, Patiala, Punjab
**Charanjiv Singh Saroa**, Assistant Professor, Punjabi University, Patiala, Punjab

While the NMT system operates conventional techniques such as rule-based machine translation and statistical machine translation, the manual human translation still falls short. Our two NMT systems, RNN sequence-to-sequence, and transformer-based models are used in this paper for English-to-Hindi translation and are compared to the current MT output for the BLEU score. It outperforms current performance systems. However, a thorough review of the translations projected shows that in instances when an unknown word is recognized, blank lines emerge in the output and the source phrase is translated in a number of ways, our NMT systems need to be improved. In addition, the finding of the effect of the bi-gram model on the Hindi translation and relation between comparable Indian languages provides a new research route for direct translation between couples of similar languages. It may be possible to circumvent the limitation of available parallel data in low-resource languages by using linguistic similarities to get accurate results. With English to Hindi, an LSTM-based care mechanism enhances the MT output of the GRU-based NMT system. We also evaluated MT output performance in the Indian language, Hindi, using the BLEU-1, BLEU-2, and BLEU3 scores. For an Indian language like Hindi, it has been pointed out that it is not sufficient to assess on the basis of the BLEU1 score, as in prior research. In any configuration of NMT systems, the average BLEU score obtained is close to the matching bi-gram BLEU score.

**Keywords:** Translation Hindi, Deep Learning, Score, Machine Learning

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 306 Internet of Things for personal healthcare

Paper ID V7I4-1824 · Pages 1565-1570 · Iot

**Tabeena Reyaz**, Student, Adesh Institute of Technology, Gharuan, Punjab
**Dr. Rajat joshi**, Professor, Adesh Institute of Technology, Gharuan, Punjab

Technologies are not still and the Internet of Things concept introduces a lot of new possibilities for innovation, new products, and user applications. All devices become truly personal and the medical sector is not an exclusion. Telemedicine is a new approach to diagnostic and treatment, while smart healthcare solutions provide the user an ultimate health control. The purpose of my study is to understand what the eHealth sector is and to provide clear guidelines for business and IT specialists on how to enter the smart healthcare market. I analyzed the current market situation, made audience research in Fin- land, and prepared a whitepaper with basic rules, which can help to develop and design a valuable, secure product for personal use, which gives maximum profit for the company and ultimate usage convenience and experience for selected consumers. The following topics are covered in the paper: needs and requirements of healthcare IoT, regulations, adoption, IoT user experience, security, and so on. I hope my work will help specialists from different fields to understand the personal healthcare Internet of Things and to open new operating areas. Finally, I applied all collected theoretical knowledge and designed a smart insulin pump, which is an innovative and new product on today's market.

**Keywords:** Internet of Things, Personal Healthcare

Read Full Paper · Download PDF · Back to index

---

## 307 Literature survey of black nightshade (Solanum Nigrum Linn)

Paper ID V7I4-1782 · Pages 1571-1573 · Medicinal Plants

**S. Nithya**, Student, Nandha College of Pharmacy, Erode, Tamil Nadu

Night black shade (Solanum Nigrum) is an important medicinal plant widely used in the Unani system of Medicine. (Family – Solanaceae). The plants are cultivated throughout the country in dry parts. Common in cultivated lands, roadsides and gardens. The plants are prescribed in various aliments like – Ascites, Piles, Chronic Cirrhosis of the liver, Gonorrhoea, Gouty joints, and various skin disorders. Through this paper, the effort has been to collect information on the Medicinal properties of Mako (Solanum Nigrum) plant species.

**Keywords:** Solanum Nigrum Linn, Manathakkali, Black Nightshade, Makho

Read Full Paper · Download PDF · Back to index

---

## 308 Ideas and suggestions for integrating future urban areas with roads & highways development for economic prosperity

Paper ID V7I4-1814 · Pages 1574-1578 · Urban Planning

**Dinesh Bhaskar Bandivdekar**, The Engineers Forum, Thane, Maharashtra

This paper focuses on how we should effectively utilize and develop the civil engineering infrastructure - for the much-needed growth and development considering that 42% of India's population will be staying in urban

© 2021, IJARIIT.COM All Rights Reserved

areas by 2030. it will be highly imperative that India builds more infra facilities in urban areas and develop suburbs and satellite cities and focus on smart area development/ smart satellite cities to accommodate the movement & shift to the cities/ urban areas. this needs government support in terms of land, buildings, medical personnel, and their training colleges in the first place. there has to be some nodal and well-established government body that drives the entire process of creating a healthy infrastructure first.

**Keywords:** India, Development, Infrastructure, Highways, Roads, Income Tax, Decongestion, Leveraging Existing Development in Roads and Highways, Growth, Medical, COVID-19

Read Full Paper · Download PDF · Back to index

---

309

## Credit card fraud detection using Machine Learning

Paper ID V7I4-1826 · Pages 1579-1584 · Ai

**Sree Maurya Eluri**, Student, Chalapathi Institute of Engineering and Technology, Lam, Andhra Pradesh
**K. Madhu Kiran**, Professor, Chalapathi Institute of Engineering and Technology, Lam, Andhra Pradesh

The task is primarily centered around charge card misrepresentation location in the genuine world. An incredible development in the quantity of charge card exchanges has as of late prompted a significant ascent in fake exercises. The intention is to get products without paying or to get unapproved assets from a record. Execution of effective misrepresentation recognition frameworks has gotten basic for all charge cards giving banks to limit their misfortunes. Perhaps the most vital difficulty in making the business is that neither the card nor the cardholder should be available when the buy is being made. This makes it unthinkable for the trader to check whether the client making a buy is a valid cardholder or not. With the proposed conspire, utilizing irregular timberland calculation the exactness of recognizing the extortion can be improved. Order interaction of irregular timberland calculation to examine informational collection and client current dataset. At last, streamline the exactness of the outcome information. The presentation of the procedures is assessed dependent on exactness, affectability, and explicitness, and accuracy. The presentation of the procedures is assessed dependent on exactness, affectability, and explicitness, and accuracy.

**Keywords:** Credit Card, Fraud, Classification, Transactions, Precision, Random Forest

Read Full Paper · Download PDF · Back to index

---

310

## Online reservation system

Paper ID V7I4-1821 · Pages 1585-1586 · Computer Science Enginering

**Navin**, Student, Raffles University, Neemrana, Rajasthan
**Rajendra Singh Khatana**, Professor, Raffles University, Neemrana, Rajasthan

In this project, we have used Microsoft Visual Studio (ASP.net) as frontend and SQL Server 2008 as a backend the topic is of online hotel booking system "A complete solution for Banquet Hall and Hotel Booking" is selected for the purpose of this project and the algorithms used in Online hotel booking is the main focus. This program is intended to reduce the manual work related to booking a banquet hall for a specific purpose. This uses specific locations and makes the booking of banquet hall easier and effective for the user. This system provides information related to the banquet hall and on basis of customer preference like capacity it proposes and

© 2021, IJARIIT.COM All Rights Reserved

recommends the best banquet hall available at a particular location. The database would include a series of information and with help of algorithms, it combines the preferences of the customer and provide the best banquet hall. The specific features of every banquet hall would be added to the database to provide the best method of booking.

**Keywords:** Algorithms, Manual Work, Specific Locations, Customer Preference

Read Full Paper · Download PDF · Back to index

---

## 311 Hybrid Cryptography for Secured Cloud Computing

Paper ID V7I4-1835 · Pages 1587-1593 · Cloud Computing

**Sanjana Krishnamsetty**, Research Scholar, Chalapathi Institute of Engineering and Technology, Lam, Andhra Pradesh
**B.Ravindra babu**, Professor, Chalapathi Institute of Engineering and Technology, Lam, Andhra Pradesh

Cloud is the ideal method to hold our information consistently. However the secrecy of our information is a major worry in the treatment of cloud information. Information honesty, verification and privacy are fundamental security dangers in the cloud. Cryptography methods and Outsider Evaluator (TPA) are extremely valuable to force the uprightness and classification of information. In this paper, a framework is proposed Improving information insurance that is housed in distributed computing. The recommended arrangement utilizes the RSA calculation and the AES calculation to encode client information. The hybridization of these two calculations permits better information security before it is put away in the cloud. Secure hash calculation 512 is utilized to register the Hash Message Confirmation Code (HMAC). A steady review program is additionally presented for Outsider Reviewer (TPA) use

**Keywords:** Cloud, Cryptography, TPA, HMAC, Encryption, Decryption

Read Full Paper · Download PDF · Back to index

---

## 312 Anti-malarial drug therapy employing falcipain2 inhibitors

Paper ID V7I4-1832 · Pages 1594-1597 · Bioinformatics And Computational Biology

**Swarnali Sarkar**, Student, Vellore Institute of Technology, Vellore, Tamil Nadu

Malaria is one of the most infectious disease affecting 300-500 million people every year. The increased resistance of the parasitic strains to anti-malarial drugs have made it all the more difficult to combat the disease at an early stage. Therefore, there is an immediate need to come up with novel strategies to arrest the spread of infection. We have been able to conclude that falcipain2, cysteine protease from P.falciparum is mainly responsible for degradation of haemoglobin and thus inhibitors of falcipain2 will block the hydrolysis of haemoglobin, preventing the further spread of infection. This article mainly focuses on the identification of new drug targets for antimalarial therapy and characterization of falcipain2 inhibitors by carrying out docking studies and statistical analysis. We have used docking softwares to identify the specific conformations of ligands that show the maximum binding affinity with the target and further analysed these results by generating descriptors manually to perform QSAR. We have made use of regression studies to perform similarity analysis by generating optimum models using statistical software. The models were generated with r2 =0.99, r2cv= 0.99, s= 0.002 when Ds and GATS8s descriptors were correlated. The main classes of

© 2021, IJARIIT.COM All Rights Reserved

falcipain2 inhibitors include peptides comprising of vinyl sulphones, aldehydes, and ketone groups7. These peptides were tested for anti-malarial activity and two potential hits were identified.

**Keywords:** Malaria, Falcipain2 Inhibitors, QSAR, Docking

Read Full Paper · Download PDF · Back to index

---

313

## Estimation of public building (office building) in Google spreadsheet

Paper ID V7I4-1833 · Pages 1598-1600 · Civil Engineering

**Sufiyan Hidayat Khan**, Student, Vivekanand Education Society's Polytechnic College, Mumbai, Maharashtra
**Rohit Vasudev Lassi**, Student, Vivekanand Education Society's Polytechnic College, Mumbai, Maharashtra
**Om Rajesh Dhonnar**, Student, Vivekanand Education Society's Polytechnic College, Mumbai, Maharashtra
**Bhushan Umesh Alhat**, Student, Vivekanand Education Society's Polytechnic College, Mumbai, Maharashtra
**Nyra Hiren Narang**, Professor, Vivekanand Education Society's Polytechnic College, Mumbai, Maharashtra

Traditionally, estimating meant using Microsoft Excel to create a spreadsheet on your desktop or server. With the rise of cloud-based tools, today you might use Excel online, which allows you to collaborate with others in an online spreadsheet or Google Sheets which is a similar online tool. Which version you choose will likely depend on your company setup and whether you use Outlook (Microsoft) or Gmail (Google) for your general company email and functions. If you do happen to find any mistakes you can simply go back and edit the drawings and reprocess your file. About estimating, it is done to find out quantity of materials required for a particular project, also rate analysis if done for the same work which needs to be done. Rate analysis includes finding out cost of materials, labours with extra charges which are included in further chapters. The plans is made using AutoCAD, which are given at the end of project in appendix. This plans were made and estimation was done of the building in plan

**Keywords:** Estimating, Spreadsheet, Rate Analysis

Read Full Paper · Download PDF · Back to index

---

314

## A research study on the rise of crude oil prices with global context

Paper ID V7I4-1836 · Pages 1601-1609 · Business Management

**Arhant Bubna**, Student, The Cathedral and John Connon School, Mumbai, Maharashtra

The price of Crude oil reached a 32 month high as the price of Brent crude rose by 6 tenths of a percentage to $73.29. However the surge is not expected to end here. The rise in the price of crude oil has lead to the surge in the price of petrol and diesel which is already becoming unaffordable for the common man. The rise in price of crude oil can be explained by Adam Smith also known as the father of economics, theory of supply and demand. In the year 2020 the world was plagued with an unforeseen once in a century pandemic. .During the time of the pandemic many countries were forced to put its people on Lockdown which lead to a drastic fall in demand which lead to crude oil being traded on the negative thus at that time a decision was taken by the Organization of Petroleum Exporting Countries (OPEC) to cut the supply. In the year 2021 with the discovery of the Vaccine against the coronavirus Economic activity has resumed in most parts of the world which lead to a sky rocketing of demand with which the supply, previously cut could not match. The current price of Brent

© 2021, IJARIIT.COM All Rights Reserved

crude is now at $52 a barrel at the time of Lockdown it was trading at 19 dollars a barrel. According to OPEC's monthly report of June they expect the demand of crude oil 96.58 barrels per day when in 2020 it was 90.63 barrels per day. According to the same report the demand of crude oil is said to further increase in the second half of the year with more and more of the world resuming economic activity. The international energy agency has predicted that by 2022 the pre pandemic level demand will be surpassed and has asked all oil producing nations to "open the tap" to continue to keep the world running. The rapid increase in the price of crude oil has had a significant impact on the state of India. Petroleum prices have skyrocketed and have become almost unaffordable to the common man. The price of petrol has been raised by 10.8 rupees a litres and in the same time period the price of diesel has been raised by 11.5 rupees a litre with both fuels being sold upwards of rupees 100 a litre.

**Keywords:** Crude Oil Price, Growth of Indian Economy, Inflation, Imports of Crude Oil, Balance of Trade Deficit, GDP

Read Full Paper · Download PDF · Back to index

---

## 315 Flexible manufacturing technology – A review of facility design and the scheduling

Paper ID V7I4-1840 · Pages 1610-1615 · Industrial Engineering

**Ershad Jahagirdar**, Student, Independent Researcher
**Harish**, Student, Independent Researcher

This paper presents developments on facility layout design and the scheduling in Flexible Manufacturing Systems. We address conventional ways of design and issues related to layout design. We discuss development and approach in facility design for layout design, P/D points, and flow path design. Also, various approaches to scheduling in FMS are discussed in the paper. Various literature is reviewed and formulated in a simplified manner.

**Keywords:** Facility Design, Flexible Manufacturing System, Scheduling

Read Full Paper · Download PDF · Back to index

---

## 316 Direct Control of Instantaneous Torque of Switched Reluctance Motor using ANFIS Controller in Generating mode and Motoring mode

Paper ID V7I4-1790 · Pages 1616-1637 · Power Electronics

**Bagyalakshmi B.**, Student, CMR College of Engineering and Technology, Hyderabad, Telangana
**D. Bhanu Murthy**, Professor, CMR College of Engineering and Technology, Hyderabad, Telangana

© 2021, IJARIIT.COM All Rights Reserved

A flexible combination of vehicle modes and modified collision-brake vehicles can be used to control the quality of equipment and various processes. This type of SRM electric drive is very different from traditional electric drives in both construction and control. The paper looks at the design features of the SRD brake control system. According to it is proposed a novel algorithm for direct control of rapid torque. Analysis of the dynamics of electric and mechanical driving during the transition of adjacent sections is analyzed. The effectiveness of the proposed control method is proven by the simulation model. In addition, factors affecting the accuracy of the high-speed control system are analyzed.

**Keywords:** Torque control in generating mode , SRD torque control, Using ANFIS controller, Controlling torque by current and flux rating

Read Full Paper · Download PDF · Back to index

---

317

## Rape: Legal changes towards justice for rape

Paper ID V7I4-1831 · Pages 1638-1641 · Law

**Isha Pandey**, Student, Symbiosis Law School, Nagpur, Maharashtra

The word “rape” has come from the Latin word “rapio” which means to “seize.” The crime of Rape is a major problem in India and this paper tries to highlight the same issue by giving an overview of sexual violence cases and the amendments brought to it. The criminal procedure code, Indian penal code, and Indian Evidence Act are the milestones discussed in this paper to give light on such sensitive topics of Rape in India. The stigma which exists in our society for a very long period of time is RAPE. The dictionary meaning of the word rape is “the ravishing or violation of a woman.” The woman who is the victim of the rape undergoes a traumatic situation and it is really very difficult for a woman to come out of this painful trauma. In India Rape is considered a cognizable offense. There are many various provisions under IPC (Indian Penal Code) rape is defined under article 375[1] of IPC, 1860. The definition of the crime is defined under this article and also it prescribes the punishment of rape. When a man penetrates or does a sexual activity or sexual intercourse with a woman without her consent, it will amount to rape. Here penetration means that even the slightest touch of the penis to the vagina amounts to rape, it cannot be said that rape is not committed if the hymen is ruptured. Under IPC it has been clearly mentioned that no person can disclose the name of the rape victim and if anybody does so, he will be punished with either description for a term that may extend to two years and shall also be liable for a fine. That person who commits such crimes is considered a psychologically sadistic person who commits such shameful crime of Rape. It is regarded as a threatening act towards a woman, it creates fear and humiliation in the mind of the victim. It is not an assault only against a woman but against her family and community as well. Sexual violence and domestic violence is not only a national problem but a global problem. Though many efforts need to be done to provide justice to all the victims of Rape. Legislative acts and judicial judgments can bring major changes in society. Investigative officers and health care departments play a vital role in such sensitive matters especially during criminal trials going against the prosecutor. Every state should try to bring positive changes towards providing justice to sexual assault victims, 164(A) CrPC, Section 164A (7) CrPC, section 39 CrPC, section 375 IPC or 376 IPC, 176 CrPC, Section (1A),

© 2021, IJARIIT.COM All Rights Reserved

**Keywords:** Criminal Procedure Code, Indian Penal Code, Indian Evidence Act, Section 375[1], Section 376(2), Section 114(A), State of Karnataka v. Manjana, Section 157 CrPC, Section 173 CrPC, Section 376, 376A, 376B, 376C, or 376D IPC, Section 53 (2) CrPC,

Read Full Paper · Download PDF · Back to index

---

## 318 The impacts of COVID-19 on the investment behavior of entrepreneurs in India

Paper ID V7I4-1856 · Pages 1642-1648 · Management

**Dr. Varsha Agarwal**, Assistant Professor, Jain (Deemed-to-be University), Bengaluru, Karnataka
**Findoliya Vidhiben Ashwin Bhai**, Student, Jain (Deemed-to-be University), Bengaluru, Karnataka
**Neha Suresh**, Student, Jain (Deemed-to-be University), Bengaluru, Karnataka

Investment behavior is directly proportional to market stability. The onset of COVID-19 rattled the economy and as a result, there was a steep decline in the market stability. Various investors across the globe have reacted to this sudden change by adapting to the situation and making amendments to their investment strategies. Similarly, entrepreneurs have done the same by adopting a certain methodology to approach investment and make profits in the investment industry during the pandemic. The purpose of this paper is to analyze qualitative factors of investment behavior of entrepreneurs such as mental stress and underlying mentality to understand their investment strategies and provide a few solutions to decrease their chances of losses when they invest in any securities, especially during the pandemic. Primary data is used to conduct the research so that entrepreneurs can anonymously provide their insight on what they think are factors and purposes of investment for someone who has active business operations underway.

**Keywords:** Investment, COVID-19, Market, Behavior, Entrepreneurs

Read Full Paper · Download PDF · Back to index

---

## 319 Identification of novel compounds to treat Alzheimer’s disease

Paper ID V7I4-1868 · Pages 1652-1655 · Bioinformatics And Computational Biology

**Swarnali Sarkar**, Student, Vellore Institute of Technology, Vellore, Tamil Nadu

Alzheimer’s disease or Alzheimer’s is a brain disorder characterized by progressive loss of neural functions and dementia in elderly people. It has perilous effects on memory and other cognitive activities. Apolipoprotein (APOE) is responsible for delivering cholesterol-rich lipoproteins to the bloodstream. The maintenance of optimum levels of cholesterol is absolutely necessary as an imbalance might lead to cardiovascular and neurological diseases. Out of the four alleles for the APOE gene, the main causative agent for the onset of Alzheimer’s is the e4 allele. APOE e4 allele leads to the production of amyloid plaques which further cause the accumulation of amyloid β peptides. The excess build-up of such toxic products leads to neuronal death giving rise to early symptoms of the disease. Our research mainly focuses on the identification of potential inhibitors against Sortilin (SORT1) and APOE receptors associated with Alzheimer’s. We have employed scientific software to identify the specific conformations of ligands that show the maximum interaction with the target compound and further analyzed these results by generating descriptors computationally for QSAR studies. The optimum

© 2021, IJARIIT.COM All Rights Reserved

model was generated with r2 = 0.794, s= 0.108. We have been able to select two ligands that can be used as potential drugs to treat Alzheimer's.

**Keywords:** Alzheimer's, QSAR, APOE Protein

Read Full Paper · Download PDF · Back to index

---

## 320 Experimental Stress Analysis of Worm Gear using 3D Photo Elasticity and its Validation through Finite Element Analysis

Paper ID V7I4-1876 · Pages 1656-1660 · Mechanical

**Kolase Sachin A.**, Student, Sahyadri Valley College of Engineering and Technology, Rajuri, Maharashtra
**Randhavan B. M.**, Assistant Professor, Sahyadri Valley College of Engineering and Technology, Rajuri, Maharashtra

one of the very important component of mechanical system involving motion transmission is gear assembly is Worm and pinion gear pairing is necessary to convert rotary motion into linear motion. The life of gear is important factor and the stresses developed on the tooth of the gear are one of the tedious task. Here, in the current work the stresses are analyzed using 3D photoelastic technique which is one of the promising techniques in stress analysis. The synthetic rubber material and the experimental stress analysis are conducted using polariscope in the laboratory. The result obtained shown promising approach to analyses the stresses in the 3D structure.

**Keywords:** Component, Gear, stress, 3D Photoelastic, Rubber material, Structure.

Read Full Paper · Download PDF · Back to index

---

## 321 Design and performance analysis of 1 mw solar photovoltaic energy system in iraqi using PVsyst software

Paper ID V7I4-1855 · Pages 1661-1666 · Electrical Engineering

**Bahaa Mohammed Najm**, Student, Andhra University College of Engineering, Visakhapatnam, Andhra Pradesh
**G.V. Siva Krishna Rao**, Professor, Andhra University College of Engineering, Visakhapatnam, Andhra Pradesh

Energy is the most important reason for global economic growth namely Required to support modern economic growth The economy depends on long-term access to energy from more reliable sources less cost, and less carbon dioxide emissions, and is environmentally friendly. The environmental concerns about power plants that run on fossil fuels and high fuel costs, pushing most countries of the world to research and develop renewable energy sources generating electricity using a renewable energy source are the only key to improving Energy efficiency energy quality issues, and sustainable energy savings. This goal can be achieved by installing small generators such as photovoltaic systems wind and fuel turbines Cells small turbines and generators of internal combustion engines Renewable energy in the world has many sources that are limited to two types, small and large-small uses of solar generators and wind turbines The large uses of aqueous biomass are geothermal solar energy and wind energy fuel cells. A 1 MW solar photovoltaic (PV) plant system has been installed at Diyala. This paper presents the design and performance analysis of this system using a PVsyst software package. The performance ratio and different losses that occurred in the system are also calculated. The average energy in the network is 1921 MW / H. Based on the simulation results developed in this paper, the practical PV grid-tied

© 2021, IJARIIT.COM All Rights Reserved

system has been implemented in the Diyala site

**Keywords:** Grid-Connected, Power Loss, Solar PV System, PVsyst Software, Performance Ratio

Read Full Paper · Download PDF · Back to index

---

## 322 Chronic kidney disease prediction using Machine Learning

Paper ID V7I4-1781 · Pages 1667-1670 · Computer Science Engineering

**Dr. K. V. Sambasiva Rao**, Professor, NRI Institute of Technology, Vijayawada, Andhra Pradesh
**J. Bhagya Lakshmi**, Student, NRI Institute of Technology, Vijayawada, Andhra Pradesh
**E. Likhitha**, Student, NRI Institute of Technology, Vijayawada, Andhra Pradesh
**Ch. Lakshmi Kalyani**, Student, NRI Institute of Technology, Vijayawada, Andhra Pradesh

The feature of Kidneys is to clear out the blood and to do away with wastes from the body. All of the blood in our body passes through the kidneys several instances a day. The kidneys get rid of wastes, manage the body's fluid stability, and modify the stability of electrolytes, it's feasible to lose as a good deal as 90% of kidney function without experiencing any signs and symptoms or problem. Kidney ailment is a silent killer detection and prevention need to be achieved before the scenario receives even worse and the situation is known as continual kidney sickness also known as chronic kidney disease (CKD) or a chronic renal disorder. It is essential to have powerful methods for early prediction of CKD, machine learning strategies are powerful in CKD prediction, In this paper, statistics are acquired from the patients, and then the prediction is done whether that individual is having any continual kidney disorder or not.

**Keywords:** Machine Learning, SVM, Random Forest, Chronic Kidney Disease, Disease Prediction

Read Full Paper · Download PDF · Back to index

---

## 323 Effect of gamma irradiation on the kinetics of ion exchange of Mg (ii), Zn (ii), Co (ii), Pb (ii) on DOWEX 50 wx8 (NH4+) in aqueous acetone – ammonium propionate media.

Paper ID V7I4-1853 · Pages 1671-1674 · Chemistry

**Kamble Rajan S.**, Associate Professor, Bhogawati Mahavidyalaya Kurukali, Maharashtra

Dedgaonkar [1] studied radiation effects on self-diffusion in polystyrene ion exchangers with functional groups So-3 in Mn+2 form and N (CH3) I -1 form. Samples exposed to gamma radiations up to a dose of 0.35 MGY showed lower values of diffusion coefficient at any given temperature than those of normal resins. Irradiation increased the energy of activation from 25.6 – 46. 5 kJ / mol-1 for the cation exchangers. Exchanger capacity of cation exchanger was un- influenced up to a dose of 2.5 MGY. The effect of gamma irradiation on the physicochemical properties of weakly basic polystyrene anion exchanger. The effect of gamma irradiation on ion-exchange characteristics of titanium vanadu phosphate was studied by Singh [2] After irradiation by gamma rays (10-9 rads) the colour of the resin changed from yellow to greenish-yellow. The capacity values and distribution coefficient values showed a slight increase upon irradiation the rates of exchange of Rb+/ h+ system were investigated on unirradiated and irradiated resin.

**Keywords:** Aqueous Ammonium Propionate, Un-Irradiated and Gamma Irradiated, Dowex 50 Wx8, Half Exchange Time (T

© 2021, IJARIIT.COM All Rights Reserved

1/2), Inter Diffusion Coefficient (D), Exchange Rate Constant (K)

Read Full Paper · Download PDF · Back to index

---

## 324 Performance and emission level studies of Simarouba Glauca biodiesel as an alternative fuel for diesel engine

Paper ID V7I4-1872 · Pages 1675-1680 · Alternative Fuels

**Dr. Shripad Diwakar**, Assistant Professor, BMS Institute of Technology and Management, Bengaluru, Karnataka

Biodiesel is a non–toxic, biodegradable, and renewable alternative fuel that can be used with little or no engine modifications. Biodiesel is currently expensive but would be more cost-effective if it could be produced from low–cost non-edible oils. The objective of this study was to investigate the effect of the biodiesel produced from non-edible oils on engine performance and emissions. In this work, biodiesel was produced from Simarouba glauca oil using base-catalyzed transesterification. The properties of the biodiesel were determined as per ASTM standards and compared with the diesel. From the property analysis, it is observed that the properties of the biodiesel are better than the raw oil and close to the diesel. From the engine tests, it is observed that the engine performance is close to the diesel.

**Keywords:** Biodiesel, Renewable, Non-Edible Oils, Simarouba Glauca, Performance, Combustion, Emission, Astm Standards

Read Full Paper · Download PDF · Back to index

---

## 325 Line follower & obstacle avoider robot

Paper ID V7I4-1845 · Pages 1681-1683 · Electrical Engineering

**Yuvaraj Ganesha**, Student, Al Shabaka Technical Institute, Dubai, UAE
**Maninder Singh Balbir Singh**, Student, Al Shabaka Technical Institute, Dubai, UAE
**Arumugam Ganesan**, Head of Engineering, Al Shabaka Technical Institute, Dubai, UAE

Of gram into the Arduino chip. Arduino vehicle contains Arduino microcontroller with basic mobility highlights. We need to make an android application that will furnish the client with an interface to connect with the Arduino-controlled vehicle. The interface is not difficult to utilize and gives criticism from the Arduino microchip through the Wi-Fi subsequent to offering guidance to Arduino for different activities through the interface by means of a Wi-Fi module. Arduino programs contain directions intervening between the android regulator and the Arduino vehicle. Android portable controller utilizes distinctive versatile sensors to direct movement. Subsequent to doing the entirety of this we have test this undertaking completely and find the greatest no. of mistakes and wrong rationale in the chip program. Subsequent to doing this no one but we can say that we have had the option to make according to our objective portrayed.

**Keywords:** Arduino Bot, Obstacle Avoiding, Line Following, Arduino Microprocessor

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 326 Camel model analysis of select public and private sector banks in India

Paper ID V7I4-1867 · Pages 1684-1688 · Finance

**Shariqua Nishat**, Research Scholar, Osmania University, Hyderabad, Telangana

The financial performance of banks has gained significant importance in recent years. It is a blueprint of the financial affairs of a business concern. Financial performance analysis is mainly done to compare the growth, profitability, and financial soundness of banks by diagnosing the information contained in the financial statements. It is also useful for the measurement of the overall financial health of the organization over a given period of time. The paper evaluates the financial performance of select public and private sector banks for a five years period from 2016 to 2020.CAMEL (Capital Adequacy, Asset, Management Efficiency, Earnings, Liquidity) model measures the performance of banks on the basis of five parameters viz. Capital adequacy, Asset quality, Management quality, Earning quality, and Liquidity quality.

**Keywords:** Axis Bank, Banks, CAMEL Model, Performance, SBI

Read Full Paper · Download PDF · Back to index

---

## 327 Segmentation approach for brain tumor detection

Paper ID V7I4-1857 · Pages 1689-1693 · Ai And Machine Learning

**Shreyash Gupta**, Student, RV College of Engineering, Bengaluru, Karnataka
**Shreyas S.**, Student, RV College of Engineering, Bengaluru, Karnataka
**Lalitha V. P.**, Professor, RV College of Engineering, Bengaluru, Karnataka

The task of detecting tumors is an important one as it can lead to many lives being saved as nearly 20k lives are lost every year due to brain tumors. The task is challenging as in few cases brain tumors are not detected in the early stages. With the help of artificial intelligence, this gap can be bridged. The task of detecting regions of tumors can be classified into the popular computer vision task of image segmentation. Given the actual MRI scans and the masks representing the region of the tumor, the machine learning models can learn the functions which map the regions to the presence or nonpresence of the tumor. The models are trained using a pair of MRI images and corresponding masks and the given an MRI image, the model should detect the region of the tumor if present. This paper explores the different state-of-the-art architectures to perform the task of image segmentation.

**Keywords:** Computer Vision, Artificial Intelligence, Segmentation, Machine Learning

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 328 Effect of rebar coating in prevention of corrosion in RC structure

Paper ID V7I4-1778 · Pages 1694-1697 · Civil Engineering

**Thejus H. R.**, Student, Raja Rajeshwari College of Engineering, Bangalore, Karnataka
**Sanjay B. N.**, Student, Raja Rajeshwari College of Engineering, Bangalore, Karnataka
**Ravikumar R.**, Student, Raja Rajeshwari College of Engineering, Bangalore, Karnataka
**Santhosh G.**, Student, Raja Rajeshwari College of Engineering, Bangalore, Karnataka
**Shalini G. V.**, Assistant Professor, Raja Rajeshwari College of Engineering, Bangalore, Karnataka

Corrosion of the reinforcement in concrete structures had been realized to be at serious problem world wide in the 60s & 70s & the number of damages still increased considerably in the 80s. Corrosion in steel reinforcement is one of the most significant factors in the deterioration of Reinforced Concrete Structures Rebars Corrosion carbonation of Concrete & Chloride Attack Affects almost 50% The Durability of concrete structures. Earlier studies Indicated the Reinforced Concrete structures Remain durable for the whole of their design life, Approximately more than 60 years, Even maintenance free. The purpose of this study is to evaluate and compare the relative merits of the two coating systems for reinforcing bars in concrete. Also this study helps to know the nature and characteristics of both epoxy coated and Zinc Coated Steel for use as reinforcement in concrete. Also presented is an overview of the results from recent experimental work on the comparative corrosion behavior of uncoated Steel, epoxy coated steel, and Zinc Coated Steel in concrete.

**Keywords:** Rebar, Corrosion, Epoxy ,Zinc, Reinforcing Steel

Read Full Paper · Download PDF · Back to index

---

## 329 Lane detection and object detection system steering advisory for driver

Paper ID V7I4-1850 · Pages 1702-1705 · Machine Learning

**Vinutha H.**, Professor, RajaRajeswari College of Engineering, Bengaluru, Karnataka
**Shivam Zagade**, Student, RajaRajeswari College of Engineering, Bengaluru, Karnataka
**Saima Sharieff**, Student, RajaRajeswari College of Engineering, Bengaluru, Karnataka
**Saniya Taj**, Student, RajaRajeswari College of Engineering, Bengaluru, Karnataka

Lane detection and tracking modules are now regarded as essential in the development of an Intelligent Transportation System (ITS). Different vision-based algorithms that are being used in autonomous vehicles to determine road lanes are presented, reviewed, and compared in this proposed work. The main components are lane departure, lane tracking, collision avoidance, driver assistance system. Lane departure component assists in keeping the vehicle stable on the desired lane on the road. The front collision avoidance component will detect the road's frontal obstruction and shows up a pre-collision/proximity warning signal. The notice is based on the vehicle's speed and the object's distance from the cars. According to current research, the system can only identify one lane marking set in real-time and is unable to provide extra lanes for assistance in scenarios such as lane closures, road repairs, and car accidents that impede the driving lane. The project proposes a method for determining the marking of two lanes that might be used in conjunction with a detecting system to detect obstructions on the road ahead of the vehicle. This method takes a strong approach to lane detection and performs admirably in a variety of lane types.

© 2021, IJARIIT.COM All Rights Reserved

**Keywords:** Lane Detection, Object Detection, Image Processing, Image Segmentation, openCV, Haar Cascade Algorithm

Read Full Paper · Download PDF · Back to index

---

## 330 Role of Information Technology in mass customization of the manufacturing process

Paper ID V7I4-1874 · Pages 1706-1712 · Infomration Technology

**Uday Bapuji Joshi**, Research Scholar, Thadomal Shahani Engineering College Mumbai, Maharashtra
**Dr. G. T. Thampi**, Professor, Thadomal Shahani Engineering College Mumbai, Maharashtra

The current manufacturing sector is defined by rapid globalization, arbitrary and heterogeneous markets, and a high rate of products customization. Considering the factor of mass customization, the review paper explores the impact of information technology (IT) in tailor-making electronic goods as per customer demands in India. The paper efficiently extrapolates the benefits of Mass Customization (MC) in a manufacturing sector and later measures its intensity when IT (Industry 3.0 application and then Industry 4.0) is applied in unison with it. Supply chain management is an important phase of manufacturing products that can be made proficient in MC by introducing IT applications like Customer Relationship Management and Enterprise Resource Planning. Through the use of IT, supply chain planning and supply chain integration can significantly enhance the supply chain of business in saving cost, resources, and can initiate better management between coordinators along with facilitating the systematic flow of information at every stage. Besides, substantiating the benefits and ways in which MC can adequately cope with individual demands, the review also dispenses information about the common challenges faced by the company in abiding MC mechanism. The main findings and discussion will evidently state the use of IT in MC manufacturing processes of consumer electronic products. The review also discusses the state-of-the-art technologies currently used for MC. Industry 4.0 applications are widely used to seek better outcomes of customization. IT with industry 4.0 applications like Big Data, Internet of Things, and Cloud Computing can help in further broadening the scope of MC manufacturing.

**Keywords:** Mass Customization, Information Technology, Impact, Electronic Products, Industry 4.0

Read Full Paper · Download PDF · Back to index

---

## 331 Branding Women as Pseudo- Feminists: Taking Away Women’s Rights to be Angry Against Injustice

Paper ID V7I4-1879 · Pages 1713-1716 · History- Gender Studies

**Fiona Cyril Creado**, University of Mumbai, Mumbai, Maharashtra

As per Merriam-Webster (2021), Feminism can be defined as the advocacy of and belief in the social, political, and economic equality of the sexes expressed on behalf of women's rights and interests. One of the popular terms that are being increasingly used to describe modern feminists is 'pseudo-feminist. This paper reflects on the origin and meaning of the term pseudo-feminism to ascertain whether the use of such a term takes away women's right to be angry against injustice. Through careful consideration of the injustices encountered by women historically and different approaches to feminism, the paper establishes that the use of terms like pseudo-feminism undermines feminist causes and unfairly demands women to be not angry with the gender

© 2021, IJARIIT.COM All Rights Reserved

who have since time immemorial spewed injustice against them.

**Keywords:** Feminism, Pseudo-Feminist, Injustice, Australian Women, Women'S Rights, Gender Studies

Read Full Paper · Download PDF · Back to index

---

## 332 Effect of social media-based counseling on study habits of distance learners

Paper ID V7I4-1882 · Pages 1717-1722 · Education

**Dr. Srutirupa Panda**, Lecturer in Education, Nabakrushna Choudhury College of Teacher Education, Angul, Odisha

In this modern era of technological advancements, teaching-learning activities along with counseling get privileged with the use of information communication technology for enriching the quality. In this concern, social media has played a significant role in teaching and taught interaction, especially in the field of distance education. Study habits play an important role in distance learning. However, it is difficult to understand the level of study habits on the part of distance learners. The main objectives of this study were to ascertain the study habits of distance learners with and without social media-based counseling and compare the result. It has also tried to compare study habits of distance learners with respect to their gender and discipline of study. About 80 distance students were taken as a sample of the study. The post-test-only experimental design was taken as methodology. It was found that the study habits of students gone through social media-based counseling were high in comparison to traditional counseling. It is also found that there exists no significant difference between male and female distance learners with respect to their study habits. A similar result was also obtained for their discipline of study. It is evident from the study that there exist strong correlations between learners' access to social media and their study habits. It is suggested that distance education institutions must encourage social media-based counseling for their learners in order to enhance their study habits.

**Keywords:** Social Media, Counseling, Study Habit, Distance Learners

Read Full Paper · Download PDF · Back to index

---

## 333 Warehouse Security System

Paper ID V7I4-1885 · Pages 1723-1726 · Iot

**Lohith M.**, Student, SJM Institute of Technology, Chitradurga, Karnataka
**Dr. Aravinda T V**, Professor, SJM Institute of Technology, Chitradurga, Karnataka

For ages, Agriculture is one of the main areas in terms of income for Farmers. Proper food storage has a very important role when it comes to food security that is affected by both food loss and food wastage. Food product losses can be avoided, which is automatic increases food availability. In this report, we are proposing an IoT-enabled warehouse monitoring system to deploy in remote areas where the very minimum accessibility for farmers with good security facilities reduces losses of food and increases the safety of food. This framework will monitor warehouse parameters such as Humidity, temperature, Smoke, and motion, which can affect grains. The ESP32 WiFi microcontroller module collects the data from the different sensors and sends data to the Blynk App dashboard, WhatsApp, and Telegram App. Many numbers of these IoT nodes can be installed inside the warehouse and which will get information about the warehouse environment to the farmers through Blynk,

© 2021, IJARIIT.COM All Rights Reserved

Telegram, and WhatsApp notifications to alert the user. Along with the security inside the warehouse, this proposed system also monitors the entry door of the warehouse to alert the farmer if any strange person wants to enter the warehouse. In such a situation, the photo of the person will be captured by the ESP32 CAM and send to the Telegram App of the farmer to allow or not to allow him inside. If the farmer authorizes the person, then, the person can enter inside the premises of the warehouse.

**Keywords:** IoT, Warehouse, Microcontroller, ESP32

Read Full Paper · Download PDF · Back to index

---

## 334 Are we doing justice to our citizens? Public financing of healthcare in developing countries with special reference to India

Paper ID V7I4-1887 · Pages 1727-1735 · Economics

**Godwin S. K.**, Associate Professor of Economics, Government College for Women, Thiruvananthapuram, Kerala

Public expenditure in health care has accounted for a rising proportion of national income in the current and previous centuries and this is regardless of their level of economic development. In this context, the central idea of the paper is to analyze the degree and volume of public health financing systems in developing countries [lower and middle-income countries (LMICs)] with a focus on India. The indicators selected include per capita income of the country (in PPP USD terms), life expectancy at birth (LEB) of the total population, infant mortality rate (IMR), the share of total health care expenditure (THE) as a proportion of GDP, government health expenditure (GHE) as a proportion of total health care expenditure (THE), private health expenditure (PHE) as a proportion of total health care expenditure (THE), etc. A positive relationship between the per capita income of the country and its corresponding health care resource commitment. In average terms, public sources contribute 45 percent of health financing, while the rest is by private means. Countries like Afghanistan, Bangladesh, India, Nepal, Seira Leone spend relatively low from public sources. Life expectancy is having a positive relationship with total health care spending in the countries analyzed. Given the context of serious market failures and government failures, the low-income country populations are in a vicious cycle of ill-health and poverty. Public spending is a major way of removing the clutches of deprivation. Scholars suggest that rich people gain more from public subsidies in education and health than do poor people for four sets of reasons: private costs, differential costs and benefits, patterns of government expenditure, and rationing.

**Keywords:** Public Financing, Health Outcomes, LMICs

Read Full Paper · Download PDF · Back to index

---

## 335 A research study to find out the changing role of the International Monetary Fund (IMF)

Paper ID V7I4-1846 · Pages 1736-1744 · Economics

**Ryka Mehra**, Student, B.D. Somani International School, Mumbai, Maharashtra

The International Monetary Fund or the IMF plays an important role in its global response to economic crises. It was created in 1944 to maintain the standard of fixed exchange rates which were established at the end of World War II. Since the abandonment of the gold standard in 1971, the IMF has adopted a new core mission,

© 2021, IJARIIT.COM All Rights Reserved

providing loans to economically troubled countries. The IMF is primarily governed by an executive board that consists of representatives of the IMF member countries, with a heavier weighting to countries that provide more money to the Fund. The executive board sets the broad policy and approves loans. The IMF has the potential to play a strategic and crucial role in stabilizing and supervising the global economy, it has its limitations due to the dynamic changes which are happening around the world's financial markets. Since countries have shifted to the flexible exchange rate system, financial independence and autonomy have increased. This development is bound to make the role of the IMF ineffective. For this research, I have collected real information by conducting a survey. I interviewed approximately 85 respondents living in Mumbai in order to fulfill the objectives of this research.

**Keywords:** International Monetary Fund, Exchange Stability, Economic Crisis, Sustainable Economic Growth, International Trade, Balance of Payments, Quota Subscriptions, Asian Financial Crisis, Financial Assistance, International Monetary Cooperation, Special Drawing Rights (SDR), Structural Adjustment Programs (SAPs), Stand-By Arrangement (SBA), Extended Fund Facility (EFF), Poverty Reduction and Growth Facility (PRGF)

Read Full Paper · Download PDF · Back to index

---

## 336 A study on micro-units' Development and Refinance Agency Limited in India – (Mudra)

Paper ID V7I4-1843 · Pages 1745-1749 · Mudhra Loan Scheme

**Dr. R. Angamuthu**, Assistant Professor, Government Arts College, Thiruvannamalai, Tamil Nadu

In this paper study the objectives, features, achievements, eligibility, etc., of Micro Units Development & Refinance Agency Limited in India. It was registered as a Company in March 2015 under the Companies Act 2013 and as a Non-Banking Finance Institution with the RBI on 07 April 2015. MUDRA was launched by the Hon'ble Prime Minister Shri Narendra Modi on 08 April 2015. Mudra Bank is for 'funding' the 'unfunded'. It is a loan scheme initiated by the Government of India too offers loan amount up to Rs. 10 lakh for individuals to start their new business or for existing businesses, without demanding any collateral or security. According to the latest Government data, the Pradhan Mantri Mudra Yojana (PMMY) has disbursed 93 percent of the loan amount sanctioned as of November 13, 2020, for the current financial year 2020-21.

**Keywords:** Mudra Bank, Collateral Security, Pradhan Mantri Jan Dhan Yojana, Non-Banking Financial Institution, Currency and Non-Corporate Small Business Sectors (NCSBS)

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 337 Longevity of the antimicrobial effect of Silver Diamond Fluoride on cariogenic bacteria in children- A Systematic review

Paper ID V7I4-1695 · Pages 1750-1756 · Preventive Dentistry

**Deepika U.**, Resident, SCB Dental College and Hospital, Cuttack, Odisha
**Kanika Chopra**, Student, SCB Dental College and Hospital, Cuttack, Odisha
**Susmita Murmu**, Student, SCB Dental College and Hospital, Cuttack, Odisha
**Prasanna Kumar Sahoo**, Professor, SCB Dental College and Hospital, Cuttack, Odisha
**Prayas Ray**, Associate Professor, SCB Dental College and Hospital, Cuttack, Odisha

To critically evaluate the effect of silver diamine fluoride (SDF) on the bacterial load of cariogenic bacteria in children. Electronic databases were searched from Google Scholar, PubMed, Wiley online library, SciELO, Science Direct, Scopus, Cochrane from 2013 till the 15th of August 2020 to list out studies undertaken to evaluate the effect of silver diamine fluoride on cariogenic bacteria in children from 2 to 10 years. Abstracts and subsequently eligible full-text articles were screened. Results: Six hundred sixty-five studies were obtained from all the databases. After a thorough screening, five studies met all the inclusion criteria. Four studies assessed the bacterial load with the microbiological culture method, two studies assessed bacteria with Adenosine triphosphate (ATP) bio-luminometer. Conclusion: Peak antimicrobial action of SDF was appreciated from the 3rd -30th day of post-application.

**Keywords:** Silver Diamine Fluoride, Cariogenic Bacteria, Diammine Silver Fluoride Cariogenic Bacteria

Read Full Paper · Download PDF · Back to index

---

## 338 Redesigning rice cultivar (<I>Oryza Sativa</I> L.) Uma as saline tolerant cultivar through marker-assisted precision breeding

Paper ID V7I4-1873 · Pages 1757-1763 · Agriculture

**Gincy Devasia**, Researcher, Kerala Agricultural University, Thrissur, Kerala
**Dr. Shylaraj K. S.**, Professor and Head (Retd.), Kerala Agricultural University, Thrissur, Kerala

Rice is the only crop adaptable for cultivation in the marshy saline coastal agroecosystem. Salinity is the second major abiotic stress that limits rice production. The widely cultivated rice variety Uma in Kerala is the best yielder, but only having moderate tolerance to salinity due to partial introgression of Saltol QTL from Pokkali being the male parent of Uma. In this study, complete introgression of Saltol QTL was effected through a Marker Assisted Precision Breeding using the donor parent FL-478 and confirmed through genotyping and phenotyping. The gene sequence of polymorphic foreground marker SKC-10, the key marker for salinity tolerance, was introgressed into Uma, to tailor it into a saline tolerant variety. The background genome recovery of Saltol introgressed inbred lines of Uma was assessed using genome-wide polymorphic SSR markers between the parents covering all the 12 chromosomes. The aim of the present study was to improve the salinity tolerance level of the most popular elite rice cultivar Uma of Kerala by applying precision molecular breeding techniques.

**Keywords:** Marker-Assisted Precision Breeding, Rice Variety Uma, Salinity Tolerance, Saltol QTL, SSR Markers

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

## 339 ph-metric studies of formation constants of the complexes of substituted thiazolyl Schiff's bases with some lanthanide metal ions in 70% ethanol-water mixture

Paper ID V7I4-1848 · Pages 1764-1767 · Physical Chemistry

**Dr. Rupali S. Talegaonkar**, Assistant Professor, Mahatma Fule Arts, Commerce and Sitaramji Chaudhari Science Mahavidyalaya, Warud, Maharashtra

The Present work is undertaken to make a systematic solution study of the complex formation of La(III), Pr(III), and Sm (III) with 2-[3-(4-methoxy phenyl)-1-(4-phenyl-thiazol-2-ylimino)-allyl]-phenol. And 2-[3-phenyl-1-(4-phenyl-thiazol-2-ylimino)-allyl]-phenol. have been determined by the pH-metric method in media of 70% ethanol-water mixture at 0.1 M ionic strength and at (30 ± 0.1)oC temperature.

**Keywords:** Thiazolyl Substituted Schiff'S Bases Ph-Metric Study La(Iii), Pr(Iii), Sm(Iii), Metal-Ligand Stability Constants

Read Full Paper · Download PDF · Back to index

---

## 340 Training of a robot manipulator model by three reinforcement learning algorithms (TRPO, PPO2, and ACKTR), use cases, and comparative studies

Paper ID V7I4-1884 · Pages 1768-1778 · Computer Science

**Narilala Daniel Ranaivoson**, Student, ED-STII, Antananarivo, Madagascar
**Soloniaina Rakotomiraho**, Professor, ED-STII, Antananarivo, Madagascar
**Rivo Randriamaroson**, Professor, ED-STII, Antananarivo, Madagascar

A model of the manipulator robot is available. It presents properties necessary for its integration in a reinforcement learning loop. This is the subject of the article [1]. Three reinforcement learning algorithms are used, TRPO, PPO2, and ACKTR. The first two algorithms learn well, but for the third one, the reward curve fails to find an increasing variation. Rather an erratic variation is observed. Experiments or use cases of the policy functions in controlling the robot were carried out. It is ok for the first two. The robot moves and reaches the targets presented after some iteration. For ACKTR there is no complete convergence but an oscillation around a fixed position.

**Keywords:** Robot Modeling, Robot Manipulator, ROS, Reinforcement Learning, Trust Region Policy Optimization, Trust Region Policy Optimization, Actor-Critic using Kronecker-Factored Trust Region, Robot Control Reinforcement Learning, Robot-Reinforcement Learning Interface, Training, Use Case, Robot Environment, Task Environment, Reward Curve, Joint Values Curve, Error Curve.

Read Full Paper · Download PDF · Back to index

---

## 341 Sri Lankan hybrid cultural remarks, revivals, and colonialism: based on Sri Lankan southern province temples' murals

Paper ID V7I4-1888 · Pages 1779-1781 · Archaeology And Buddhist Civilization

**Wasantha Mendis**, Professor, The University of Sri Jayawardenapura, Nugegoda, Sri Lanka

Sri Lanka has been an independent nation since ancient times. Historical sources attest to the fact that Sri

© 2021, IJARIIT.COM All Rights Reserved

Lanka was mainly inhabited by the Sinhala Buddhists and the Hindus under the political and economic conditions inherent in the country have changed due to the British occupation of the country. It had a profound effect on the cultural and religious conditions, especially the customs and traditions that promoted the local identity. It can be seen that the local people have been in a lot of trouble as upper-class people of this country who had worked with foreigners. The temple murals can be identified as an opportunity for the oppressed people of this country, led by the monks, to stand up against it, and through the visual media to show the oppression of the people and the catastrophic situation in the governing body. This research explores the challenges posed to the local culture through the art of temple murals. It will be very important to be able to control the present adverse conditions by finding solutions through history to the problems that are especially affecting the Buddhist Culture.

**Keywords:** Sri Lanka, Buddhist Culture, Murals, Sinhala

Read Full Paper · Download PDF · Back to index

---

## 342 Image classification

Paper ID V7I4-1865 · Pages 1782-1829 · Computer Science And Engineering

**Guru S. S.**, Student, Prathyusha Engineering College, Thiruvallur, Tamil Nadu
**Giridharan K.**, Student, Prathyusha Engineering College, Thiruvallur, Tamil Nadu
**Mohammed Fahad**, Student, Prathyusha Engineering College, Thiruvallur, Tamil Nadu
**Fahid Akthar A.**, Student, Prathyusha Engineering College, Thiruvallur, Tamil Nadu

More than 25 % of the entire revenue in E-Commerce is attributed to apparel & accessories. A major problem they face is categorizing these apparel from just the images especially when the categories provided by the brands are inconsistent. There is potentially n number of categories in which a given image can be classified. Manually checking and classifying images is a very tedious process. The task becomes near impossible when we're faced with a massive number of images, say 10,000 or even 100,000. How useful would it be if we could automate this entire process and quickly label images per their corresponding class? We can solve this problem by implementing the image classification

**Keywords:** E-Commerce, Accessories

Read Full Paper · Download PDF · Back to index

---

## 343 Consumerism

Paper ID V7I4-1904 · Pages 1830-1833 · Business

**Baikunt Sachdeva**, Student, Independent Researcher

Post-WWI, the idea of consumerism emerged. Appliances that made the life of American housewives much simpler were introduced into society. These appliances were commonly known as ‘electric servants’ as they made everyday tasks easier and faster to finish. They included washing machines, vacuum cleaners, refrigerators that had freezers. Further, post the Great Depression and WWII, the living standards of the American people increased significantly as the US emerged as a powerful military force. Society became more affluent, suburban lifestyle and the middle class emerged. With this new inflow of income, there had to also be

© 2021, IJARIIT.COM All Rights Reserved

an outflow of this income. Americans became indulgent in material desire, spending most of their money on goods like televisions, cars, and home appliances – things that modernized their life. . Between 1945 and 1949, Americans purchased 20 million refrigerators, 21.4 million cars, and 5.5 million stoves, a trend that continued well into the 1950s.

**Keywords:** Consumerism, Business, and Capitalism

Read Full Paper · Download PDF · Back to index

---

## 344 Study of relationship between Anemia and Hypertension

Paper ID V7I4-1901 · Pages 1834-1836 · Medical Physiology

**Dr. Hemangini Chaudhari**, Assistant Professor, Government Medical College, Surat, Gujarat
**Dr. Vidhya Rathwa**, Government Medical College, Surat, Gujarat
**Dr. Payal Danger**, Government Medical College, Surat, Gujarat

Hypertension in pregnancy is one of the major complications in pregnancy, which increases the maternal mortality rate. The purpose of this study is to study the relation between anemia and hypertension for early detection and preventive measure. Method: Hemoglobin and Blood Pressure were measured in 80 women in their I, II, and III trimesters of pregnancy. Patients with infective, metabolic, or degenerative disease and patients with antihypertensive medication before pregnancy were excluded from the study. Result: In non-anemic women, blood pressure was within the normal range, whereas in the anemic group systolic blood pressure was found to be raised in the 3rd trimester. Conclusion: This study shows anemia can be well co-related with systolic hypertension and early detection of anemia can prevent further complications.

**Keywords:** Pregnancy, Hypertension, Anemia

Read Full Paper · Download PDF · Back to index

---

## 345 Rainfall threshold intensity & other associated factors triggering debris flow in the Himalayan region – A literature review

Paper ID V7I4-1897 · Pages 1837-1842 · Civil Engineering

**Arghadeep Dasgupta**, Road Building International (India) Pvt. Ltd., New Delhi, Delhi

Debris flows are fast-moving landslides that occur in a wide variety of environments throughout the world. Some landslides move slowly and cause damage gradually, whereas others move so rapidly that they can destroy property and take lives suddenly and unexpectedly. Debris flows, sometimes referred to as mudslides, mudflows, lahars, or debris avalanches, are common types of fast-moving landslides. These flows generally occur during periods of intense rainfall or rapid snowmelt. They usually start on steep hillsides as shallow landslides that liquefy and accelerate to speeds that are typically about 10 mph but can exceed 35 mph. The consistency of debris flows ranges from watery mud to thick, rocky mud that can carry large items such as boulders, trees, and cars. Debris flows from many different sources can combine in channels where their destructive power may be greatly increased. They continue flowing downhills and through channels, growing in volume with the addition of water, sand, mud, boulders, trees, and other materials. When the flows reach canyon mouths or flatter ground, the debris spreads over a broad area, sometimes accumulating in thick

© 2021, IJARIIT.COM All Rights Reserved

deposits that can wreak havoc in developed areas.

**Keywords:** Debris Flow, Rainfall Threshold Intensity, Early Warning System, Rainfall Intensity Duration, etc.

Read Full Paper · Download PDF · Back to index

---

## 346 Content-based image retrieval using combined features of color descriptors, GLCM-SFTA, and Hu's moments

Paper ID V7I4-1907 · Pages 1843-1849 · Image Processing

**Sujatha H.**, Lecturer, Government Polytechnic, Nagamangala, Karnataka
**Dr. A. Sreenivasa Murthy**, Professor, University Visvesvaraya College of Engineering, Bangalore, Karnataka

Due to the information technology which is rapidly developing, digital content is becoming increasingly difficult to handle. This includes images that are kept on digital cameras, CCTV, and medical scanners. Areas such as medical and forensic science are using these databases to do critical tasks which include diagnosing diseases or identification of criminal suspects. However, managing and search the similar images from these databases is not an easy task. Content-Based Image Retrieval (CBIR) is one of the techniques used to manage and search similar images from a database. The performance of CBIR depends on the low level (Color, Texture, and Shape) features. In this paper, a new feature vector to represent the image in terms of low-level features and to improve the performance of CBIR is proposed. The proposed CBIR system was developed based on the combined features of Color, Texture, and Shape Features. Color features are extracted by using Color moments, HSV Color Autocorrelogram Feature (CAF), and Color Layout Descriptor (CLD). Texture features are extracted by Gray Level Co-Occurrence Matrix (GLCM) and Segmentation-based Fractal Texture Analysis (SFTA). Shape features are extracted by Hu Moments. The combined features which are made up of 165 Color Descriptor features, 109 GLCM-SFTA texture features, and 8 shape Hu's moment values are extracted to both query and database images. The extracted feature vector of the query image is compared with extracted feature vectors of the database images to obtain similar images.

**Keywords:** CBIR, Color Autocorrelogram Feature, Color moments; GLCM, SFTA, CLD, Hu moments, HSV, Content-Based Image Retrieval, Fractal Texture Features, Color Descriptors, Shape Features.

Read Full Paper · Download PDF · Back to index

---

## 347 An intrusion detection system in network traffic with the performance of snort in Wireshark to capture detailed information of data packets

Paper ID V7I4-1898 · Pages 1850-1855 · Computer Security

**Isiaka O. S.**, Kwara State Polytechnic, Ilorin, Nigeria
**Bolaji-Adetoro D. F.**, Kwara State Polytechnic, Ilorin, Nigeria

Ideal for any closed data communication system is Data Packet. Network security means data packet security. Every day there are terrible attacks on the Internet. Quality of service has become an issue that requires a powerful traffic analysis and distribution engine for network applications. Network operators can index all applications on their network and use their full set of packet analyses to act as the primary method of intrusion detection. This study mainly focuses on a network intrusion detection system using a network packet analyzer

© 2021, IJARIIT.COM All Rights Reserved

called Wireshark. Therefore, it provides network security through network monitoring tools so that intrusion detection systems can easily gather accurate information. Packet sniffers have the decisive advantage of being an intrusion detection system that detects and blocks a variety of malware and spyware activity in network traffic. It is therefore important to evaluate the performance of Snort in Wireshark to capture, analyze and log detailed information of data packets in network traffic.

**Keywords:** Wireshark, Network Packet Analyzer, Intrusion Detection System, Snort, Packet Sniffer

Read Full Paper · Download PDF · Back to index

---

## 348 Harmonics prediction of power system network in the presence of FACTS devices

Paper ID V7I4-1900 · Pages 1856-1860 · Power Engineering

**Dr. G. Nageswara Reddy**, Assistant Professor, Y. S. R Engineering College of Yogi Vemana University, Proddatur, Andhra Pradesh
**B. Jayababu**, Associate Professor, Vignan's Lara Institute of Technology and Science, Guntur, Andhra Pradesh

Flexible AC Transmission System (FACTS) devices are used in the transmission systems to improve voltage profiles, stability, active and reactive power flows. Basically, these devices are nonlinear. One of the present challenges facing power research groups is the harmonic study and characterization of Flexible AC Transmission System (FACTS) and their interaction with transmission and distribution networks. This kind of device will distort the steady-state voltage and current waveforms. This work is concerned with the quantification of distorted voltage and current waveforms of power system networks in the presence of FACTS devices. MATLAB code is developed to assess the harmonic performance of five bus test systems.

**Keywords:** FACTS, Harmonics, Distortion, Nonlinear devices, SVC, Total Harmonic Distortion

Read Full Paper · Download PDF · Back to index

---

## 349 Challenges and recommendations of Bangalore University library in COVID pandemic

Paper ID V7I4-1890 · Pages 1861-1863 · Library And Information Science

**Ravikumar C. V.**, Research Scholar, Bangalore University, Bengaluru, Karnataka
**Sateesha H.**, Assistant librarian, Bangalore University, Bengaluru, Karnataka
**Sudhakara N.**, Research Scholar, Bangalore University, Bengaluru, Karnataka

Abstract ` As a prudent step, The Union Government of India Has pronounced the public level shut down after 22nd March 2020 to break the chain of the COVID 19 pandemic. Be that as it may, the day isn't far away to begin the way toward eliminating the limitations bit by bit in a staged way. Consequently, we the library experts ought to likewise be a plan to resume the libraries alongside the COVID 19. We have an enormous obligation to ensure the customer bases, staff, and library assets in such a pandemic circumstance. While resuming the library after the lockdown we have to bring careful steps to back off and forestall the Coronavirus. The creator has referenced the difficulties and proposed proposals of the libraries during the post lockdown period. The creator has additionally proposing to re-examine the library rules dependent on the proposals and

© 2021, IJARIIT.COM All Rights Reserved

the degree of the power of the pandemic. For the betterment of library users and also for the betterment of the library staff Bangalore university library taking many precautionary measurements with the cooperation of Bangalore university management. Library centers are the places where a large number of people can gather. We have a huge responsibility to protect the clientele, staff, and library resources in such a pandemic situation. While reopening the library after the lockdown we need to take precautionary measures to slow down and prevent the COVID 19.

**Keywords:** COVID Pandemic, Challenges, Recommendations, Libraries, Bangalore University Library

Read Full Paper · Download PDF · Back to index

---

## 350 Automatic dual-axis solar tracker system using Image Processing

Paper ID V7I4-1911 · Pages 1864-1870 · Renewable Energy

**Adnan M.**, Student, Government Engineering College Barton Hill, Thiruvananthapuram, Kerala
**Ashiq Ali Abdul Lathief**, Student, Government Engineering College Barton Hill, Thiruvananthapuram, Kerala
**Sivadeep P. R.**, Student, Government Engineering College Barton Hill, Thiruvananthapuram, Kerala
**Akshay Ganga**, Student, Government Engineering College Barton Hill, Thiruvananthapuram, Kerala
**Simi Raj**, Assistant Professor, Government Engineering College Barton Hill, Thiruvananthapuram, Kerala

Solar energy is the most inexhaustible, renewable source of energy known to humanity. The energy extracted from photo-voltaic or any solar collector depends on solar irradiance. For maximum extraction of energy from the sun, the solar collector panel should always be normal to the incident radiation. Solar trackers move the solar collector to follow the sun’s path and keep the orientation of the solar collector at an optimal tilt angle. Solar tracking system improves substantially the energy efficiency of photo-voltaic panels. The aim of this project is to develop an Automatic Dual Axis Solar Tracker System with Image Processing in order to improve the efficiency of the solar panels.

**Keywords:** Image Processing, Raspberry Pi, Atmega328 Microcontroller, Polyurethane

Read Full Paper · Download PDF · Back to index

---

## 351 Adsorption Behavior of Thorium and some Metal Ions on Cation Exchange Resin Dowex 50 WX<sub>8</sub> (Nh<sub>4</sub><sup>+</sup>Form) from Aqueous Acetone-Ammonium Propionate Media

Paper ID V7I4-1921 · Pages 1871-1876 · Chemistry

**Rajan Kamble**, Associate Professor, Bhogawati Mahavidyalaya, Kurukali, Maharashtra

In the field of inorganic separations, the incentive to explore the use of non-aqueous or mixed solvents has been the enhanced selectivity, discovered quite early in such media for Zeolites[1] and ion exchange resins. [2] The partial substitution of an aqueous solution by organic solvent produces a number of changes in an exchange system, such as, change in the solution structure due to the interaction between water and the organic solvent, change in the hydration and salvation of the electrolyte, change in the solvent composition in the resin phase, change in the activity coefficients of the electrolyte in the solution phase as well as in the resin phase, change in the complexation of the metal ion and change in the extent of invasion by an electrolyte. All

© 2021, IJARIIT.COM All Rights Reserved

these changes are mutually dependent and affect the distribution of the metal ion. From the investigations of ion exchange in mixed solvents, it is apparent that the adsorption equilibrium depends markedly on the properties of the organic solvent and reactions with the resin and electrolytes which determine the equilibrium.

**Keywords:** Aqueous Ammonium propionate, Un-Irradiated, and Gamma-Irradiated, Dowex 50 WX8, Half Exchange Time (t 1/2), Interdiffusion Coefficient (D), Exchange Rate Constant (K)

Read Full Paper · Download PDF · Back to index

---

## 352 Banana marketing challenges during Covid-19

Paper ID V7I4-1841 · Pages 1877-1882 · Horticulture

**Nalla Sridevi Parvathi**, Research Scholar, Andhra University, Visakhapatnam, Andhra Pradesh
**Dr. Nagaraja**, Professor, Andhra University, Visakhapatnam, Andhra Pradesh

Banana is a low-priced but high nutritive value fruit hence it is one of the major horticulture crops in the state of Andhra Pradesh. Different varieties of bananas are cultivated to an extent of 1,04,953 hectares across AP state. The yield is estimated to be 62,97,180 tonnes this year. The market has come down from 15000 INR per tonne to 3500 per tonne. What is the possible way out?

**Keywords:** Banana, AP, Lockdown

Read Full Paper · Download PDF · Back to index

---

## 353 A critical study of issues faced by farmers

Paper ID V7I4-1828 · Pages 1883-1889 · Management

**Dr. Anuradha Sarkar**, Professor, Neville Wadia Institute of Management Studies and Research, Pune, Maharashtra
**Sai Badhe**, Student, Neville Wadia Institute of Management Studies and Research, Pune, Maharashtra
**Advait Syamsunder**, Student, Neville Wadia Institute of Management Studies and Research, Pune, Maharashtra
**Akshay Kadam**, Professor, Neville Wadia Institute of Management Studies and Research, Pune, Maharashtra
**Himanshu Niwal**, Student, Neville Wadia Institute of Management Studies and Research, Pune, Maharashtra
**Shubham Lohakare**, Student, Neville Wadia Institute of Management Studies and Research, Pune, Maharashtra
**Kaustubh Naikwad**, Student, Neville Wadia Institute of Management Studies and Research, Pune, Maharashtra

The critical issues that plague Indian agriculture at present are the knowledge deficit and infrastructure deficit, especially in the rural areas. Problems related to irrigation infrastructure, market infrastructure, and transport infrastructure add significant costs to farmers' operations. Another issue is the lack of delivery mechanisms. There are a number of schemes aimed to bring development in agriculture. We do not have effective delivery mechanisms that can translate into effective facilitation in terms of increasing productivity or decreasing cost or increasing price realization at the ground level. Moreover, inadequate government support exacerbates these issues. Exploratory research was conducted and a data sample of 41 persons was taken who are from the farming background or profession. A chi-square test was conducted to see whether the suitability of agriculture for farmers due to globalization and the usefulness of new farmers are associated. After conducting the chi-square test it is concluded that the null hypothesis is accepted viz. The suitability of agriculture for farmers due to globalization and the usefulness of new farmers are associated. Corporate farming could be a solution to the Indian agrarian sector, but it needs deep thinking and innovating better policies so that neither the corporate

© 2021, IJARIIT.COM All Rights Reserved

nor the farmers be at loss. Also, the role of central government and state governments needs to be defined clearly as because of being a joint subject, it creates a lot of confusion. Eminent experts should do research in this aspect and governments must take proactive action. Indian agrarian sector in fact requires very innovative ideas for the uplifting of this sector. Also, without mechanization, farming is hard and back-breaking work. This has resulted in most farmers' children quitting farming and going for other vocations. Farmers get more money by selling their land to builders, malls, and factories. This has put more pressure on farmland, thereby requiring technologies to increase productivity so that shrinking farmland can feed billion plus people of India in the future. India, though one of the biggest producers of agricultural products, has very low farm productivity, with an average of only 33 percent of the best farms the world over. This needs to be increased so that farmers can get more remuneration from the same piece of land with less labor.

**Keywords:** Farming, Issues, Transportation, Insufficient, Crops

Read Full Paper · Download PDF · Back to index

---

## 354 Design and performance analysis of Interior Permanent Magnet Motor (IPMSM) using RMXPRT – ANSYS MAXWELL

Paper ID V7I4-1447 · Pages 1890-1893 · Electrical Engineering

**Nithyanandam R.**, Student, Amrita Vishwa Vidyapeetham University, Coimbatore, Tamil Nadu
**Parveen Kumar N**, Assistant Professor, Amrita Vishwa Vidyapeetham University, Coimbatore, Tamil Nadu

This During manufacturing of any motor optimum design and performance check are vital. In this regards right selection of material and efficient design improves the performance of the electric motor. For this vary purpose Ansys RMxprt is much suited software for accurate and cost effective design of various electrical machines.This article explains about application of RMxprt for machine design and also presents the model and analysis of IPMSM. Further this paper highlights explains about the simulated results along with 2D and 3D mapping of various aspects of an IPMSM

**Keywords:** IPMSM, Ansys Maxwell, Motor Design, Permanent Magnet, RMxprt Design

Read Full Paper · Download PDF · Back to index

---

## 355 How the COVID-19 pandemic affected mother-daughter relationships

Paper ID V7I4-1902 · Pages 1894-1901 · Social Psychology

**Lavanya Maheshwari**, Student, Neerja Modi School, Jaipur, Rajasthan

The unprecedented COVID-19 pandemic has had drastic consequences on all aspects of our lives, especially relationships. Since research suggests that the mother-daughter dyad has a significantly higher influence on adolescents than any other familial relation, the purpose of this qualitative study was to assess the impact of the pandemic on this markedly influential relationship in the Indian context. Convenient sampling was used to recruit 20 female participants, all in the 14 to 17 years age group, studying in Neerja Modi School, Jaipur. Semi-structured interviews were conducted, transcribed, thematically analyzed, and the results were then tabulated. It was found that the pandemic positively impacted mother-daughter relationships for the majority of the participants, while for a select few, it led to detrimental effects like an increase in the number of fights and

© 2021, IJARIIT.COM All Rights Reserved

arguments. The study also aimed to evaluate the impact of these changes in relationships on the well-being of the daughter, and it was inferred from the data that for a majority of the participants, the shift in relationship dynamics was accompanied by a conspicuously positive impact on their wellness and mental health.

**Keywords:** COVID-19, Pandemic, Mother-Daughter Relationships, Lockdown, Well-Being

Read Full Paper · Download PDF · Back to index

---

## 356 Open Pyramid Graph and Euler Circuit

Paper ID V7I4-1922 · Pages 1902-1904 · Mathematics

**Puja**, Research Scholar, Magadh University, Bodh Gaya, Bihar
**Shree Nath Sharma**, Professor, S.S. College, Jehanabad, Bihar
**Ram Lakhan Prasad**, Professor, Magadh University, Bodh Gaya, Bihar

The concept of open pyramid graph has been introduced and it has been established that it is closely related to BCK-algebra and Euler circuit.

**Keywords:** Euler Circuit, Open Pyramid Graph, BCK Algebra, and Disjoint Elements

Read Full Paper · Download PDF · Back to index

---

## 357 Pareto-optimal phylogenetic tree reconciliation considering duplications, transfers, losses, and incomplete lineage sorting

Paper ID V7I4-1862 · Pages 1905-1910 · Bioinformatics

**Rahnuma Tasmin**, Student, Military Institute of Science and Technology (MIST), Dhaka, Bangladesh
**Dr. Md. Abul Kashem Mia**, Professor, Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh

A phylogenetic tree is a representation of the evolutionary histories of different species from which the gene tree is constructed from some specific sequence of copies of genes that are sampled from a group of species. For some biological events like gene Duplication (D), Horizontal Gene Transfer (T), Loss (L), and Incomplete Lineage Sorting (ILS), with the passage of time, the history of gene evolution and species evolution might show discord in most cases. Though many researchers do not account ILS event as discordance between a gene tree and species tree because, in theory, ILS is not a true “gene event” such as duplication or a transfer, since nothing “happens” to the gene during incomplete lineage sorting. But still, this phenomenon can lead to a gene tree differing from the species tree just like speciation acts on populations. Reconciliation is a process of resolving a disagreement between gene and species tree with the least possible evolutionary event costs. Addressing this problem (not accounting ILS event), we propose an efficient Pareto-optimal algorithm to reconcile a binary gene tree with binary species tree under Duplication, Transfer, Loss and Incomplete Lineage Sorting parsimony criterion, which is the extension of the previous Pareto-optimal algorithm developed by Libeskind-Hadas et al., 2014[12]. Through this research, it has been shown that how to properly cost DTL events considering ILS event and then give a fixed-parameter tractable (FPT) algorithm which calculates the most parsimonious Duplication (D), Horizontal Gene Transfer (T), Loss (L), and Incomplete Lineage Sorting (ILS) reconciliations. Comparing with the previous Pareto-optimal algorithm, the space complexity will remain the

© 2021, IJARIIT.COM All Rights Reserved

same after considering the ILS events. This is the first Pareto-optimal reconciliation algorithm to consider all of the four evolutionary processes driving tree incongruence.

**Keywords:** Phylogenetic Incomplete Lineage Sorting Reconciliation Coalescence Pareto Optimality

Read Full Paper · Download PDF · Back to index

---

## 358 Landfill site selection with spatial suitability analysis and multi-criteria decision making in Devchuli municipality

Paper ID V7I4-1906 · Pages 1911-1916 · Environment

**Asmita Paudel**, Student, Tribhuvan University, Kirtipur, Nepal
**Bikash Sherchan**, Assistant Professor, Tribhuvan University, Kirtipur, Nepal
**Aashish Adhikari**, Student, Tribhuvan University, Kirtipur, Nepal

Solid waste management (SWM) being an important aspect of infrastructure development defines the state, status of urban development in terms of other co-related aspects such as Political, Environmental, Socio-Economic, and Technological as well. The prevailing Landfill Site in Devchuli Municipality needs to be assessed in terms of various criteria as the needs of rapidly growing and emerging cities are changing. Moreover, the landfill site is a public decision and requiring inputs from various stakeholders and groups in compliance with the participatory approach involving various voices for complex decision making. Geospatial Technology and its applications can be used in these sorts of Assessments. The multi-criteria decisions are based on various aspects as suggested by previous researchers. The combination of these criteria and the use of Geospatial Technology allows us to assess the suitability of the Landfill site. The output will be able to find out the challenges and give a clear vision for further research.

**Keywords:** Geospatial Technology, Multicriteria Decision, Solid Waste Management

Read Full Paper · Download PDF · Back to index

---

© 2021, IJARIIT.COM All Rights Reserved

# Thank You!

## www.IJARIIT.COM

Encouraging Research

| Important Links | |
|---|---|
| Submit Paper Online | Author Guidelines |
| Track Your Paper | Call For Papers |
| Publication Fee | Current Issue |

Contact Us

Volume 12, Issue 6 (November-December, 2026) is open for submissions. Last date: 31st December, 2026.

© 2021, IJARIIT.COM All Rights Reserved