International Journal Of Advance Research, Ideas And Innovations In Technology

VOLUME 6 - ISSUE 4

IJARIIT

SPECTRUM

International Journal of Advance Research, Ideas and Innovations in Technology

July-August, 2020

149	297	136	5
PAPERS	AUTHORS	INSTITUTIONS	COUNTRIES

INSIDE THIS ISSUE

The systemic pattern of Evolution p. 1

Higher education in India- The past glory of excellence, the downfall,... p. 2

The food and beverage sector in the COVID-19 times p. 8

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 6, Issue 4 (July-August, 2020). This edition brings together 149 papers by 297 authors from 136 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

© 2020, IJARIIT.COM All Rights Reserved

Research areas		Authors by country	
Civil Engineering	9	India	143
Mechanical Engineering	9	Ethiopia	2
Computer Science	7	Nepal	2
Nursing	5	United States	1
Computer Science AndEngineering	5	Somalia	1
Computer Science Engineering	4		

© 2020, IJARIIT.COM All Rights Reserved

Indexing of Volume 6 – Issue 4

S. No	Title	Page Number	Links
1.	**The systemic pattern of Evolution** *Ajil Benny* **Independent Researcher**	1-1	View Abstract Download PDF
2.	**Higher education in India- The past glory of excellence, the downfall, and an attempt to rise again** *Nisha Chakyarkandiyil* **Christ Deemed To Be University, Bangalore, Karnataka**	2-7	View Abstract Download PDF
3.	**The food and beverage sector in the COVID-19 times** *Vir Jain* **Independent Researcher**	8-17	View Abstract Download PDF
4.	**Bio-control of mosquito larvae using filamentous fungi-environmental study** *Dharit Bhatt, Dr. Sashirekha Sureshkumar, Shamil Darbar* **Bhavan's College, Mumbai, Maharashtra, Mithibai College of Arts Chauhan Institute of Science and Amrutben Jivanlal College of Commerce and Economics, Mumbai, Maharashtra, K.E.M hospital, Mumbai, Maharashtra**	18-23	View Abstract Download PDF
5.	**A multivariate statistical approach for ranking the best batsmen in test cricket** *Rahul Motipalle, Sajjanapu Venkat Lokesh Kumar* **Indian Institute of Information Technology, Sricity, Andhra Pradesh**	25-36	View Abstract Download PDF
6.	**Controlling web browser via different hand gestures and speech recognition** *Rithika V. Jadhav, Prajakta S. Bait, Sumedh Pundkar* **Usha Mittal Institute of Technology, Mumbai, Maharashtra**	37-42	View Abstract Download PDF
7.	**Design of rainwater harvesting system in RRCE campus** *Akash M. P., Vivek J., Venugopal M., Dhanush Bhavan B. M.* **Rajarajeswari College of Engineering, Bengaluru, Karnataka**	43-45	View Abstract Download PDF
8.	**Parallel A* search on a multi-core CPU** *Ishaan Jaffer* **Carnegie Mellon University, Pittsburgh, Pennsylvania**	46-49	View Abstract Download PDF
9.	**A study on life cycle of six spotted zig-zag ladybird** *Ajil Benny* **Independent Researcher**	50-51	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
10.	**Development of fiber rich gummies** *Priya Bharat Lohar, Pooja Manojkumar Shrivastav, Suhana Suleman Kulavoor* **Guru Nanak Khalsa College of Arts, Science and Commerce, Mumbai, Maharashtra**	52-55	View Abstract Download PDF
11.	**Development of a Protein-Rich Premix "Health-o-Fit Basundi Mix"** *Komal Kamlesh Pathak, Shreya Bhau Parab, Suhana Suleman Kulavoor* **Guru Nanak Khalsa College of Arts, Science and Commerce, Mumbai, Maharashtra**	56-61	View Abstract Download PDF
12.	**Improvement of highway capacity due to cycle track in urban area** *Arif Anwar, Prof. D. S. Ray* **Babu Banarasi Das University, Lucknow, Uttar Pradesh**	62-66	View Abstract Download PDF
13.	**Women empowerment and their empowering schemes in India** *Huma Akhtar Malik, Dr. Dinesh Mandot* **Bhagwant University, Ajmer, Rajasthan**	67-70	View Abstract Download PDF
14.	**Gender and space in temple architecture** *D. Midhila, Dr.R.V.Nagarajan* **Hindustan Institute of Technology and Sciences, Vijayawada, Andhra Pradesh, Hindustan Institute of Technology and Sciences, Padur,Chennai,Tamilnadu**	71-73	View Abstract Download PDF
15.	**Kinetics of rural transformation in Marathwada and Khandesh region of Maharashtra and the rhythmic factors affecting it** *Parag Gopal Panchabhai* **Independent Researcher**	74-79	View Abstract Download PDF
16.	**Literature Survey on different topologies of UPQC** *Vinay Gupta, Shobhna Jain* **University Institute of Technology, RGPV, Bhopal, Madhya Pradesh**	80-84	View Abstract Download PDF
17.	**Stacklite – Stack overflow tag prediction** *Gada Shrenika, Ch. Ramya, A. Rajashekar Reddy* **BVRIT Hyderabad College of Engineering for Women, Hyderabad, Telangana**	85-87	View Abstract Download PDF
18.	**Impact of computer education in high school – A case study of Dharwad city** *Maimuneesa K. Kazi* **Independent Researcher**	88-92	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
19.	**A comparative study to assess nutritional games and modified hearth approach for adolescents** *Meera M., R. K. Anuradha* **Sri Sathya Sai Institute of Higher Learning, Anantapur, Andhra Pradesh, Sri Venkateswara University, Tirupati, Andhra Pradesh**	93-98	View Abstract Download PDF
20.	**An analysis of online music streaming behavior in India** *Divya Shridhar* **Independent Researcher**	99-102	View Abstract Download PDF
21.	**Anti-oxidant activity of 2-amino-5-(3-arylsydnon-4-oyl) thiazoles** *Dr. Jisha S. P., Dr. K. N. Rajasekharan* **Government First Grade College, Bengaluru, Karnataka, University of Kerala, Thiruvananthapuram, Kerala**	103-108	View Abstract Download PDF
22.	**Setup for simulation and analysis of Pulsatile Flow** *Nagasai Panuganti* **Vasavi College of Engineering, Hyderabad, Telangana**	109-115	View Abstract Download PDF
23.	**Decolorization of Azo dyes and Triphenylmethane dyes using Citrobacter diverses isolated from textile waste** *Dr. Kirti Jayant Mhatre* **Mahatma Phule Arts Science and Commerce College, Navi Mumbai, Maharashtra**	116-120	View Abstract Download PDF
24.	**Pinpointing the sort of bosom malignancy for exact treatment** *Sravani* **Vignan's Institute of Information Technology, Visakhapatnam, Andhra Pradesh**	121-126	View Abstract Download PDF
25.	**Design of flexible FFT core for fast computing of digital signals in real time applications** *Deepa S., Dr. Yasha Jyothi M. Shirur* **BNM Institute of Technology, Bengaluru, Karnataka**	127-131	View Abstract Download PDF
26.	**Challenges in education management due to the Coronavirus pandemic** *Divya Tahira Mayadas* **Chatrabhuj Narsee School, Mumbai, Maharashtra**	132-134	View Abstract Download PDF
27.	**Detection of Cyberbullying using Machine Learning** *Sinchana C., Sinchana K, Pradyumna C S, Deepika S* **Vidya Vardhaka College of Engineering, Mysore, Karnataka**	135-138	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
28.	**Green Building: A Review** *Chetan Sonvane, Ompriya Kale* **Datta Meghe College of Engineering, Mumbai, Maharashtra, Pimpri Chinchwad College of Engineering and Research (PCCOER), Pune, Maharashtra**	139-141	View Abstract Download PDF
29.	**Behaviour of youth towards sustainable and fast fashion** *Pragya Gargee* **Symbiosis College of Arts and Commerce, Pune, Maharashtra**	142-146	View Abstract Download PDF
30.	**A pre-experimental study to assess the effectiveness of a structured interventional program on knowledge regarding care of patients with chest tube drainage among staff nurses in IGMC and Hospital, Shimla, Himachal Pradesh** *Lovely, Sangeeta Sharma* **Akal College of Nursing, Baru Sahib, Himachal Pradesh**	147-156	View Abstract Download PDF
31.	**Managing cross-cultural diversity in global scenario through HR strategies** *Anisha Anil Hande* **MIT Arts Commerce and Science, Pune Maharashtra**	157-162	View Abstract Download PDF
32.	**Clinico haematological profile in beta Thalassemia trait** *Dr. Muthu Venkat T.* **Independent Researcher**	163-169	View Abstract Download PDF
33.	**Law of ten generations gap in Heredity** *Ajil Benny* **Independent Researcher**	170-172	View Abstract Download PDF
34.	**Parameter extraction for audio signal** *Neha Sohani Mohanty* **College of Engineering and Technology, Bhubaneswar, Odisha**	173-175	View Abstract Download PDF
35.	**Review paper on connecting the dots using drones** *Shritish Shete, Siddhi Dave* **Priyadarshini Institute of Engineering and Technology, Nagpur, Maharashtra**	176-179	View Abstract Download PDF
36.	**Don’t Sleep – Drowsiness Detection Tool** *Anjaneya Turai* **Symbiosis Skills and Professional University, Pune, Maharashtra**	180-183	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
37.	**Comparitive study on self cleaning property of Activated charcoal supported Bi₂O₃−ZnO with other coupled semiconductor oxide nanocomposites** *G. Ida, D. Easwaramoorthy* **Research and Development Centre, Bharathiar University, Dhanalakshmi College of Engineering, Erumaiyur, Tamil Nadu, Research and Development Centre, Bharathiar University B. S. Abdur Rahman Crescent Institute of Science and Technology, Chennai, Tamil Nadu**	184-187	View Abstract Download PDF
38.	**Experimental investigation on performance analysis of dual-axis solar tracker** *Ohmsakthi Vel, Santhosh, Upanraj, Mohammed Jaffar Sadiq* **Agni College of Technology, Thalambur, Tamil Nadu**	188-191	View Abstract Download PDF
39.	**A descriptive study to assess the general wellbeing and psychological distress of leprosy patients in selected leprosy centre at Indira Gandhi Medical College and Hospital, shimla (H.P.) India.** *Reena Dogra* **Sister Nivedita Govt. Nursing Institute, Shimla, Himachal Pradesh**	192-199	View Abstract Download PDF
40.	**A study to assess the anxiety related to the onset of labour and delivery among primigravida mothers admitted for delivery at Kamla Nehru hospital Shimla.** *Amita Puri* **Sister Nivedita Govt. Nursing Institute, Shimla, Himachal Pradesh**	200-205	View Abstract Download PDF
41.	**Vehicle accident and alert with datalog system** *Devadharshini, Pavithra, Praveena, Summia Parveen* **Avinashilingam University, Coimbatore, Tamil Nadu**	206-210	View Abstract Download PDF
42.	**Structural assessment of RCC buildings by using Pushover Analysis** *Suraj Shivaji Shinde, Manoj Deosarkar, Dr. Nagesh L. Shelke, Vishwajeet Kadlag* **Dr. D. Y. Patil School of Engineering and Technology, Pune, Maharashtra**	211-221	View Abstract Download PDF
43.	**Radial radio number of uniform cyclic and wheel split graphs** *Kins Yenoke* **Loyola College, Chennai, Tamil Nadu**	222-227	View Abstract Download PDF
44.	**Manna cipher** *Neelanjan Manna* **Vellore Institute of Technology, Vellore, Tamil Nadu**	228-231	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
45.	**Nanobots in nanomedicine : An overview** *Jyolsna P.* **Sams College of Engineering and Technology, Chennai, Tamil Nadu**	232-234	View Abstract Download PDF
46.	**A Descriptive study to access the awareness regarding oral hygiene and prevalence of oral problems among school children at selected school, Mohali, Punjab** *Indira Devi* **Sister Nivedita Govt. Nursing Institute, Shimla, Himachal Pradesh**	235-240	View Abstract Download PDF
47.	**A study to assess the effectiveness of structured teaching programme regarding knowledge and practices of mother on prevention of accidents among toddlers** *Prabha Kashyap* **Sister Nivedita Government Nursing College, IGMC, Shimla, Himachal Pradesh**	241-253	View Abstract Download PDF
48.	**Handwritten character recognition** *Addala Tejaswini, Y. Lakshmi Pratyusha, A. Rajashekar Reddy* **BVRIT Hyderabad College of Engineering for Women**	254-258	View Abstract Download PDF
49.	**Computer vision and its role in driving safety** *Probhakar Sarkar, Umair Siddiqui* **Independent Researcher**	259-262	View Abstract Download PDF
50.	**Eye blink to voice format communication for paralyzed patients** *Namratha K. S., Jeevitha B. S., Sneha P. H., Veda D.* **Rajarajeswari College of Engineering, Bangalore, Karnataka**	263-266	View Abstract Download PDF
51.	**Lightweight privacy-preserving scheme for the smart grid data using ANU and Perturbation Algorithm** *Ravinderpal Singh, Puneet Jain* **Adesh Institute of Engineering and Technology, Faridkot, Punjab**	267-272	View Abstract Download PDF
52.	**Combined emission economic load dispatch problem using hybrid combination of flower pollination algorithm and moderate random search particle swarm optimization** *Jaspreet Singh, Puneet Jain* **Adesh Institute of Engineering and Technology, Faridkot, Punjab**	273-277	View Abstract Download PDF
53.	**A Study on the behaviour of IT Employees during the COVID 19 Pandemic with special reference to Bangalore.** *Glady Agnes L., Amritha Ashok, Kalyani V.* **Kristu Jayanti College, Autonomous, Bengaluru, Karnataka**	278-280	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
54.	**Rupayinvest** *Satish, H. K. Vedamurthy, D. V. Nishanth, Vishwajeet Kumar* **Siddaganga Institute of Technology, Tumakuru, Karnataka**	281-286	View Abstract Download PDF
55.	**Use of cotton, curcumin smoke as a potential treatment of COVID-19** *Praveen Adiga N. K., Subrahmanya Madhyastha* **Independent Researcher**	287-289	View Abstract Download PDF
56.	**Black hole attack detection and prevention by Grey Wolf Optimization** *Gbazoe Kelezonga Daniel, Anuj Gupta* **AP Goyal Shimla University, Shimla, Himachal Pradesh**	290-293	View Abstract Download PDF
57.	**Challenges in the development of a new obturation device: A questionnaire survey** *Swanand Sudhir Pachpore, Pradeep Jadhav, Ratnakar Ghorpade* **Bharati Vidyapeeth Deemed University, Pune, Maharashtra, MIT World Peace University, Pune, Maharashtra**	294-301	View Abstract Download PDF
58.	**The SIR Model: Spread of Disease (COVID-19) in Ethiopia** *A. R. Muralidharan, Tena Manaye* **Debre Berhan University, Debre Birhan, Ethiopia**	302-308	View Abstract Download PDF
59.	**Identification of public realm aspects in connection to the trends of urbanization in Indian cities** *Prashant P.* **School of Architecture and Interior Design, SRMIST, Chennai, Tamil Nadu**	309-316	View Abstract Download PDF
60.	**Formulation, development and sensory acceptability of high calorie snack bars** *Sai Dharshini S., Meera M.* **Sri Sathya Sai Institute of Higher Learning, Anantapur, Andhra Pradesh**	317-322	View Abstract Download PDF
61.	**Comprehensive Seismic Performance Assessment of Low Rise RC Buildings by Numerical Modelling** *Saugat Tiwari, Sailesh Adhikari, Deepak Thapa* **Institute of Engineering, Pashchimanchal Campus, Lamachaur Pokhara, Nepal**	323-331	View Abstract Download PDF
62.	**An overview of RedTacton Technology- A ubiquitous computing** *Nandini A. S., Manjula K. B., Shama Firdous* **Brindavan College of Engineering, Bengaluru, Karnataka**	332-336	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
63.	**Structural and dielectric properties of 'Ni' doped(Bi_(2-x)Ni_xTi₃O₁₂) polymer thin film** *Jyotiprakash Panda* **Centurion University of Technology and Management, Bhubaneswar, Odisha**	337-349	View Abstract Download PDF
64.	**E – Zyklus** *Suyant Dharwarkar, Abdulhasnain Akodiyawala* **Vishwakarma University, Pune, Vishwakarma University, Pune.**	350-357	View Abstract Download PDF
65.	**Chatuska – An idiosyncratic approach of Charaka Samhita** *Dr. Samichha Neupane, Dr. Bikash Raj Ghimire* **Rajiv Gandhi Government Post Graduate Ayurvedic College and Hospital, Paprola, Himachal Pradesh, National Ayurveda Research and Training Center, Kathmandu, Nepal**	358-362	View Abstract Download PDF
66.	**Mobile charger using piezoelectric material** *Syed Ali Ahmad, Apoorv Kumar Dwivedi, Vinit Singh, Saksham Mishra* **SRM Institute of Science and Technology, Chennai, Tamil Nadu**	363-367	View Abstract Download PDF
67.	**VLSI implementation of SPI and I²C communication protocols** *Muhammad Bakir, Niju Rajan* **N.M.A.M. Institute of Technology, Nitte, Karkala, Karnataka**	368-374	View Abstract Download PDF
68.	**Flood modelling of Patu river in Tulsipur city of Nepal and analysis of flooding impact on encroached settlement along the river** *B. B. Sadadev, K. Basnet, Bikash Sherchan* **Pashchimanchal Campus, Institute of Engineering, Tribhuvan University, Nepal**	375-384	View Abstract Download PDF
69.	**Digital marketing and its role in India** *Yash Kotak* **NMIMS Anil Surendra Modi School of Commerce, Mumbai, Maharashtra**	385-394	View Abstract Download PDF
70.	**A theoretical paper on the impact of a moving elevator on a person's apparent weight** *Mann Thakkar* **Independent Researcher**	395-402	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
71.	**Small in Size …. Yet Big at Work- Role of Microrobot inhealth care context** *K. Sasikala, Dr. V. Selvanayaki* **Vinayaka Mission's Research Foundation (Deemed to be University), Salem, Tamil Nadu, Vinayaka Mission's Research Foundation, (Deemed to be University), Salem, Tamil Nadu**	403-406	View Abstract Download PDF
72.	**Production of Bio diesel from Algae** *Shivansh Juneja, Vaibhav Mestry, Sumit Pethe* **Thadomal Shahani Engineering College, Mumbai, Maharashtra**	407-411	View Abstract Download PDF
73.	**Motor operated automatic ramming machine** *Rohit Tidke* **College of Engineering Pune, Pune, Maharashtra**	412-421	View Abstract Download PDF
74.	**Understanding the people's willingness to change their intensions towards bicycle** *Sowmya Dumpala* **Center for Environmental Planning and Technology, Ahmedabad, Gujarat**	422-432	View Abstract Download PDF
75.	**SpO2 measurement and analysis for improvement in shooting performance** *Tejas, K. N. Subramanya* **RV College of Engineering, Bengaluru, Karnataka**	433-435	View Abstract Download PDF
76.	**Synthesis and characterization of (Zn) doped Bismuth Titranate (BZT) ceramics** *Jyotiprakash Panda, S. Behera, S. Sathpathy* **Centurion University of Technology and Management, Bhubaneswar, Odisha**	436-447	View Abstract Download PDF
77.	**School van safety and surveillance system** *Abilash R., Anantha Sanker R., Kishan Kumar R.* **SRM Institute of Science and Technology, Chennai, Tamil Nadu**	448-451	View Abstract Download PDF
78.	**Implementation of CAN BUs in designing of smart vehicle control system using ARM7 Microprocessor** *Kishora Achary, Lavanya B. L.* **N.M.A.M. Institute of Technology, Karkala, Karnataka**	452-457	View Abstract Download PDF
79.	**Vehicle detection based on deep learning** *Debasmita Mishra, Rashmita Routray* **College of Engineering and Technology, Bhubaneswar, Odisha**	458-461	View Abstract Download PDF
80.	**Voice over IP mobile telephony using Wi-Fi** *Bharath M. S., Dr. Padmashree T.* **RV College of Engineering, Bengaluru, Karnataka**	462-465	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
81.	**Software Defect Prediction by optimizing features weight with a CNN** *Asheesh Raju, Anuj Gupta* **Alakh Prakash Goyal Shimla University, Shimla, Himachal Pradesh**	466-470	View Abstract Download PDF
82.	**Fleet optimization for time and cost factors in residential building** *Pravin Sable, S. M. Waysal* **Maratha Vidya Prasarak Samaj's Karmaveer Baburao Thakare College of Engineering, Nashik, Maharashtra**	471-477	View Abstract Download PDF
83.	**Acute Sheehan's Syndrome – An Update** *Nithya Natarajan, Dr. V. Selvanayaki* **Vinayaka Missions Annapoorana College of Nursing, Salem, Tamil Nadu**	478-481	View Abstract Download PDF
84.	**Development of healthy fibrous brownies** *Sahaja Gajam, Shraddha Dinesh Dubey, Dr. Gauri Vahalkar* **Guru Nanak Khalsa College of Arts ,Science and Commerce(Autonomous),Mumbai ,Maharashtra**	482-487	View Abstract Download PDF
85.	**Expected impact of reopening schools after lockdown in India** *Pratik Darbhe* **Darshan Academy, Pune, Maharashtra**	488-490	View Abstract Download PDF
86.	**P VERSUS NP PARADOX** *Swostik Pati* **Delhi Public School, Navi Mumbai, Maharashtra**	491-496	View Abstract Download PDF
87.	**The growth of lettuce under T5 led lamps in non-circulating hydroponics** *G. Sai Preetham, Bibek Bahadur Shreshta, Anne Harsha Gopal, P. Sreeja* **Vignan's Foundation for Science, Technology and Research (Deemed to be University), Guntur, Andhra Pradesh**	497-502	View Abstract Download PDF
88.	**Development of calcium-rich product- "Multipro Ragi Premix"** *Sahifa Phoplunkar, Susan George, Aathira Sudhir, Vanita Narala* **Guru Nanak Khalsa College of Arts, Science and Commerce, Mumbai, Maharashtra**	503-507	View Abstract Download PDF
89.	**Fingerprint matching algorithm using multipoint minutiae matching algorithm using SVM approach** *Gurwinder Singh, Puneet Jain* **Adesh Institute of Engineering and Technology, Faridkot, Punjab**	508-512	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
90.	**The association of body mass index with high bloodpressure among adults** *Asma Mafiz Ansari, Dr. Arpita Verma* **Institute of Clinical Research India, Mumbai, Maharashtra**	513-519	View Abstract Download PDF
91.	**Operational modal analysis of a bike chassis** *Mohamed Hafeez, Varun V. Bhat, V. Ajay, Santhosh Kumar H. V.* **PES University, Bangalore, Karnataka**	520-523	View Abstract Download PDF
92.	**The role of the arts during a global pandemic** *Ariya Maskara* **Independent Researcher**	524-527	View Abstract Download PDF
93.	**Wireless sensor networks for agricultural and other applications and routing protocols with challenges of routing protocols** *Anusha D., Vanishree K.* **RV College of Engineering, Bengaluru, Karnataka**	528-536	View Abstract Download PDF
94.	**Solar-powered semi-autonomous vehicle for agricultural usage** *Soubhik Mazumdar, Abhinav Bhattacharya, Kirti Bhagat, Aayush Kumar, Shivam Gupta, Kunal Sahni, Menaka R.* **Vellore Institute of Technology Chennai, Tamil Nadu**	537-542	View Abstract Download PDF
95.	**Ionic Liquids and it's versatile applications : Blessings for Chemists** *Pratik D. Saudagar* **Institute of Chemical Technology (ICT) Mumbai, Maharashtra**	543-551	View Abstract Download PDF
96.	**A brief review on various topologies of custom power devices** *Mantu Kumar, Eknath Borkar* **Scope College of Engineering, Bhopal, Madhya Pradesh**	552-555	View Abstract Download PDF
97.	**Advancements in controlled Drug Release Systems** *Akanksha Pradhan, Saksham Rawal* **Indian Institute of Technology, New Delhi, Delhi**	556-558	View Abstract Download PDF
98.	**Role of Carbon Markets in India to meet its Climate Commitments** *Aaditya Gupta* **Delhi Public School, New Delhi, Delhi**	559-568	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
99.	**Understanding urbanization and urban flooding scenario in India** *Thoudam Sudha, Rachit K. Pamnani, Sanjay Singh Jadon, Noopur Gupta* **Madhav Institute of Technology and Science, Gwalior, Madhya Pradesh, AMITY University, Raipur, Chhattisgarh**	569-574	View Abstract Download PDF
100.	**Candidate talent assessment through recommender systems using machine learning techniques** *Swathi V., Suraksha S. Tasgaonkar, Shubhashri T. V., Prarthana T. V.* **BNM Institute of Technology, Bengaluru, Karnataka**	575-578	View Abstract Download PDF
101.	**Approach to help choose right data warehousing tool for an enterprise** *Madhusudhan Reddy Sureddy, Prathyusha Yallamula* **Santander Bank, Holmdel, NJ, USA, Natixis CIB Americas, New York, New York, USA**	579-583	View Abstract Download PDF
102.	**Water demand prediction using Machine Learning** *Disha A. P., Lahari T. K., G. Jananisri, Soniya R.* **Sai Vidya Institute of Technology, Bangalore, Karnataka**	589-594	View Abstract Download PDF
103.	**Smart grid demand side management using hybrid combination of bat and firefly algorithm** *Kirtanpal Singh, Puneet Jain* **Adesh Institute of Engineering and Technology, Faridkot, Punjab**	595-599	View Abstract Download PDF
104.	**UNO-Phobia vs. Islam-Phobia** *Jamir Ahmed Choudhury* **Assam University, Silchar, Assam**	600-629	View Abstract Download PDF
105.	**Solar tracker** *Mithilesh Rai* **ABES Engineering College, Ghaziabad, Uttar Pradesh**	630-638	View Abstract Download PDF
106.	**Experiment on different indoor vertical gardening by hydroponic method for sustainable infrastructure** *Dr. Aravinthan K., Haseeb Baig, Aanchal P., Gnaneshwari S., Khalid Pasha R.* **Raja Rajeshwari College of Engineering, Bengaluru, Karnataka**	639-642	View Abstract Download PDF
107.	**Scenario behind the water color changed from green to pink/red of Lonar Crater Lake, Maharashtra, India** *Raju D. Jadhav, Harishchandra B. Mali* **Independent Researcher**	643-650	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
108.	**Grid-Connected PV system using Single and Three Phase Neutral Point Clamped ML** *Lalit Mishra, Sachindra Kumar Verma* **NRI Institute of Information Science and Technology, Bhopal, Madhya Pradesh**	651-655	View Abstract Download PDF
109.	**A review of implementations in wearables to detect stress** *Manish Kumar Sharma, Sheshank Kumar* **Samsung Research Institute, Noida, Uttar Pradesh**	656-660	View Abstract Download PDF
110.	**Impact of GST on FMCG companies in India** *Aalya Jhelumi* **The Shri Ram School Moulsari, Gurugram, Haryana**	661-667	View Abstract Download PDF
111.	**Accuracy of Machine Learning Models for Plant Disease Detection** *Harshith P. K., Bitopan Deka, Nikhil N., Sumanth T. S.* **Sai Vidya Institute of Technology, Bengaluru, Karnataka**	668-669	View Abstract Download PDF
112.	**Polymer-concrete composites: Impregnation** *Ankur Kapooria* **Indian Institute of Technology Delhi, New Delhi, Delhi**	670-672	View Abstract Download PDF
113.	**Design and analysis of cocoon extractor** *Yeshwant J., Samarth B. Deshpande, Yashvanth Naik M. M., Sadan Gowda V., Manjunath Naik H. R.* **SJB Institute of Technology, Bengaluru, Karnataka**	673-675	View Abstract Download PDF
114.	**Over-dues forecasting using ARIMA Technique** *A. Kalyan Aravind Kumar* **Indian School of Business, Hyderabad, Telangana**	676-679	View Abstract Download PDF
115.	**A study on influence of store ambience on consumers purchase behaviour** *S. Ilakya, S. Sandhya, Dr. D. Vijayalakshmi* **PSG College of Technology, Coimbatore, Tamil Nadu**	680-686	View Abstract Download PDF
116.	**Review on credit card fraud detection and classification by Machine Learning and Data Mining approaches** *Aaushi Sharma, Neha Bathla* **Yamuna Group of Institutions Engineering and Technology, Yamuna Nagar, Haryana**	687-692	View Abstract Download PDF
117.	**Review on software defect prediction with role of Machine Learning and Feature Selection** *Megha Saloni, Sucheta* **Yamuna Group of Institutions Engineering and Technology, Yamuna Nagar, Haryana**	693-699	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
118.	**Effectiveness of mHealth app on self –management of ascites in terms of knowledge and attitude of chronic liver disease patients** *Rachna Sharma, Dr. Mini George, Dr. Shasthry SM* **Institute of Liver and Biliary Sciences, New Delhi, Delhi**	700-706	View Abstract Download PDF
119.	**Soil Based, Aeroponic and Hydroponic Systems in Space with Microgravity and Hypogravity Conditions** *Saranyaa Kashyap* **Delhi Public School, New Delhi, Delhi**	707-713	View Abstract Download PDF
120.	**Autism Action Plan of Canada and Northern Ireland – A comparative review** *Joshitha Sankam* **Department of Public Health, Prasanna School of Public Health, Manipal, Karnataka**	714-716	View Abstract Download PDF
121.	**Evaluation of crop depredation by Asian Elephant (Elephas maximus) in Badrama Wildlife Sanctuary, Odisha, India** *Barun Kumar Behera, Rabindra Kumar Mishra, Hemanta Kumar Sahu, Prithwiraj Sahu, Sanath Kumar N.* **North Orissa University, Baripada, Odisha, Balda Iron Ore Mines, Balada, Odisha, Bamra Wildlife Division, Bamra, Sambalpur**	717-723	View Abstract Download PDF
122.	**Accelerating sales for Citrix Education Services using Logistic Regression** *A. Kalyan Aravind Kumar* **Great Lakes Institute of Management, Chennai, Tamil Nadu**	724-733	View Abstract Download PDF
123.	**Experimental study on characteristics of bacterial concrete** *Dr. Aravinthan K., Arshad Rashid, Syed Afnan Asad, Hyder Ali, Abdul Bhasha* **RajaRajeswari College of Engineering, Bengaluru, Karnataka**	734-737	View Abstract Download PDF
124.	**Modeling and data analysis for the evolution of COVID-19 in Ethiopia** *Wudneh Ketema* **Debre Berhan University, Debre Berhan, Ethiopia**	738-744	View Abstract Download PDF
125.	**The motion of weak spherical shock waves in highly viscous medium** *Dr. Arvind Kumar, Dr. Kamlesh Kumar, Dr. Satyendra Prakash, Dr. Harminder Singh* **Daryao Singh Rathore Memorial Mahavidyalaya, Baduan, Uttar Pradesh, Agra College, Agra, Uttar Pradesh, Saraswati Vidya Mandir, Etah, Uttar Pradesh, Government College, Bareilly, Uttar Pradesh**	745-747	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
126.	**Pets and stress** *Khushboo Hemnani, Ayushi Dhanesha* **Mithibai College of Arts, Mumbai, Maharashtra**	748-751	View Abstract Download PDF
127.	**Study and compare the photodegradation efficiency of clay based compound with semiconductor oxide nanomaterials** *G. Ida, D. Easwaramoorthy* **Research and Development Centre, Bharathiar University, Dhanalakshmi College of Engineering, Manimangalam, Tamil Nadu, Research and Development Centre, Bharathiar University, B. S. Abdur Rahman Crescent Institute of Science and Technology, Chennai, Tamil Nadu**	752-754	View Abstract Download PDF
128.	**Performance evaluation of helicoidal flow jet flocculator** *Pradnya Telang, Dr. L. G. Patil* **Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded, Maharashtra**	755-760	View Abstract Download PDF
129.	**Modelling parking for public health and education institutions in Srinagar City** *Sheikh Abdul Hanan, Vikram Kaintura* **Himgiri Zee University, Dehradun, Uttarakhand**	761-765	View Abstract Download PDF
130.	**E – Moped** *Abdulhasnain Murtaza Akodiyawala, Suyant Yugant Dharwarkar, Amit Harishchandra Jadhav, Ayush Kunkulol, Dhruv Gopal Suratwala, Aman Gulab Bargir* **Vishwakarma University, Pune, Maharashtra**	766-773	View Abstract Download PDF
131.	**Suspicious and Terror Message Detection Using NLP and Web Minning** *Ashwin Nair, Shashank T. V., Rakesh S.* **Sai Vidya Institute of Technology, Rajanukunte, Karnataka**	774-775	View Abstract Download PDF
132.	**Biosynthesis of silver nanoparticle from pasteurized milk and their effects on raw milk to control spoilage** *Shailesh Saurabh* **Aasma Foods and Beverages Private Limited, Hajipur, Bihar**	776-779	View Abstract Download PDF
133.	**Hawking Radiation and its Implications as the Information Paradox** *Shivam* **Greenwood High International School, Bangalore, Karnataka**	780-787	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
134.	**Assessment of functional requirements for the development of a smart village** *A. Muthu Veeran* **Sri Ramakrishna Institute of Technology, Coimbatore, Tamil Nadu**	788-791	View Abstract Download PDF
135.	**Impact of the human-animal bond on stress** *Saumya Swamy, Rhea Bedi, Yusra Nadeem Dawnak* **Mithibai College of Arts, Science and Commerce, Mumbai, Maharashtra**	792-795	View Abstract Download PDF
136.	**The effect of activities of daily living on depression among elderly people** *Pradhiba S. P. M* **KMCH College of Nursing, Coimbatore, Tamil Nadu**	796-798	View Abstract Download PDF
137.	**Mood recognition emotion ontology with texts** *Jacquelin Anushya P., P. Nisha Priya* **CSI College of Engineering, Ketti, Tamil Nadu**	799-802	View Abstract Download PDF
138.	**A Review on Effect of Different Nanofluids on Thermal Performance in Trapezoidal Corrugated Channel** *Aaditya Sharma, Brijendra Kumar Yadav* **Patel College of Science and Technology, Bhopal, Madhya Pradesh**	803-806	View Abstract Download PDF
139.	**Medicinal weed plants in paddy (Oryza sativa L.) fields** *Rajasekaran S., G. Thiyagarajan* **A.V.C. College (Autonomous), Mayiladuthurai, Tamil Nadu, Government Arts College for Men Kumbakonam, Tamil Nadu**	807-808	View Abstract Download PDF
140.	**Ludwig's Angina – Case Study** *Santhipriya A., Dr. V. Selvanayaki* **VMRF(DU) Vinayaka Missions Annapoorana College of Nursing, Salem, Tamil Nadu**	809-812	View Abstract Download PDF
141.	**Effect of Different Nanofluids on Thermal Performance in Trapezoidal Corrugated Channel** *Aaditya Sharma, Brijendra Kumar Yadav* **Patel College of Science and Technology, Bhopal, Madhya Pradesh**	813-819	View Abstract Download PDF
142.	**E-health care system** *Gontla Bhargava Sai Sathvik, Guna Sekhar Tirumalasetti* **Vellore Institute of Technology, Vellore, Tamil Nadu**	820-823	View Abstract Download PDF
143.	**Impact of COVID-19 in India and its effects on different sectors of Indian Economy and it's relation to the second-largest Post Independence Mass Migration of people** *Debarthy Dutta, Dr. A. N. Sahi* **Amity Institute of Biotechnology, Kolkata, West Bengal**	824-832	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

S.No	Title	Page Number	Links
144.	**Maternal and neonatal health care status in Somalia: A descriptive, facility-based survey** *Omar O. Hasan* **Somali National University, Mogadishu, Somalia**	833-836	View Abstract Download PDF
145.	**Gender and family roles: A survey in urban India** *Tanya Chugh* **Symbiosis Centre for Management Studies, Pune, Maharashtra**	837-845	View Abstract Download PDF
146.	**The effect of caffeine and nicotine on different plant growth** *Asma Mafiz Ansari* **Ismail Yusuf Arts, Science, and Commerce College, Mumbai, Maharashtra**	846-858	View Abstract Download PDF
147.	**Evaluating gaps in interdepartmental communication and assessing their relation to employee motivation: An action research study** *Navneet Kaur Babbra* **The British School, New Delhi, Delhi**	859-862	View Abstract Download PDF
148.	**Symmetric and asymmetric mixed convection heat transfer through vertical channel with porous medium with different oxide nanofluids** *Dr. G. Srinivasa Rao* **Kakatiya Institute of Technology and Science, Warangal, Telangana**	863-869	View Abstract Download PDF
149.	**Evaluation on predictive analysis of rain disaster using Adaptive Neural Turing Networks** *Satwik P. M., Dr. Meenatchi Sundram* **Garden City University, Bengaluru, Karnataka**	870-873	View Abstract Download PDF

© 2020, IJARIIT.COM All Rights Reserved

ABSTRACTS

1 The systemic pattern of Evolution

Paper ID V6I4-1142 · Pages 1-1 · Zoology

Ajil Benny, Student, Independent Researcher

The paper depicts about the relation of the evolution in contest of comparison of gene difference of an organism in present generation and older generation

Keywords: Zoology, Evolution, Genetics, Evolutionary zoology

Read Full Paper · Download PDF · Back to index

---

2 Higher education in India- The past glory of excellence, the downfall, and an attempt to rise again

Paper ID V6I4-1147 · Pages 2-7 · Education

Nisha Chakyarkandiyil, Research Scholar, Christ Deemed To Be University, Bangalore, Karnataka

The current study titled “Higher Education in India –The Past Glory of Excellence, the Downfall, and an Attempt to Rise Again” is a quantitative study to analyse the perceptions of people about the Higher Education in India. The investigator used random sampling method to collect the information through an online survey. The sample consisted of 40 individuals who are directly or indirectly involved in the higher education system. The study revealed that India had enjoyed a well renowned higher education system and world class universities. India contributed immensely towards Science, Mathematics, surgery and medicine. But the statics show that now India’s performance in higher education in the global level is alarming and shameful. The young generation wants to move to world- class universities abroad for their higher education. The findings of the study shows that most of the respondents are aware about the positive aspects, negative aspects, brain drain and the current scenario of Indian Higher Education System. The finding also shows the Indian Education System needs radical changes and more investment from the government towards its development. There was a strong opinion that Indian universities should respond to global changes and also work hard towards the skill-based training rather than the age old theory-based learning.

Keywords: Higher education system, brain drain, colonial system, global changes, skill-based education, human resource, social reforms, NAAC, accreditation agencies, policies, funds

Read Full Paper · Download PDF · Back to index

---

3 The food and beverage sector in the COVID-19 times

Paper ID V6I4-1151 · Pages 8-17 · Business (hospitality Sector)

Vir Jain, Student, Independent Researcher

The following research paper attempts to unravel the effects of the COVID-19 pandemic on industries’

© 2020, IJARIIT.COM All Rights Reserved

operations. In order to ensure that the inferences drawn are reliable, this paper focuses exclusively on the dynamic Food & Beverage Sector.

Keywords: Food and Beverage sector, COVID-19, Pandemic, Restaurants, Consumers

Read Full Paper · Download PDF · Back to index

---

4 Bio-control of mosquito larvae using filamentous fungi-environmental study

Paper ID V6I4-1156 · Pages 18-23 · Environmental Science

Dharit Bhatt, Student, Bhavan's College, Mumbai, Maharashtra
Dr. Sashirekha Sureshkumar, Associate Professor, Mithibai College of Arts Chauhan Institute of Science and Amrutben Jivanlal College of Commerce and Economics, Mumbai, Maharashtra
Shamil Darbar, Student, K.E.M hospital, Mumbai, Maharashtra

fungal species are useful for medical and agriculture purpose as a bio- control agent. In aquatic environments, temperature, salinity and organic pollution are the important factors.The objective of the current project was to investigate the possibilities of controlling the mosquito population using fungal cultures. to investigate the possibilities of controlling the mosquito population using fungal cultures. In the view of rampant increase in the incidence of dengue fever transmitted through mosquitoes it is absolutely essential to control the mosquito population. There are different species of mosquitoes of which dengue virus is transmitted by the Aedes aegypti, found in habitats like stagnant clear waters, backyards which are common in urban areas. In the present work water samples were collected from in and around Mumbai, the water samples were examined for its nutritional status by analyzing them physically, chemically and biologically.The fungal cultures obtained from water samples were predominantly Aspergillus niger, Aspergillus terreus, and Penicillium, Trichoderma, Curvularia, Sprolegmia and Achlya.. As per the results it was observed that the Curvularia was the most effective on the larvae as the mortality rate was 100%. . The death of the larvae could be possibly due to the organic acids produced by the fungi. Microscopic observation of the larvae shows the growth of the fungi on larvae ultimately killing it. This is the most effective bio-control.

Keywords: Bio-Control, Asperigillus Niger, Aspergillus terreus, Penicillium, Curvalaria, Trichoderma

Read Full Paper · Download PDF · Back to index

---

5 A multivariate statistical approach for ranking the best batsmen in test cricket

Paper ID V6I4-1160 · Pages 25-36 · Statistics

Rahul Motipalle, Student, Indian Institute of Information Technology, Sricity, Andhra Pradesh
Sajjanapu Venkat Lokesh Kumar, Student, Indian Institute of Information Technology, Sricity, Andhra Pradesh

The primary objective of this paper is to devise a ranking system for individual test batsmen (from different eras) considering all possible factors like the difficulty of opposition bowlers, the batsman’s consistency, the contribution of the batsman in the success of his team, the era in which he played, etc. Due to the presence of such numerous factors—each one of them having a significance of its own, it is imperative that a multivariate statistical approach is employed in the ranking of Test batsmen. A total of eight factors were zeroed in on which

© 2020, IJARIIT.COM All Rights Reserved

were thought to influence the performance of a batsman. An index was developed for each of the eight factors, and thus each of the batsmen got eight different scores for the eight different factors. Consequently, the eight scores of the batsman act as the coordinates of a point/cluster in an eight-dimensional plane. In this way, each of the batsmen under study is represented by a point in an eight-dimensional plane. Finally, to determine the most exceptional batsmen among the batsmen under study, the concept of multivariate statistical outlier detection using Mahalanobis distances was used. However, the concept of Outlier Detection only gives us an idea of the most exceptional batsmen when compared to the others. In order to determine the best batsmen, the process of outlier detection is followed up with the determination of the efficiencies of each of the batsmen under study. The efficiencies of the batsmen are calculated by adopting the approach of Data Envelopment Analysis (DEA), wherein each batsman is likened to a machine or a Decision-Making Unit (DMU). The higher the efficiency of a batsman, the greater his success in converting low inputs (difficult input parameters) to high outputs.

Keywords: Ranking Batsmen, Ranking Cricketers, Outlier Detection, Factor Analysis, Data Envelopment Analysis, Test Cricket

Read Full Paper · Download PDF · Back to index

---

6 Controlling web browser via different hand gestures and speech recognition

Paper ID V6I4-1167 · Pages 37-42 · Computer Science & Technology Engineering

Rithika V. Jadhav, Student, Usha Mittal Institute of Technology, Mumbai, Maharashtra
Prajakta S. Bait, Student, Usha Mittal Institute of Technology, Mumbai, Maharashtra
Sumedh Pundkar, Assistant Professor, Usha Mittal Institute of Technology, Mumbai, Maharashtra

Gestures and speech are major forms of human communication. The primary goal of gesture recognition is to create a system that can identify specific human gestures whereas the primary goal of speech recognition is to create a system that can convert speech sound into its corresponding text. In this paper, we have implemented a real-time gesture recognition system where a user can navigate a computer to a particular website by doing a specific gesture in front of a web camera linked to the computer. We have also implemented a speech recognition system that takes speech as an input from the device microphone, converts it into text, and thereafter performs different operations.

Keywords: Gesture, Speech, Human Communication, Gesture Recognition, Speech Recognition

Read Full Paper · Download PDF · Back to index

---

7 Design of rainwater harvesting system in RRCE campus

Paper ID V6I4-1172 · Pages 43-45 · Civil Engineering

Akash M. P., Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
Vivek J., Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
Venugopal M., Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka
Dhanush Bhavan B. M., Student, Rajarajeswari College of Engineering, Bengaluru, Karnataka

Rainwater harvesting system is mainly the process or a phenomenon of collection and conservation of rainwater from various techniques where the rainwater is the main source for the process of harvesting. Here

© 2020, IJARIIT.COM All Rights Reserved

we mainly consider the rooftop rainwater harvesting system for the collection of rainwater from roof or top of the buildings of Rajarajeswari College of Engineering campus. The study and implementation of the technique of rooftop rainwater harvesting system in RRCE campus mainly fulfill the needs and also resolves the issue of scarcity of water in all seasons by equivalent supply of collected and stored water for future needs . Also groundwater recharge could be done in efficient way. By implementation of this technique, water source will be increased up to 1420 meter cube in the campus which also intern could be used for construction works as well as maintenance of the good gardening works in the campus .Thus we can say it mainly fulfill the needs of scarcity of water and also mainly recharge groundwater

Keywords: Roof top Rainwater harvesting system, Total station Surveying, Design considerations

Read Full Paper · Download PDF · Back to index

---

8 Parallel A* search on a multi-core CPU

Paper ID V6I4-1183 · Pages 46-49 · Computer Science

Ishaan Jaffer, Research Scholar, Carnegie Mellon University, Pittsburgh, Pennsylvania

Multi-core central processing units (CPU) and the graphics processing unit (GPU) have become popular parallel computing platforms in recent years [1]. The GPU platform is commonly adopted in the research community as it has been to be superior to the traditional CPU. Straightforward implementations of Parallel algorithms on a GPU can easily achieve a speedup of ten times or more over the sequential algorithms. However, achieving significant speedup on a multi-core CPU (over the sequential algorithm) requires intelligently designed and well-optimized algorithms [3]. This paper discusses a parallel implementation of A* search which achieved 6.67x Speedup with a search space of 106 nodes, 3.14x speedup with 107 nodes, and 137.67x speedup with 108 nodes when run on the eight-core, 3.0 GHz Intel Core i7 processor. This paper also analyses different work partitioning strategies and how the performance of the parallel A* search algorithm scales.

Keywords: Parallel Computing, A* Search, Search Algorithms, High-Performance Computing, Multi-core, CPU, GPU, Speedup, Threading, Parallel A* Search

Read Full Paper · Download PDF · Back to index

---

9 A study on life cycle of six spotted zig-zag ladybird

Paper ID V6I4-1187 · Pages 50-51 · Zoology

Ajil Benny, Student, Independent Researcher

Six spotted zig-zag ladybird is a type of ladybird belonging to genus Cheilomenes. Even though the beetle is known to everyone their life cycle is not commonly known to us. The aim of this research project was to identify the different life stages of the six spotted zig-zag ladybird

Keywords: Zoology, Ecology, Entomology Ecosystem

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

10 Development of fiber rich gummies

Paper ID V6I4-1157 · Pages 52-55 · Msc Nutraceutical

Priya Bharat Lohar, Student, Guru Nanak Khalsa College of Arts, Science and Commerce, Mumbai, Maharashtra
Pooja Manojkumar Shrivastav, Student, Guru Nanak Khalsa College of Arts, Science and Commerce, Mumbai, Maharashtra
Suhana Suleman Kulavoor, Guide/Mentor, Guru Nanak Khalsa College of Arts, Science and Commerce, Mumbai, Maharashtra

The consumer's demand for functional foods and nutraceuticals has increased globally in recent years. There is a shift towards natural colorants, low fat, low cholesterol, natural-based ingredients, and free of synthetic additives. The gummy food supplements are more acceptable having fewer limitations compared to other dosage forms. Fiber is a critically important nutrient in the everyday diet as it promotes healthy digestion, improves gut microbiota composition, helps reduce cholesterol, and improves cardiovascular health. Research has shown that consumers are more likely to move towards fiber as a value-added ingredient for a healthy lifestyle. The aim of our study was to produce a fiber-rich gummy. The key ingredients used include watermelon juice, beetroot juice, plant-based pectin instead of gelatin, and stevia. The present study showed that the product is a good source of dietary fiber (8.54%)and carbohydrates (64.52%). The product was liked very much by all the participants (score- 8.) Through various proximate analysis, the nutritional value of gummies was estimated. Even the sensory analysis and microbiological analysis were conducted to analyze the safety and consumers preference respectively.

Keywords: Gummies, Dietary Fiber, Watermelon Juice, Beetroot Juice, Sensory Evaluation, Nutritional Requirements

Read Full Paper · Download PDF · Back to index

---

11 Development of a Protein-Rich Premix “Health-o-Fit Basundi Mix”

Paper ID V6I4-1161 · Pages 56-61 · Nutraceuticals

Komal Kamlesh Pathak, Student, Guru Nanak Khalsa College of Arts, Science and Commerce, Mumbai, Maharashtra
Shreya Bhau Parab, Student, Guru Nanak Khalsa College of Arts, Science and Commerce, Mumbai, Maharashtra
Suhana Suleman Kulavoor, Mentor, Guru Nanak Khalsa College of Arts, Science and Commerce, Mumbai, Maharashtra

The increasing demand, craze of muscle building and the market related to protein supplements is seeking a lot of profit and is growing at a very fast rate. In India, gyms are opening across the country in both small and big cities, thus serving as main promoters of Sports nutrition products/ Protein supplements for a typical consumer being someone that wants to build muscles and aid recovery after a serious workout. Keeping that in mind, the idea of having something as delicious as basundi is always appealing and added to it the nutrition factor will just make it more desirable. A premix for Basundi rich in protein and high amount of fiber was developed for general population except diabetic people. Effects of the ingredient incorporation on the nutritional composition and sensory qualities were evaluated. The product with more consumer acceptability was analyzed for various parameters like protein, calcium, energy, fat, carbohydrate, moisture, ash, essential amino acids. Addition of powdered oats, dried fruits and pumpkin seeds improved the nutritional composition and made it acceptable for wide range of consumer groups. The premix was analyzed for its physical, biochemical and sensory properties. Proximate analysis was carried out and the results obtained were Energy

© 2020, IJARIIT.COM All Rights Reserved

(397.38 kcal), Ash content (3.48%), Moisture content (3.52%), Carbohydrate content (67.9g), Protein content (25.1g), Fibre content (8.6g) and Fat content (2.82g). Organoleptic analysis including sensory attribute like color, odour, appearance, texture and taste was carried out to check the overall acceptability of the product. Microbiological testing and shelf life studies were also carried out and suitable packaging for the product was also identified. Health-O-Fit Basundi Mix is healthy and a good source of protein, fibre and energy. Also effective in terms of nutritional quality, without compromising on the taste of the basundi premix available locally.

Keywords: Premix, Basundi, Protein rich, Pumpkin seeds, Powdered Oats

Read Full Paper · Download PDF · Back to index

---

12 Improvement of highway capacity due to cycle track in urban area

Paper ID V6I4-1164 · Pages 62-66 · Traffic Engineering

Arif Anwar, Research Scholar, Babu Banarasi Das University, Lucknow, Uttar Pradesh
Prof. D. S. Ray, Professor, Babu Banarasi Das University, Lucknow, Uttar Pradesh

This paper tries to make study of the Improvement of highway capacity due to cycle track in urban area. As urban areas develop in our country and the world, some issue related to urbanization such as traffic congestion became a serious issue. Cycle tracks are exclusive bicycle facilities that are physically separated cyclists from motor vehicle lanes. Cycle tracks are important part of infrastructure proven to increase ridership and improvement in highway capacity. Increasing bicycling can improve the overall quality in the urban areas. A separate cycle track can increase the speed of remaining vehicles so that it can save time, fuel consumption, wear and tear, reduce pollution etc. It can also increase the transportation choices, reduce parking and traffic congestion. In urban planning, cycle tracks are designed to encourage bicycling to an effort to relieve traffic congestion and reduce pollution, reducing bicycling fatalities and injuries by eliminating the need for cars and bicycles to journey for the same road space and to reduce overall confusion and tension for all users of the road. Cycle track may be one-way or two-way, and may be at road level, at sidewalk level, or at an intermediate level. I tried to find improvement of highway capacity if we construct cycle track in urban area. For this I did survey work on Chinhat to Dewa section of Itaunja-Mahona-Kumhrawa-Kursi-Dewa-Chinhat road, Lucknow. I did two way classified traffic survey of the road and also calculate average speed of commercial vehicles, personal vehicles and two wheeler vehicles except cycle. We studied of speed of commercial vehicles, personal vehicles and two wheeler vehicles based on algorithm that there will be no cyclist on mixed traffic. Lastly we studied and comparison of fuel consumption, wear and tear cost, air pollution cost, accident cost etc and as well as total cost saving due to separate cycle tracks

Keywords: Cycle Track, Traffic Congestion, Urbanization, Traffic Jams, Bicycling

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

13 Women empowerment and their empowering schemes in India

Paper ID V6I4-1185 · Pages 67-70 · Sociology

Huma Akhtar Malik, Research Scholar, Bhagwant University, Ajmer, Rajasthan
Dr. Dinesh Mandot, Assistant Professor, Bhagwant University, Ajmer, Rajasthan

This paper attempts to analyze the need for Women Empowerment in India and highlights the methods and schemes of Women Empowerment. Empowerment is the main process of social development that can enable women to participate, in the economic, political and social sustainable development of the rural communities. Today the empowerment of women has become one of the most important concerns of the 21st century but practically women empowerment is still an illusion of reality. Empowerment of women is essentially the process of upliftment of the economic, social and political status of women, the traditionally underprivileged ones in the society. We observe in our day to day life how women become victimized by various social evils. Women Empowerment is a vital instrument to expand women's ability to have resources and to make strategic life choices. It is the process of guarding them against all forms of violence. The study is based on purely from secondary sources. Women of India are relatively disempowered and they enjoy somewhat lower status than of men in spite of many efforts undertaken by the Government. It is found that acceptance of unequal gender norms by women are still prevailing in the society. The study concludes by an observation that providing basic facilities and implementing various schemes are enabling factors to Women Empowerment.

Keywords: Women Empowerment, Basic rights, Education, Health, Socio-Economic Status, scheme implementation.

Read Full Paper · Download PDF · Back to index

---

14 Gender and space in temple architecture

Paper ID V6I4-1158 · Pages 71-73 · Architecture

D. Midhila, Student, Hindustan Institute of Technology and Sciences, Vijayawada, Andhra Pradesh
Dr.R.V.Nagarajan, Professor, Hindustan Institute of Technology and Sciences, Padur,Chennai,Tamilnadu

Architecture can be perceived as Masculine, Feminine, and Neuter. These principles can be observed all around from history till present. These are the fundamental philosophies of life. As per vitrivius, Masculine interprets firmatis, feminine interprets venustas while neuter interprets utilitas. It has been observed from the literature that these parameters don't function independently and are dependent on each other. If we look on earth, wind, water, sky & fire all have their unique characteristics and depend on each other. All together they create balance and harmony. Few other examples are as follows Sun & moon –both are balancing the entire universe. Yin & yang - were in harmony with each other. This paper addresses a sensitive and ideological study based on balance, fluidity, harmony, style, engineering, and sustainability. This paper looks into the articulation of sacred geometry, golden ratios & ancient wisdom with masculine and feminine principles.

Keywords: Gender and space, Masculine and feminine principles, Gandikota, Madhavaraya temple

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

15 Kinetics of rural transformation in Marathwada and Khandesh region of Maharashtra and the rhythmic factors affecting it

Paper ID V6I4-1181 · Pages 74-79 · Rural Development

Parag Gopal Panchabhai, Independent Researcher

The rural development in India has been overlooked as an approach to increase the financial status of the villages. Whereas, the actual sustainably developed villages have adopted a very unique and significant approach. These villages have approached towards strengthening of the resources a village has and generating the resources village need, especially natural resources. This research is an effort to state the role of various rhythmic factor which affects rural development. The study was conducted in 165 villages from Marathwada and Khandesh Region from Maharashtra, India. The selected villages were almost in the drought-prone area with very low rainfall and improper auxiliary systems for development and transformation

Keywords: Rural Development, Factors affecting Rural Development, Natural Resources, Marathwada & Khandesh Villages, Rural India

Read Full Paper · Download PDF · Back to index

---

16 Literature Survey on different topologies of UPQC

Paper ID V6I4-1186 · Pages 80-84 · Power System

Vinay Gupta, Student, University Institute of Technology, RGPV, Bhopal, Madhya Pradesh
Shobhna Jain, Assistant Professor, University Institute of Technology, RGPV, Bhopal, Madhya Pradesh

Concern for power quality issues has been increasing day by day due to increase in renewable energy resources, non-linear loads and applications of power electronic devices. Utility of UPQC to mitigate issues related to power quality is emerging as a universal solution. This paper presents review on various topologies available for UPQC system both for single phase system and three phase system. A review on previous research work on application of UPQC in various utility systems is also showcased.

Keywords: Unified power quality conditioner (UPQC), Power quality, power electronic converters, dual control strategy, harmonic compensation, voltage sag and swell compensation.

Read Full Paper · Download PDF · Back to index

---

17 Stacklite – Stack overflow tag prediction

Paper ID V6I4-1166 · Pages 85-87 · Computer Science Engineering

Gada Shrenika, Student, BVRIT Hyderabad College of Engineering for Women, Hyderabad, Telangana
Ch. Ramya, Student, BVRIT Hyderabad College of Engineering for Women, Hyderabad, Telangana
A. Rajashekar Reddy, Assistant Professor, BVRIT Hyderabad College of Engineering for Women, Hyderabad, Telangana

Nowadays data plays a major role in every aspect of our life. The past data that is available can be used for analysis and to predict the future. For websites that are based on learning, the old data which the users are posting and tagging can be used to analyze and predict what new implementations can be done to increase the user experience. Similarly, Stack Overflow is the largest learning forum that is used by most of the developers

© 2020, IJARIIT.COM All Rights Reserved

to learn and share their programming knowledge. To post a question, users need to enter the tags related to the question manually. Here we are analyzing the past available data to predict the tags automatically based on the question a user enters which increases the enhancement of user experience.

Keywords: Machine Learning, Multi-class classification, Text Classification, Binary Relevance, Classifier Chains, Label Powerset, K-Nearest Neighbours, Logistic Regression, Tags, TF-IDF vectorizer, Countvectorizer

Read Full Paper · Download PDF · Back to index

---

18 Impact of computer education in high school – A case study of Dharwad city

Paper ID V6I4-1177 · Pages 88-92 · Computer Technology

Maimuneesa K. Kazi, Independent Researcher

Liberalization, Globalization, and Privatization coupled with the advancement in computer technology have opened up new demand for skilled manpower, service, and education sector. So in this scenario education has been identified as one of the 12 main services under the general agreement on trade in services, which needs to be opened up for the free flow of trade between countries. Knowledge is expected to become a tradable commodity and it will be essential that Indian educators keep pace with the change in the field of education and learning. The findings of this study reveal that computer education has greatly enhanced educational administrators through improving cross communication at the managerial level, quick access to needed information, analyzing data fast and effectively. It reduces workload good secure storage of information, improves coordination of tasks and activities in the education era with respect to high school. Therefore, the finding reveals that computer education should procure more ICT facilities and equipment in order to ensure maximum efficiency and effectiveness in all dimensional of educational administration. Hence researchers move contrasted on High School education, so sample study of Dharwad City has been considered.

Keywords: Computer technology, Knowledge, Education, learning

Read Full Paper · Download PDF · Back to index

---

19 A comparative study to assess nutritional games and modified hearth approach for adolescents

Paper ID V6I4-1192 · Pages 93-98 · Food Science And Nutrition

Meera M., Assistant Professor, Sri Sathya Sai Institute of Higher Learning, Anantapur, Andhra Pradesh
R. K. Anuradha, Professor, Sri Venkateswara University, Tirupati, Andhra Pradesh

Communication is the heart of human beings for exchanging information. Use of health communication principles in public health nutrition present various challenges and has contributed in gaining vast recognition by combing theory and practice in bringing desirable changes in nutritional knowledge and practice to overcome communicable and non-communicable diseases. An attempt was made to bring out a desirable knowledge change in school going children of 8th and 9th class by using nutritional games approach and modified hearth approach and to study the efficacy of the approaches by comparing. The study revealed a Significant improvement in knowledge level of intervention groups of adolescents after exposure to experimental approaches-nutrition game and modified hearth approach compared to control group not exposed

© 2020, IJARIIT.COM All Rights Reserved

to any treatment(p

Keywords: Nutritional Games, Hearth Approach, Nutrition Education, Communication

Read Full Paper · Download PDF · Back to index

---

20 An analysis of online music streaming behavior in India

Paper ID V6I4-1199 · Pages 99-102 · Marketing

Divya Shridhar, Student, Independent Researcher

In the Indian music industry, the consumption of music on digital music streaming platforms has increased significantly over the past few years. There has also been a rise in the number of music streaming apps in India. The purpose of this study is to determine popular features in a music streaming app that appeal the most to consumers. This information can be used by brands so that they can enhance one or more of these features and hence provide a better customer experience to users.

Keywords: Music Streaming App, Brand, Customer Experience, Consumers

Read Full Paper · Download PDF · Back to index

---

21 Anti-oxidant activity of 2-amino-5-(3-arylsydnon-4-oyl) thiazoles

Paper ID V6I4-1168 · Pages 103-108 · Chemical Sciences

Dr. Jisha S. P., Assistant Professor, Government First Grade College, Bengaluru, Karnataka
Dr. K. N. Rajasekharan, Former Professor and Head, University of Kerala, Thiruvananthapuram, Kerala

In biochemistry and medicine, antioxidants are enzymes or other organic substances, such as vitamin E or β-carotene, that are capable of counteracting the damaging effects of oxidation in animal tissues". Because of these considerations and the wide variety seen in molecules that exhibit antioxidant ability through a multitude of mechanisms, AO activity may be interpreted in a variety of ways. Antioxidant activity of different 2-amino-5-(3-arylsydnon-4-oyl)thiazoles are studied by different methods like FRAP, -carotene assay and DPPH assay and the results are presented.

Keywords: Sydnones, Thiazoles, DPPH, FRAP, Beta-carotene assay

Read Full Paper · Download PDF · Back to index

---

22 Setup for simulation and analysis of Pulsatile Flow

Paper ID V6I4-1152 · Pages 109-115 · Mechanical Engineering

Nagasai Panuganti, Student, Vasavi College of Engineering, Hyderabad, Telangana

In Fluid Dynamics, we can classify the flows in different ways, but we have two flows that remain pristine, these are Pulastle flow and Continous Flow. Pulsatile flow is the one in which the flow is represented by cycles, whereas the Continous Flow is represented by a straight line. In this paper, Pulsatile flow is feed to the Inlet boundary as a varying sinusoidal wave with a constant amplitude and angular velocity. The feasibility of the model can be increased as we have can use a cosine wave instead of a sinusoidal wave according to the

© 2020, IJARIIT.COM All Rights Reserved

requirement. This setup gives a detailed explanation as to how to set up for the simulation and analysis of the Pulsatile flow. The results of the following setup can be obtained by using the Post-Processing in Ansys Fluent.

Keywords: Pulsatile Flow, Continous Flow, Amplitude, Angular Velocity, Sinusoidal wave, Cosine wave, Setup, Ansys Fluent

Read Full Paper · Download PDF · Back to index

---

23 Decolorization of Azo dyes and Triphenylmethane dyes using Citrobacter diverses isolated from textile waste

Paper ID V6I4-1163 · Pages 116-120 · Microbiology

Dr. Kirti Jayant Mhatre, Assistant Professor, Mahatma Phule Arts Science and Commerce College, Navi Mumbai, Maharashtra

Release of residual dyes into natural water bodies through industrial waste water is considered to be a potential threat to the environment. There are several traditional physio-chemical treatment methods to remove such organic and inorganic dyes, but these are costly and create secondary sludge disposal problems. Bioremediation is offered the best approach to overcome the limitations of traditional methods. Thus, this study was undertaken to isolate bacteria possessing the high potential to degrade the different types of dyes. Total of 12 different dyes decolorizing bacterial isolates were obtained from textile wastewater using enrichment and isolation techniques. Out of these isolates, Citrobacter diverses was found to be the most prominent dyes decolorizing bacteria. It showed 79% to 98% decolorization of MR (Methyl red), MG (Malachite green), CR (Congo red), CV (Crystal violet), CF (Carbol fuchsin) dyes within 72 h. It showed maximum decolorization in presence of optimum growth conditions like 1.5gm/L yeast extract, sucrose, and glucose as a carbon source, peptone, and NH4SO4 as a nitrogen source of medium pH 7.0 at 37°C. This isolate showed the highest decolorization in its free cell form as compared to its immobilized form. According to these results, the obtained strain of Citrobacter diverses confirms its application in bioremediation process of dyes in In-situ.

Keywords: Dyes, Bioremediation, Textile waste, Bacteria, Optimum growth conditions

Read Full Paper · Download PDF · Back to index

---

24 Pinpointing the sort of bosom malignancy for exact treatment

Paper ID V6I4-1191 · Pages 121-126 · Bio-science

Sravani, Student, Vignan’s Institute of Information Technology, Visakhapatnam, Andhra Pradesh

The second-largest cause of carcinoma death is breast carcinoma in woman. The Breast carcinoma development is one multi-stage cycle that requires many cell types, and its detection remains challenging worldwide. One of the best approaches to avoiding this disorder is Fast treatment with cancer in breasts. In the past decade, there have been significant progress over identifying breast cancer and improving prevention approaches. Pathogenicity in breast carcinoma stem cells and tumor drug resistant mechanisms are shown and many genes associated with the disease are found. In this analysis, we will sum up how breast cancer is defined and which category it belongs to through order to provide specific treatment and medications to promote rapid recovery. Identification of the form will allow us to recognize the drug to react and get rid of. Through using the dataset as feedback, we use it to differentiate if it is non-invasive / invasive. When it falls

© 2020, IJARIIT.COM All Rights Reserved

under non-invasive, we use the sub-category to define that it fits under DCIS / LCIS. If it falls under invasive, we use it to classify that sub-category, whether it falls under IDC / ILC / OTHER Forms. we will sum up the concept of breast cancer and its diagnosis and include therapies and medicines that help a quick recovery. Identification of the type will allow us to identify and get rid of the medication.

Keywords: Breast, Carcinoma, DCIS, Ductal, Differentiate, IDC, ILC, Invasive, LCIS, Lobular, Non-Invasive

Read Full Paper · Download PDF · Back to index

---

25 Design of flexible FFT core for fast computing of digital signals in real time applications

Paper ID V6I4-1207 · Pages 127-131 · Vlsi Design

Deepa S., Student, BNM Institute of Technology, Bengaluru, Karnataka
Dr. Yasha Jyothi M. Shirur, Professor, BNM Institute of Technology, Bengaluru, Karnataka

To meet needs of the customers, real-time signals are processed dynamically in many of the wireless communications, audio/video processing and industrial control applications. The heart of any computation is DSP Processor. Traditionally, dedicated (application-specific) architectures are used for high performance DSP applications. This trend continues today as more digital signal processing and image/video processing algorithms are implemented on single chips. The three optimization factors which every designer will be concerned about are area, speed, and power. Out of which speed is an important factor to be considered in real-time applications. To facilitate the requirement of fast computing, a scalable and reusable FFT Processor is designed and verified for its functionality. In paper a radix-2 butterfly is designed and implemented for fast computation of digital signals which is scaled to perform 8-point DIT FFT and 16-point DIT FFT. The design also supports reconfigurability feature to meet the design specification.

Keywords: FFT, Radix-2, Booth Multiplier, Fast Computation

Read Full Paper · Download PDF · Back to index

---

26 Challenges in education management due to the Coronavirus pandemic

Paper ID V6I4-1202 · Pages 132-134 · Management

Divya Tahira Mayadas, Professor, Chatrabhuj Narsee School, Mumbai, Maharashtra

With the Coronavirus pandemic, educators across the board have had to rethink and devise innovative, yet accessible ways and means to reach out to the students. Today’s day invokes a great sense of anxiety, as far as the future is concerned, owning to the fact that there is not yet a vaccine to the virus, rampant and swift job loss and discontinuity of businesses. The ongoing pandemic has changed the way that most of us go about doing our jobs. Each one is grappling with what is now the ‘New Normal’, that is a volatile, uncertain, complex and ambiguous environment, where adaptability is of utmost importance. Just a few months ago, educators across the board were delivering lectures in well organised classes, without much to worry about, save examination, correction, completing syllabus, and other routine activities part of education management. How quickly this bastion of learning has had to adapt to the changing environment. But has the old system of education been parcelled out? This paper aims to look into the challenges faced by educators in a developing

© 2020, IJARIIT.COM All Rights Reserved

nation, India, where there is no standard quality of education, and more importantly, technology is not ubiquitous across the geography of India.

Keywords: Education Institutes, Management, Technology, Online Education, Coronavirus, Pandemic

Read Full Paper · Download PDF · Back to index

---

27 Detection of Cyberbullying using Machine Learning

Paper ID V6I4-1214 · Pages 135-138 · Machine Learning

Sinchana C., Student, Vidya Vardhaka College of Engineering, Mysore, Karnataka
Sinchana K, Student, Vidya Vardhaka College of Engineering, Mysore, Karnataka
Pradyumna C S, Student, Vidya Vardhaka College of Engineering, Mysore, Karnataka
Deepika S, Student, Vidya Vardhaka College of Engineering, Mysore, Karnataka

Cyberbullying is a form of bullying in which technology is used as a medium to bully someone. As the new boom of the internet and other social media platforms are increasing, the number of users is also increasing and the main users of social media are mostly teens and young adults. As much as these social media platforms are used for getting new information and for entertainment, it is more prone for bullies to uses these networks as vulnerable to attacks against victims. Due to the increase in cyberbullying on victims, it is in need to develop a suitable method for the detection and prevention of cyberbullying. A growing body of work is emerging on automated approaches to cyberbullying detection. These approaches utilize machine learning and natural language processing techniques to identify the characteristics of a cyberbullying exchange and automatically detect cyberbullying by matching Textual data. The main objective of this project is to detect cyberbullying by matching both Image and Textual data. The test cases and are used to classify the dataset and detect the bullying. Machine learning techniques are used to efficiently predict and detect cyberbullying.

Keywords: Cyberbullying, Support Vector Machine, K-Nearest Neighbor, NaïVe Bayes, Decision Tree, Neural Network

Read Full Paper · Download PDF · Back to index

---

28 Green Building: A Review

Paper ID V6I4-1154 · Pages 139-141 · Environmental Engineering

Chetan Sonvane, Student, Datta Meghe College of Engineering, Mumbai, Maharashtra
Ompriya Kale, Professor, Pimpri Chinchwad College of Engineering and Research (PCCOER), Pune, Maharashtra

Green Building is a technology which has been developed and put forward in recent years, so as to lead our world towards economic, global as well as social sustainability. Green buildings are quite related to sustainable buildings and they are interchangeable. Green buildings are helpful considering several factors like reduction of carbon footprint, usage renewable energies, use of less energy,usage of smart materials and so on. In recent times, world is facing a major problem of drastic climate change. A major contributor to climate change is the construction industry. Buildings are responsible for an estimated 33% global greenhouse gas emission. Between 1971 and 2004, Carbon dioxide (CO2) grew 2.5% for commercial buildings and 1.7% for residential buildings. This puts the concept of green building in light. Government all around the globe have started to take this concept solemnly. Few organizations are in place for rating green buildings. LEED also known as Leadership

© 2020, IJARIIT.COM All Rights Reserved

in Energy and Environmental design is one of the leading organization. Green building rating system in India are Green Rating for Integrated Habitat Assessment (GRIHA), Indian Green Building Council (IGBC). These organizations rate the buildings on various factors like operation, cost, maintenance, etc. The intention of writing this paper is to acquaint everyone with green building.

Keywords: Green Building, Sustainable buildings, Greenhouse Gas Emission, Green Features

Read Full Paper · Download PDF · Back to index

---

29 Behaviour of youth towards sustainable and fast fashion

Paper ID V6I4-1204 · Pages 142-146 · Sustainability

Pragya Gargee, Student, Symbiosis College of Arts and Commerce, Pune, Maharashtra

Sustainable fashion is producing clothes, shoes, and accessories in environmentally and socio-economically sustainable manners with more sustainable patterns of consumption and use, which necessitate shifts in individual attitudes and behaviour. Sustainable clothing refers to fabrics derived from eco-friendly resources, such as sustainably grown crops or recycled materials and how these fabrics are made. Fashion is the second most polluting industry globally. The apparel and footwear industries together account for more than 8% of global carbon emissions, greater than all international airline flights and maritime shipping routes combined. On average a person consumes 11.4kg of apparel each year (Quantis 2018). It takes about 2,720 litres of water to produce just one cotton shirt – a number equivalent to what an average person drinks over three years (EJF). Nearly three-fifths or 60% of all clothing produced ends up in incinerators or landfills within a year of being made (McKinsey 2016). The total level of fashion waste is expected to be 148 million tons by 2030—equivalent to annual waste of 17.5 kg per capita across the planet. Textile dyeing is the second largest polluter of clean water globally, after agriculture. In such severe conditions, unawareness among consumer about sustainable fashion costs the environment. The main objectives of this study is to analyse whether the trend towards buying sustainable fashion really helping with climate crisis, or should one simply be buying less clothing? For the conservation of the environment, the sustainability of fashion is the utmost need in the present fastest growing world. This research is based on empirical study done with literature review and other secondary data sources. A combination of quantitative and qualitative research methodology approach has been adopted to understand ethical shopping.

Keywords: Eco-friendly, Environment conservation, Impact, Sustainable Fashion, Young Customer

Read Full Paper · Download PDF · Back to index

---

30 A pre-experimental study to assess the effectiveness of a structured interventional program on knowledge regarding care of patients with chest tube drainage among staff nurses in IGMC and Hospital, Shimla, Himachal Pradesh

Paper ID V6I4-1196 · Pages 147-156 · Nursing

Lovely, Student, Akal College of Nursing, Baru Sahib, Himachal Pradesh
Sangeeta Sharma, Akal College of Nursing, Baru Sahib, Himachal Pradesh

Introduction: A chest tube insertion is a surgical procedure to remove the air, blood, pus, lymph, and fluid from

© 2020, IJARIIT.COM All Rights Reserved

the pleural space by inserting a hollow, flexible drainage tube through the side of the chest in the pleural space. A chest tube is a widespread therapeutic intervention for patients admitted to medical and surgical care areas. It is associated with significant morbidity and mortality. Objectives: To assess the knowledge of staff nurses regarding the care of the patient with chest tube drainage, To evaluate the effectiveness of the structured interventional program on knowledge regarding care of the patient with chest tube drainage among staff nurses, to find out the association between pre-test scores of knowledge regarding care of the patient with chest tube drainage with selected socio-demographic variables. Methods: A quantitative one group pre-test and post-test design were conducted at IGMC and Hospital Shimla, Himachal Pradesh. A total of 40 staff nurses were selected by convenience sampling technique. The tool used for data collection was a structured knowledge questionnaire. A structured interventional program on care of patients with chest tube drainage with the use of ppt was administered. Results: The majority of the subjects 19(47.5%) fall in the age group between 26-30 years. With respect to education, 19(47.5) have done B.Sc nursing. 22 (55.0%) of the staff nurses had experienced between 2-3 years, and 34(85.0) of them belong to the Hindu religion. The majority had 20 (70%) average knowledge, 16 (40%) of staff nurses had poor knowledge and 4(10%) of them had good knowledge whereas after intervention majority 28(70%) of the subjects have good knowledge, 12(30%) of subjects has average knowledge and none of the subjects has poor knowledge regarding care of patients with chest tube drainage. The mean knowledge score in the pre-test was (16.6 ±7.98), in the post-test was (31.65±6.12) which indicates there is an increase in knowledge of the subjects. Conclusion: The study concluded that a structured interventional program on the care of the patient with chest tube drainage was found to be effective in increasing the knowledge of staff nurses. Staff nurses had a significant gain in knowledge regarding the care of patients with chest tube drainage.

Keywords: Effectiveness, Chest Tube Drainage, Knowledge, Structured Educational Program, Staff Nurses

Read Full Paper · Download PDF · Back to index

---

31 Managing cross-cultural diversity in global scenario through HR strategies

Paper ID V6I4-1149 · Pages 157-162 · Business Administration In International Business

Anisha Anil Hande, Student, MIT Arts Commerce and Science, Pune Maharashtra

© 2020, IJARIIT.COM All Rights Reserved

International management has never been as significant as today. As the 21st Century has been tremendous growths in enterprise sectors many of the world's largest firms are truly global and even their small counterparts increasingly participate in cross-border activities by- having customers, joint venture partner collaboration around the globe. The trend towards a single global economy is expanding the market and providing limitless opportunities for global business. Place of a job today consists of people who are diverse and unique in religion and culture, language, age gender and ability, education, interest and opinion, expectations as well. The cultural diversity of a company has cascading effects on the way its organization messages are restrained, collected, allocated, and perceived and how it is elucidated. Global workforces managing has increased pressure on human resource managers to identify and adopt the culture differences. To remain competitive, companies must have an understanding of HRM practices and cultural differences across theglobe. The main motive of this study is to get a clear concept of cross-cultural management and to identify thereason, how HR mange to develop a multicultural workforce, the resultant challenges, and the way to manage effectively the diversified workforce in the international scenario.

Keywords: Cross-cultural diversity, International Human Resource Management (IHRM), Human Resource(HR)

Read Full Paper · Download PDF · Back to index

---

32 Clinico haematological profile in beta Thalassemia trait

Paper ID V6I4-1193 · Pages 163-169 · Haematology

Dr. Muthu Venkat T., Doctrate Degree Holder, Independent Researcher

Introduction with Objectives: - The most common causes of microcytic hypochromic anemia in India are β Thalassemia & Iron deficiency anemia (IDA). β- Thalassemia is one of the most common single gene disorder in India with an overall prevalence of 3-4 %. Effective screening of β Thalassemia trait (βTT), decrease its incidence. Hb electrophoresis, serum iron profile & RBC indices are used to differentiate βTT from IDA .HbA2, red cell indices are observed as effective screening tests in βTT. Our main objective is to study the hemoglobin electrophoresis & RBC indices in β-Thalassemia Trait & to differentiate from IDA. Methodology: - A retrospective study of 50 patients (OP & IP) admitted in our KMC & hospital, Manipal was done. Study period was 1year (Aug 2015-Sep 2016). HbA2 level is studied by capillary zone electrophoresis method. Hb & red cell indices (MCV, MCH, RDW) were calculated. From red cell indices formulas –Mentzer (MI-cut off-13), Srivastava (SI-3.3), Shine & Lal(S&L-595), England & Frazer (E&F-1.39) were derived & serum iron profiles (Fe 2+, TIBC, Ferritin) was done to distinguish βTT from IDA. Vitamin B12 & folate assay was done . Sensitivity, specificity & Youden index were also calculated . Results:-All 50 pts were diagnosed as β-Thalassemia Trait (HbA2≥3.5 .Hb≤8gms/dl, MCV16%).Mean age group is 50yrs, M>F.3/50 cases (6%) shows ↑ HbF along with ↑HbA2.2/50 (4%) has ↑HbS .1 case shows IDA features with βTT. 49/50 (98%) cases of βTT showed-≤ cut off values of all index (MI,SI, S&LI ,E&FI). Serum iron profile was normal in 24/50 (48%), ↑ serum ferritin in 5/50 (10%).↑ vitamin B12 & folate levels seen in 9/50(18%).1 case showed ↓iron profile & ↑index. The MI is the most sensitive (>90%) & specific (>83%). Conclusion:-βTT & IDA are the M.C. causes of microcytic anemia. Hemogram parameters and RBC indices have significant role in βTT. HbA2, MCV & MI are the most sensitive tool to detect βTT.

Keywords: βTT, electrophoresis, RBC Indices.

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

33 Law of ten generations gap in Heredity

Paper ID V6I4-1232 · Pages 170-172 · Zoology

Ajil Benny, Student, Independent Researcher

Heredity is the transfer of physical or behaviour characters genetically from one generation to another through genetic material.During the transfer of the genetic material only half of them from both the parents will be transfered to the offspring. The question here is, how many generation genes that was transferred from our forefathers exist in our genetic material,If present how much it will be and what all ways genes from the forefathers can be moved.For finding a suitable answer and explanation to this I put forwarding some new ideas in relate to this

Keywords: Zoology, Evolution, Heredity, Evolutionary Zoology, Law, 10 Generations

Read Full Paper · Download PDF · Back to index

---

34 Parameter extraction for audio signal

Paper ID V6I4-1222 · Pages 173-175 · Signal Processing

Neha Sohani Mohanty, Student, College of Engineering and Technology, Bhubaneswar, Odisha

Speech is a signal which consisting of various complex information, like the information contain in a signal which to be communicate, language, speaker, region, emotions etc. Speech Processing is one of the important parts of signal processing and finds applications in Audio mining, Human computer interfaces, Assistive technologies, Telecommunication, Security etc. For the speaker identification and emotion analysis Gender Identification is a pre requites. By analyzing the features of different voice signals of male & female it can be determined that which parameters are creating a difference in between the male voice & female voice. For this a comparison between the different parameters present in a voice signal like energy, mean, median and standard deviation is done. It observed that in the graph of mean and standard deviation one can differentiate between a male voice and female as the statistical results are shown. In this paper an input voice signal taken as .wav file and added some noise or unwanted signal; the unwanted noise signals are removed from the original signal by reducing the intensities of high frequencies by averaging and Gaussian window for the smoothing and conv function to removing the pseudo numbers that added as a noise to the original signal

Keywords: Energy, Mean, Median, Standard deviation

Read Full Paper · Download PDF · Back to index

---

35 Review paper on connecting the dots using drones

Paper ID V6I4-1194 · Pages 176-179 · Aeronautical Engineering

Shritish Shete, Student, Priyadarshini Institute of Engineering and Technology, Nagpur, Maharashtra
Siddhi Dave, Student, Priyadarshini Institute of Engineering and Technology, Nagpur, Maharashtra

From the past few years, drones have been a trending topic surrounding technology. There are many applications leading to the advancement of the drones such as aerial photography as well as videography, shipping and delivery, geographic mapping, disaster management, precision agriculture, search and rescue

© 2020, IJARIIT.COM All Rights Reserved

operations, weather forecast, wildlife monitoring, law enforcement, and many more. In a country like India, drones will play a vital role in dealing with problems from the front. A Drone with the latest technology onboard will be able to change the downgraded frame of India. Like a drone with a medical kit will give higher efficiency in reachability, remote farming will be smoothly operated using a drone, from a military point view it will be helpful in guarding the hilly posts over LOC, etc. Thus if the future technology implemented as soon as possible in India it will provide huge latency.

Keywords: Drones, Medical Kit, Military, Agriculture, Wildlife

Read Full Paper · Download PDF · Back to index

---

36 Don’t Sleep – Drowsiness Detection Tool

Paper ID V6I4-1205 · Pages 180-183 · Computer Vision

Anjaneya Turai, Student, Symbiosis Skills and Professional University, Pune, Maharashtra

An important application for machine vision and image processing can be the driver's recovery program because of its high importance. In recent years a number of research works have been reported in the literature in this field. In this paper, in contrast to the conventional tone detection methods, which are based on eye regions alone, we have used facial expressions to detect drowsiness. There are many challenges that involve pull detection systems. Some of the important issues are: changes in stiffness due to lighting conditions, the presence of glasses and beards on a person's face. For this project, I propose and implement an infrared light-based hardware system and can be used to solve these problems. In the proposed method, following the acquisition step of the face, the most important face elements and considered to be the most effective, are extracted and tracked in the video sequence frames. The system is monitored and performed locally. Every year more and more people lose their lives because of fatal road accidents worldwide and hot driving is one of the leading causes of road accidents and deaths. Exhaustion and poor sleep in the most common driving sources are the cause of major accidents. However, the first signs of fatigue may appear before the emergence of a crisis and therefore, the diagnosis of driver fatigue and its identification is a topic of further research. Most traditional methods of getting sleep are based on behavioral behavior while some are less confusing and may distract motorists, while others require expensive sensors. So, in this paper, a light weight, driver-specific death detection system was developed and implemented in the Android app. The program records videos and recognizes the face of the driver in all sectors using image printing techniques. The system can detect facial expressions, including the Eye Aspect Ratio (EAR) to detect driver drowsiness based on a changing threshold. Machine learning algorithms were employed to test the performance of the proposed method.

Keywords: Don't Sleep, Drowsiness Detection Tool, Drowsiness, Road Accidents, Eye Aspect Ratio

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

37 Comparitive study on self cleaning property of Activated charcoal supported Bi₂O₃−ZnO with other coupled semiconductor oxide nanocomposites

Paper ID V6I4-1224 · Pages 184-187 · Chemistry

G. Ida, Assistant Professor, Research and Development Centre, Bharathiar University, Dhanalakshmi College of Engineering, Erumaiyur, Tamil Nadu
D. Easwaramoorthy, Professor, Research and Development Centre, Bharathiar University B. S. Abdur Rahman Crescent Institute of Science and Technology, Chennai, Tamil Nadu

The development of active semiconductor oxide nanomaterials creates a vital role in catalytic effective materials. Here we compare the self-cleaning property of Activated charcoal supported Bi2O3 – ZnO (AC−BZ) nanocomposites with other Photocatalytic nanocomposites of CdWO4 −ZnO and Pr6O11 − Zn. This study has been evaluated using contact angle measurement and our results give some new vision on the performance of coupled semiconductor oxide nanomaterials on an environmental basis.

Keywords: Activated Charcoal supported Bi2O3−ZnO, CdWO4−ZnO, Pr6O11−ZnO, Self-cleaning, Tetra ethoxy ortho silane

Read Full Paper · Download PDF · Back to index

---

38 Experimental investigation on performance analysis of dual-axis solar tracker

Paper ID V6I4-1231 · Pages 188-191 · Mechatronics Engineering

Ohmsakthi Vel, Assistant Professor, Agni College of Technology, Thalambur, Tamil Nadu
Santhosh, Student, Agni College of Technology, Thalambur, Tamil Nadu
Upanraj, Student, Agni College of Technology, Thalambur, Tamil Nadu
Mohammed Jaffar Sadiq, Student, Agni College of Technology, Thalambur, Tamil Nadu

This paper presents the experimental investigation on the performance of dual-axis Solar Tracker. The main objective of the project is to generate an optimal level of electrical energy through the solar panels. The solar tracker is a device that tracks the density of sun rays and ensuring that the maximum amount of sunlight strikes the panel. The power output from the solar panel is maximum when it is facing 90 degrees. The major components used for this project are Arduino, DC motor, light-dependent resistors (LDR), solar panel. The active Light Dependent Resistor (LDR) continuously monitors the sunlight and rotate the panel towards the direction where the intensity of the sunlight is maximum. These light sensors also compare the darkness and cloudy and sunny conditions assisting daily tracking. The designed tracker can track the sun’s apparent position at different months and seasons. The device is able to simulate the sun’s tracking of 12 months within a few minutes thus, implementing automatic mechanisms in the tracking system.

Keywords: Arduino, Dual-axis, LDR, Solar tracking

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

39 A descriptive study to assess the general wellbeing and psychological distress of leprosy patients in selected leprosy centre at Indira Gandhi Medical College and Hospital, shimla (H.P.) India.

Paper ID V6I4-1252 · Pages 192-199 · Psychiatary And Mental Health

Reena Dogra, Assistant Professor, Sister Nivedita Govt. Nursing Institute, Shimla, Himachal Pradesh

Background of the study: Throughout its history, leprosy has been feared and misunderstood. For long time leprosy was thought to be a hereditary disease, a curse, or a punishment from God. Before and even after the discovery of its biological cause, leprosy patients were stigmatized and shunned. For example, in Europe during the Middle Ages, leprosy sufferers had to wear special clothing, ring bells to warn others that they were close, and even walk on a particular side of the road, depending on the direction of the wind. Problem statement: A Descriptive Study to Assess the General Wellbeing & Psychological Distress of Leprosy Patients in Selected Leprosy Centre, I.G.M.C.Shimla,(H.P). Objectives: The objectives of this study were to assess the general well being of the leprosy patients, to assess the psychological distress of leprosy patients, to find the association between general well being and psychological distress with their selected demographic variables. Materials and methods: A Quantitative approach and non-experimental descriptive design was adopted to accomplish the main objectives of the study. The study was conducted in leprosy center, I.G.M.C.Shimla. The target population of the study was all leprosy patients of leprosy center, I.G.M.C.Shimla. The total sample size was 100 leprosy patients selected by convenient sampling technique, The tool was constructed to assess the general well being & psychological distress of leprosy patients. Analysis and interpretation: Most of the patients (78%) had some well-being risks. The majority of the patients (71%) had moderate psychological distress. The highest general well being was in the physical domain and the least well being was in social domain among leprosy patients. Conclusion: Type of family, duration of suffering from illness, had significant association with the general well-being and psychological distress.

Keywords: Descriptive, Assess, General Well Being, Psychological Distress

Read Full Paper · Download PDF · Back to index

---

40 A study to assess the anxiety related to the onset of labour and delivery among primigravida mothers admitted for delivery at Kamla Nehru hospital Shimla.

Paper ID V6I4-1253 · Pages 200-205 · Gyanae And Obstetric In Nursing

Amita Puri, Assistant Professor, Sister Nivedita Govt. Nursing Institute, Shimla, Himachal Pradesh

Background and Objectives: The health of the nation is often judged by the health of mothers and infants. In all societies, family is the central nucleus of people and women form the backbone of it. Thus mothers play an indispensable role in the health of any nation. Anxiety is common in life, it is more among Primigravida mothers during labour and delivery. The objectives of the study are to assess the anxiety related to the onset of labour and delivery among primigravida mothers and to determine the association between the level of anxiety with selected variables. Methods and materials : The descriptive survey approach and descriptive exploratory survey design was used. By purposive sampling technique, 100 Primigravida mothers were selected in the

© 2020, IJARIIT.COM All Rights Reserved

clean labour ward at Kamla Nehru State Hospital, Shimla. The tool consisted of 63 items to assess the level of anxiety. The reliability was established by conducting a pilot r = (0.948). The data was collected and analyzed. Results: Majority 50% of respondent are in the age group of 20-25 years and 42% of the respondent had studied upto high school which is the highest. 100% among them of respondent were married and income was between Rs. 5000 and above (63%), 99% of respondent are Hindus and emerge from nuclear family background (61%), 71% of respondent live in rural area and seek support through elders and relatives (44%), 80.5% of mothers had anxiety related to family aspects. Interpretation and Conclusion: Overall findings showed that there is no significant association found between educations, employment status, religion, type of family and type of marriage with the level of anxiety to onset of labour. The result on aspect wise reveals that the mean anxiety was higher than family aspect 80.5%, compared to physical aspect 41.47%, social aspect 33.67% and psychological aspect 45.98.

Keywords: Assess, Anxiety, Onset of labor, Labor

Read Full Paper · Download PDF · Back to index

---

41 Vehicle accident and alert with datalog system

Paper ID V6I4-1146 · Pages 206-210 · Computer Science Engineering

Devadharshini, Student, Avinashilingam University, Coimbatore, Tamil Nadu
Pavithra, Student, Avinashilingam University, Coimbatore, Tamil Nadu
Praveena, Student, Avinashilingam University, Coimbatore, Tamil Nadu
Summia Parveen, Assistant Professor, Avinashilingam University, Coimbatore, Tamil Nadu

Now-a-days lot of accidents happen on highways due to increase in traffic and also due to rash driving of the drivers of the vehicle. Vehicle accident and alert with data log system presents review on the accident detection techniques and future possibilities in this field. And in such situations like that the family members or the ambulance and police authority is not informed in time. This results in delaying the help reached to the person suffered due to accident on the roads. Road accidents plays the major part of the accidents in our world . The purpose is to find the vehicle where it is located by means of sending a message using a system which is placed inside of vehicle system and ambulance. The message is sent to police station and authorized family member. Using radio frequency method ,We can find the nearest ambulance. We can also save the accident data information in the cloud for later access for our use. Our vehicle accident and alert with data log system with GPS and GSM is designed to avoid such situations

Keywords: GSM, GPS, Arduino UNO, Message Alert

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

42 Structural assessment of RCC buildings by using Pushover Analysis

Paper ID V6I4-1243 · Pages 211-221 · Civil Engineering

Suraj Shivaji Shinde, Student, Dr. D. Y. Patil School of Engineering and Technology, Pune, Maharashtra
Manoj Deosarkar, Assistant Professor, Dr. D. Y. Patil School of Engineering and Technology, Pune, Maharashtra
Dr. Nagesh L. Shelke, Associate Professor, Dr. D. Y. Patil School of Engineering and Technology, Pune, Maharashtra
Vishwajeet Kadlag, Assistant Professor, Dr. D. Y. Patil School of Engineering and Technology, Pune, Maharashtra

Shear wall is one of lateral resisting structure which is used commonly. Shear wall gives high stiffness to the structure so as the structure will be stable. This will reduce the destruction that comes from lateral loads such as an earthquake. Earlier studies showed that shear wall gives different performance based on its position in structures. The study focuses to see the effect of shear wall location in multi-storied building. A residential building of G+12 Storey structure having base dimension of plan 13.5m X 10.5m with typical floor height of 3m is considered. In this study 13 storied building was modeled using software and four different cases were studied with different location of shear wall in building frame for critical parameters like displacement and base shear under lateral loading. The analysis has been carried out using the software SAP2000 for analysis equivalent static method and non-linear static analysis method is used here. Four types of models (one without any shear wall, shear wall at 3 periphery sides of lift, shear wall at middle along periphery of structure, shear wall at Corner along periphery of structure in L shape) have been analyzed. It is found from this study that Model 3 shows best performance.

Keywords: Linear Analysis, Non-Linear Analysis, Pushover Analysis, Shear Wall

Read Full Paper · Download PDF · Back to index

---

43 Radial radio number of uniform cyclic and wheel split graphs

Paper ID V6I4-1249 · Pages 222-227 · Graph Theory

Kins Yenoke, Assistant Professor, Loyola College, Chennai, Tamil Nadu

A radial radio labelling h, of a connected graph G=(V,E) is an assignment of non-negative integers to the vertices of G satisfying the radial radio condition d(u,v)+|h(u) h(v)|≥1+rad(G), for any two distinct vertices u,v∈V(G), where rad(G) denote the radius of the graph G. The span of a radial radio labeling h is the largest integer in the range of h and is denoted by rr(h). The radial radio number of G, denoted by rr(G), is the minimum span taken over all radial radio labelings of G. In this paper, we have obtained the radial radio number of certain wheel related graphs such as the graph KDW(r), HW(r), SW(r), uniform n-wheel split graph and uniform r-cyclic split graphs

Keywords: Labelling, Radial Radio Labelling, Radial Radio Number, Uniform N-Wheel Spilt Graphs, Uniform R-Cyclic Split Graphs.

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

44 Manna cipher

Paper ID V6I4-1251 · Pages 228-231 · Cryptography

Neelanjan Manna, Student, Vellore Institute of Technology, Vellore, Tamil Nadu

This document gives an overview of solving the limitations of ciphertext formatting while implementing cryptography techniques on computers. The Manna Cipher uses the numbering system to represent ciphers rather than alphanumeric characters. The aim is to create a ciphering standard that is painstakingly difficult to crack even using the latest supercomputers. This document will be focusing on the plain text the resultant ciphertext and the run time to have a fair idea about the performance.

Keywords: Manna Cipher, Cryptography, Mathematical Cipher Model, Uncrackable Cipher

Read Full Paper · Download PDF · Back to index

---

45 Nanobots in nanomedicine : An overview

Paper ID V6I4-1219 · Pages 232-234 · Nanotechnology

Jyolsna P., Assistant Professor, Sams College of Engineering and Technology, Chennai, Tamil Nadu

In this century, health care industries are mainly focusing on the development of minimally invasive techniques for diagnosing as well as for curing ailments. For the implant of bones and membranes, a better-advanced technology is needed. As an advancement, scientists incorporated robots at the nanoscale to enhance the developments in the medical field. Nanorobotics is a growing area of nanotechnology in which they collaborate with machines or robots which is at the nanoscale. There are many challenges for the growth of this technology, not only from the technical side but also from the introduction of new material into the human body and environment. On the other side, the advantages of nanobots are immense. Nanobots can pave way for many creative approaches especially as good applicants for complex treatments. The goal of this paper is to peek into the applications of nanobots in medicine.

Keywords: Nanobots, Nanosensor, Nanomotor

Read Full Paper · Download PDF · Back to index

---

46 A Descriptive study to access the awareness regarding oral hygiene and prevalence of oral problems among school children at selected school, Mohali, Punjab

Paper ID V6I4-1261 · Pages 235-240 · Pediatric Nursing

Indira Devi, Research Scholar, Sister Nivedita Govt. Nursing Institute, Shimla, Himachal Pradesh

Background of the study: Oral health is a part of general health. Oral health also influences the quality of life. Dental caries and periodontal diseases are common diseases in populations. These diseases are highly irreversible, once occur, and also have complex etiology. Although primary prevention techniques exist for total protection. Statement of the problem: A Descriptive study to access the awareness regarding oral hygiene and prevalence of oral problems among school children at selected schools, Mohali, Punjab. Objectives: assess the awareness regarding oral hygiene, describe the prevalence of oral problems, determine the association

© 2020, IJARIIT.COM All Rights Reserved

between awareness regarding oral hygiene and prevalence of oral problems, find out the association between awareness and prevalence with selected sociodemographic variables. Materials and Methods: Qualitative approach and descriptive research design are adopted in this study. The study was conducted at BSF, Arya Senior Secondary School, Sohana, Mohali (Punjab). The target population was school children. A study was conducted on 150 school children; sampling technique adapted to this study is a purposive sampling technique. The structured questioner and checklist were prepared. Tools were validated by various concerned experts before application. Result: The result was interpreted as follows. According to sociodemographic variable the age of 12 years 20% (30) 13 years 44 % (66) 14 years 36% (54), class 7th 20% (30), 8th class 44% (66) 9th 36% (54) sex of the child male 100% female 0%, education of father ,illiterate 0%, middle 8% (12), Matric 41% (62), Senior Secondary 41% (62) graduate and above 9% (14). Conclusion: In the present study 150 students participated. The findings of the study revealed that the majority of school children show a moderate level of awareness about oral hygiene and prevalence of oral problems.

Keywords: Assess, Awareness, Prevalence, Dental Problems, Oral Hygiene

Read Full Paper · Download PDF · Back to index

---

47 A study to assess the effectiveness of structured teaching programme regarding knowledge and practices of mother on prevention of accidents among toddlers

Paper ID V6I4-1263 · Pages 241-253 · Pediatric Nursing

Prabha Kashyap, Assistant Professor, Sister Nivedita Government Nursing College, IGMC, Shimla, Himachal Pradesh

Introduction: Mother is an important care provider and she is strongly responsible to the safety of the children. Children are the most vulnerable group of our population. Childhood accident is a sudden cause of death in children. Accident means “sudden, unexpected harmful event", An accident is often a harmful event that could be avoided by a little careful thought. Child accidents are very common among toddlers. Objectives: This study was done to assess the effectiveness of structure teaching programme regarding knowledge and practice of mothers. to assess the knowledge of mothers regarding prevention of accidents among toddlers, to assess the practice of mothers regarding prevention of accidents among toddlers, to find out the effectiveness of structured teaching program regarding knowledge and practices of mothers on the prevention of accidents among toddlers, to find out the association between the selected demographic variables with knowledge and practice score of mothers regarding prevention of accidents among toddlers. Material and Method: The present study has been carried out in Mashobra village and sample was included 320 mothers of toddlers. A structured questionnaire sheet was developed by the researcher to collect data. A simple random sampling approach was followed in this study and collection of data was performed by interviewing each mother at her home. The main results obtained from the study were as follows: most of the mothers were very poor knowledge of prevention of common accidents among toddlers and nearly all home had at least two or three potential environmental hazards. RESULTS: The present study revealed that the overall pre-test mean knowledge score of mothers regarding prevention of accidents among toddlers was found 31.67% and post test score was 73.33% in area of overall accidents, According to mothers practice in different type of accidents the present study indicated that the majority of mothers had 100% poor practice and post practice score was 62.5% mothers have moderate

© 2020, IJARIIT.COM All Rights Reserved

practice and 37.5% of mothers have good practice score regarding prevention of accidents among toddlers. After administration of STP the knowledge and practice level of mothers increased tremendously. The present study recommended health promotion classes about causes of accidents, first aid, preventive measures and safety for mothers at MCH center, in service educational program toward first aid should be established for community health nurses at rural health units and MCH center, a well planned health education program about causes of accidents, first aid and prevention introduced to the curriculum. Interpretation and Conclusion: The study findings revealed that structured teaching programme was highly effective in improving knowledge and practice of mothers regarding prevention of accidents among toddler. Key Word: Effectiveness, Knowledge, Practice, Structured teaching programme, toddler,

Keywords: Effectiveness, Knowledge, Practice, Structured teaching programme, Toddler,

Read Full Paper · Download PDF · Back to index

---

48 Handwritten character recognition

Paper ID V6I4-1268 · Pages 254-258 · Natural Language Processing

Addala Tejaswini, Student, BVRIT Hyderabad College of Engineering for Women
Y. Lakshmi Pratyusha, Student, BVRIT Hyderabad College of Engineering for Women
A. Rajashekar Reddy, Assistant Professor, BVRIT Hyderabad College of Engineering for Women

Character recognition is one of the most important research fields of image processing and pattern recognition. Character recognition is generally known as Handwritten Character Recognition (HCR) or Optical Character Recognition (OCR). HCR is the process of electronic translation of handwritten images or typewritten text into machine editable text. It becomes very difficult if there are lots of paper based information on companies and offices. Because they want to manage huge volume of documents and records. Computers can work much faster and more efficiently than human. It is used to perform many of the tasks required for efficient document and Content management. But computer knows only alphanumeric characters as ASCII code. So computer cannot distinguish character or word from a scanned image. In order to use the computer for document management, it is required to retrieve alphanumeric information from a scanned image. There are so many methods which are currently used for OCR and are based on different languages. The existing method like Artificial Neural Network (ANN based on English Handwritten character recognition needs the features to be extracted and also the performance level is low. So Convolutional Neural Network (CNN) based English handwritten character recognition method is used as a deep machine learning method for which it doesn't want to extract the features and also a fast method for character recognition.

Keywords: Convolutional Neural Network, Optical Character Recognition, EMNIST

Read Full Paper · Download PDF · Back to index

---

49 Computer vision and its role in driving safety

Paper ID V6I4-1217 · Pages 259-262 · Computer Vision

Probhakar Sarkar, Independent Researcher
Umair Siddiqui, Independent Researcher

© 2020, IJARIIT.COM All Rights Reserved

Every year there are more than 1.2 million road accidents happening across the globe, which accounts for more than 2.2% of deaths on a global scale. There has been an alarming increase in road accidents in today's time and a major reason behind this can be attributed to how the driver is behaving during his driving. Some of them may be unavoidable, yet a major portion of the hazards may be averted if there are means to keep a check on driver state ranging from their physical condition to monitoring their reckless driving patterns. This is where the advent of technology and the role of having a robust monitoring ecosystem come into the picture. Computer Vision more or less is a sought after technology that automotive companies today are chasing, be it telematics-based connected cars or autonomous self-driving vehicles. It can help solve this purpose by monitoring the driver drowsiness through advanced image processing solutions and providing the user with an integrated report showcasing how concentrated their driving was and what needs to be improved. This image processing technique may also be integrated into Telematics products to provide results on what the eco-driving score of the user is and maybe alerted via notifications on smartphones as to what daily trends of their driving are. This solution proves to be an effective approach to counter and restrict the increasing number of road accidents happening across the globe and meet end goal of achieving the maximum safety out of the road-network ecosystem.

Keywords: Computer Vision, Connected-Cars, Image processing, driver drowsiness, IoT, Analytics

Read Full Paper · Download PDF · Back to index

---

50 Eye blink to voice format communication for paralyzed patients

Paper ID V6I4-1229 · Pages 263-266 · Information Science

Namratha K. S., Student, Rajarajeswari College of Engineering, Bangalore, Karnataka
Jeevitha B. S., Student, Rajarajeswari College of Engineering, Bangalore, Karnataka
Sneha P. H., Student, Rajarajeswari College of Engineering, Bangalore, Karnataka
Veda D., Guide, Rajarajeswari College of Engineering, Bangalore, Karnataka

The wide growth of technology in the medication field reduces the difficulties of patients to a large extent. Motor Neuron Disease is one such major classes of physical disabilities resulting in disfunction.MND patients are unable to figure like walk and communicate caused by weakness of muscles. The patient has management solely upon his Eye movement. This technique contains strategies like face detection, eye detection, eye pursuit, conversion of blink to voice, Video-Oculogragphy methodology is employed to create communication between patient and caretaker. The image process module incorporates a digital camera and therefore the eye movement-image is captured with OpenCv to get the coordinate of the eyeball. The system permits the patients to speak with caretaker victimization blink pattern converted into voice format The sensible resolution for image process is obtained be Python programming with Open CV

Keywords: Video Oculography, Eye Blink Detection, Eye Pursuit, Face Recognition, Open CV

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

51 Lightweight privacy-preserving scheme for the smart grid data using ANU and Perturbation Algorithm

Paper ID V6I4-1285 · Pages 267-272 · Electrical Engineering

Ravinderpal Singh, Research Scholar, Adesh Institute of Engineering and Technology, Faridkot, Punjab
Puneet Jain, Assistant Professor, Adesh Institute of Engineering and Technology, Faridkot, Punjab

Smart Grid collects the data of smart meter and communicates the data to electricity generation, pricing, and billing departments. The departments used this information for electricity forecasting, real-time pricing, and generate electricity bills. The smart grid data contains customer personal information as well as electricity consumption details. Thus, sharing all information with the departments violates customer privacy. In addition, if no security mechanism provided for the data makes it prone to the attacks. In this paper, we have proposed a privacy-preserving algorithm for smart grid data security. The algorithm has two-phase. In the first phase, customer personal information and electricity consumption details separated. In the second phase, the customer's personal information is secured using a lightweight algorithm ANU and electricity consumption details are secured using noise addition on the data by applying the perturbation algorithm. The algorithm is coded and simulated in the MATLAB 2013a. The experimental results show that the proposed technique consumes less memory and provides better security as compared to the existing algorithms.

Keywords: Smart Grid, Privacy-Preserving, ANU, Perturbation

Read Full Paper · Download PDF · Back to index

---

52 Combined emission economic load dispatch problem using hybrid combination of flower pollination algorithm and moderate random search particle swarm optimization

Paper ID V6I4-1286 · Pages 273-277 · Electrical Engineering

Jaspreet Singh, Research Scholar, Adesh Institute of Engineering and Technology, Faridkot, Punjab
Puneet Jain, Assistant Professor, Adesh Institute of Engineering and Technology, Faridkot, Punjab

The total cost of electricity generation is minimized while fulfilling the total load demand and considering all constraints in the Combined Economic Emission Dispatch (CEELD) problem. Electricity generation from fossil fuel negatively impacts the environment. Therefore, various optimization techniques have been deployed for the CEELD problem. In the literature, the Modified Random Search Particle Swarm Optimization (MRSPSO) and Flower pollination algorithm (FPA) are used as a solution for CEELD known as Combined Economic Emission Load dispatch problem. However, MRSPSO is easy to settle into local optima in high-dimensional space and delivers a low convergence rate in the iterative process, whereas in the FPA, the diverse population make it prone to being limited to the local optima. Thus, in order to overcome these limitations, in this paper, we have hybrid the FPA and MRSPSO algorithm that improves the convergence rate to meet the optimal solution. Initially, we have implemented MRSPSO and FPA algorithm; after that, combined it for CEELD. The experimental results were performed in MATLAB. The experimental results show that the hybrid approach gives better results as compared to the MRSPSO and FPA. Thus, the proposed technique is efficient and can be deployed for real-time CEELD problem.

© 2020, IJARIIT.COM All Rights Reserved

Keywords: Particle Swarm Optimization, Flower Pollination Algorithm, Combined Economic Emission Load Dispatch, Modified Random Search Particle Swarm Optimization, MRSPSO, FPA, Economic Load Dispatch

Read Full Paper · Download PDF · Back to index

---

53 A Study on the behaviour of IT Employees during the COVID 19 Pandemic with special reference to Bangalore.

Paper ID V6I4-1288 · Pages 278-280 · Management

Glady Agnes L., Assistant Professor, Kristu Jayanti College, Autonomous, Bengaluru, Karnataka
Amritha Ashok, Assistant Professor, Kristu Jayanti College, Autonomous, Bengaluru, Karnataka
Kalyani V., Assistant Professor, Kristu Jayanti College, Autonomous, Bengaluru, Karnataka

COVID 19 an issue which the whole world is talking about and the world is looking out for a solution to come out of this pandemic situation. During this pandemic situation, a lot of industries and individuals are effected by means of mental and financial pressure. One such industry that got effected is the IT industry. The paper deals with the issues faced by IT employees during this pandemic situation. The researcher highlights the issues and challenges faced by the IT employees and suggestions are given on how to overcome the issues and the researcher has collected the sample from 50 respondents. The paper is empirical in nature and depends on the primary data. The respondents were administered a questionnaire comprising the statements addressing the challenges and issues. Various statistical tools like correlation and regression analysis have been carried on to test the relation between the COVID effect and the reduction in salary. From the statistical results, it becomes evident that IT employees are undergoing tremendous pressure.

Keywords: Financial Pressure, Mental Pressure, Pandemic, Issues, Challenges

Read Full Paper · Download PDF · Back to index

---

54 Rupayinvest

Paper ID V6I4-1281 · Pages 281-286 · Computer Science And Engineering

Satish, Student, Siddaganga Institute of Technology, Tumakuru, Karnataka
H. K. Vedamurthy, Assistant professor, Siddaganga Institute of Technology, Tumakuru, Karnataka
D. V. Nishanth, Student, Siddaganga Institute of Technology, Tumakuru, Karnataka
Vishwajeet Kumar, Student, Siddaganga Institute of Technology, Tumakuru, Karnataka

© 2020, IJARIIT.COM All Rights Reserved

The numbers of smart phone users have increased exponentially irrespective of the platform within no time. Hence there arose several opportunities for both users and developers. User would be sure of downloading an application which provides more features, easier to use, responsive etc. Keeping these circumstances in the mind the developer has to work accordingly and provide an attractive interface which attracts the user and obtain a better feedback, which motivates the developer in making the application better every day by launching updates and by adding more features to it. In today's world there arises multiple scenarios where a person is in an emergency and would require funds to overcome, and at the same time he would be running short of money. Our project or this application will provide loan via a digital platform through which he could achieve or accomplish their needs. Money is lent based on their occupation and other credentials.

Keywords: Loan, Funds, Employee, Student, Credentials

Read Full Paper · Download PDF · Back to index

---

55 Use of cotton, curcumin smoke as a potential treatment of COVID-19

Paper ID V6I4-1307 · Pages 287-289 · Natural Chemistry

Praveen Adiga N. K., Student, Independent Researcher
Subrahmanya Madhyastha, Practisioner, Independent Researcher

COVID-19 pandemic is rapidly spreading at an increased rate. Various medicines are at various stages of testing or live usage, but none is proven to effectively reduce either the recovery time or the fatality rate. Current treatments focus on treating the symptoms or the complications which arise from the virus. Curcumin as traditionally used in India and as per various researches conducted is proven to act as antiviral, anti-inflammatory, antibacterial, anti-fibrotic, antioxidant, anti-fungal, antithrombotic agent when consumed orally. Studies have also suggested curcumin to be explored as cure or remedy for COVID-19. In this thesis, we suggest why and how Cotton, Curcumin smoke inhalation may help to cure or remedy COVID-19 so that this may be used as an effective treatment to reduce recovery time and fatality rate.

Keywords: COVID-19, Curcumin, Cotton Curcumin smoke

Read Full Paper · Download PDF · Back to index

---

56 Black hole attack detection and prevention by Grey Wolf Optimization

Paper ID V6I4-1313 · Pages 290-293 · Computer Science

Gbazoe Kelezonga Daniel, Others, AP Goyal Shimla University, Shimla, Himachal Pradesh
Anuj Gupta, Research Scholar, AP Goyal Shimla University, Shimla, Himachal Pradesh

In this work, a detailed description of attacks in wireless sensor networks is presented and after this detailed literature review on the related approaches is resented. The review of different approaches and their methodology helps to improve the methodology of the work and helps to enhance the knowledge related to different types of attacks and their solution on WSN. This work presented the work on the optimization of energy and reduction in delay and packet loss during the communication on network. The optimization performed by using the grey wolf optimization algorithm which is a global optimizer that optimizes the results for effective and efficient outcomes. It improves the packet delivery rate, throughput, and reduces energy

© 2020, IJARIIT.COM All Rights Reserved

consumption and delay.

Keywords: Packet Delivery Rate, Throughput, Energy Consumption, Delay, WSN

Read Full Paper · Download PDF · Back to index

---

57 Challenges in the development of a new obturation device: A questionnaire survey

Paper ID V6I4-1258 · Pages 294-301 · Biomedical Devices

Swanand Sudhir Pachpore, Research Scholar, Bharati Vidyapeeth Deemed University, Pune, Maharashtra
Pradeep Jadhav, Professor, Bharati Vidyapeeth Deemed University, Pune, Maharashtra
Ratnakar Ghorpade, Associate Professor, MIT World Peace University, Pune, Maharashtra

Dental anatomy plays a crucial role in human body as it helps in survival. The after treatment protocol in the root canal treatment (RCT) for improper functioning of the anatomy is major challenge for dentists. RCT deals with repairing and saving the tooth that is badly decayed or becomes infected. The RCT, if analyzed mechanically; various factors governs efficacy of the treatment out of which incomplete filling and sealing of 3D root canal space with suitable biomaterial against bacterial growth is major parameter. Today, thanks to modern technologies satisfactory results are obtained, but the cost of treatment is substantially increased which is unaffordable. Thus, a survey was carried by visiting doctors practicing for more than 25 years in conservative dentistry to recent students admitted to dental surgery in various colleges to understand tools/aids used during RCT with hypothesis of developing low cost obturation device for augmenting the dental device feasibility. The success rate of obturation device is high over hand pluggers; but the cost parameter limits the usage of same. The survey also coveys that complete sealing is also not possible with hand pluggers as well as existing available aids, and thus there is a need to develop a low cost obturation device using dual energy (low operating frequency and heat) source for increasing efficacy of treatment. To test feasibility of the collected data, it's being analyzed through p-test ($p>0.05$) for selected parameters and correlation was found to be statistically significant.

Keywords: Root Canal Treatment, Obturation Device, Dual Energy Source

Read Full Paper · Download PDF · Back to index

---

58 The SIR Model: Spread of Disease (COVID-19) in Ethiopia

Paper ID V6I4-1259 · Pages 302-308 · Statistics

A. R. Muralidharan, Assistant Professor, Debre Berhan University, Debre Birhan, Ethiopia
Tena Manaye, Lecturer, Debre Berhan University, Debre Birhan, Ethiopia

The recent emergence of COVID-19 a pandemic is the top of the issues in the Globe. The spread of disease is more and there are several phases of Outbreaks and propagandas to aware their people by the Government and various public interested organizations. Even the daily reports on this Pandemic increased with respect to times or days. In Ethiopia, the Government announced State of Emergency (SOE) to protect the people. After observing these situations, the thrust of analysis of Spread of disease leads this article. Based on the daily reports from the authorized concern bodies that is Ministry of Health (MOH) , Ethiopia providing daily reports

© 2020, IJARIIT.COM All Rights Reserved

and it was recorded by the authors and the data were made. Conclusion: There is no any special significance of spread of diseases (COVID-19) in Ethiopia; it has the same pattern in spread of diseases as like the overall world. By maintain the practice of Hygiene and social distance the spread may reduce in Ethiopia.

Keywords: COVID-19, SIR Model, Spread of Diseases, Pandemic, Ethiopia

Read Full Paper · Download PDF · Back to index

---

59 Identification of public realm aspects in connection to the trends of urbanization in Indian cities

Paper ID V6I4-1292 · Pages 309-316 · Urban Design And Built Environment

Prashant P., Assistant Professor, School of Architecture and Interior Design, SRMIST, Chennai, Tamil Nadu

If the population keeps growing and lands are desired, there is always a need to explore the numerous directions of how the city immediately emerges. The new trend for future development and urbanization is higher density development. The barrier between advocacy of higher density environment and social sustainability asks for a descriptive and systematic interpretation for inclusive growth. The paper discusses the dynamics of urbanization trends and the immediate attention that has to be considered to ensure quality public life through understanding and finding the aspects of public realm. This work investigates several ways of how the public spaces are manifested and understood. The intent of the paper is to identify the aspects of public realm which could contribute to a resourceful organization of public spaces.

Keywords: Rapid Urbanization, Population Growth, Quality Of Public Realm, Public Spaces

Read Full Paper · Download PDF · Back to index

---

60 Formulation, development and sensory acceptability of high calorie snack bars

Paper ID V6I4-1293 · Pages 317-322 · Food Technology

Sai Dharshini S., Research Scholar, Sri Sathya Sai Institute of Higher Learning, Anantapur, Andhra Pradesh
Meera M., Assistant Professor, Sri Sathya Sai Institute of Higher Learning, Anantapur, Andhra Pradesh

Background: The demand for consumption of healthy, innovative, processed and convenience foods are increasing rapidly due to increasing in awareness about health and lack of time to cook has led to the development of cereal bars. Study focused on developing high calorie snack bars to be used as a complementary food for malnutrition. Objectives: To develop high calorie millet-based snack bar as a complementary food for malnutrition. Materials and methods: Snack bars were made with millets, nuts and oil seeds, sweeteners and gum. The optimized composite mix formulation was enriched with inulin. The developed bars were evaluated for sensory acceptability using 9-point hedonic scale. Physical characteristics and nutrient content were estimated. Results: The high calorie bar was prepared with locally available ingredients. The sensorial attributes of bars made with jaggery scored higher in comparison with other sweeteners. The developed bars had calorific value of 402-430 kcal/100gm with protein content in the range of 11%, fat 13-14%, fibre 2-3% and carbohydrates 57- 64%. Calcium content ranged from 44.1 -70.9 mg, iron 2-3mg, whereas zinc 50.41mg and magnesium 2.04mg/100g was constant in all samples. Conclusion: Incorporation of millets

© 2020, IJARIIT.COM All Rights Reserved

enhanced the functional and nutrient content of snack bars and could be used as a functional ingredient for better health.

Keywords: Malnutrition, High Calorie Bar, Millets, Physico-Chemical Properties, Sensory Evaluation

Read Full Paper · Download PDF · Back to index

61 Comprehensive Seismic Performance Assessment of Low Rise RC Buildings by Numerical Modelling

Paper ID V6I4-1304 · Pages 323-331 · Civil Engineering

Saugat Tiwari, Student, Institute of Engineering, Pashchimanchal Campus, Lamachaur Pokhara, Nepal
Sailesh Adhikari, Lecturer, Institute of Engineering, Pashchimanchal Campus, Lamachaur Pokhara, Nepal
Deepak Thapa, Lecturer, Institute of Engineering, Pashchimanchal Campus, Lamachaur Pokhara, Nepal

In the context of Nepal, Nepal lies in the tectonic plate zone between Indian and Eurasian plates and due to the collision of these plates Himalayan mountain ranges were formed and this result number of earthquakes have occurred in past and in present. The geology is different as there is variation in latitude and longitude, which may result in different ground motion. As there is variation in ground motion there is a variation on earthquake intensity which may change the performance of the low rise buildings. And for the study, 10 different irregular low rise buildings are used. For the proper study linear static analysis is done to check time period of models and check displacement, drift and storey shear on linear static analysis. Later on, the model is checked and analyzed using nonlinear pushover analysis. Model is made nonlinear by making the beam as per existing condition using section designer and hinges were introduced on the beam and column as per FEMA-356 and ATC-40. For the execution of nonlinear analysis both push-in x and push in Y direction load is applied in controlled displacement mode. After execution of nonlinear pushover analysis different colour of hinges were formed and study. And maximum displacement, max storey drift and storey shear were found both in X and Y direction. Peak ground acceleration of Gorkha, EI Centro and Kobe earthquake is used for time history analysis, and different twelve ground motion is used for analysis, and after analysis results, max displacement, base shear, max storey drift was found and the result shown in graphs, which concluded that model having a same irregular plan but with different structure size is more seismically strong, after nonlinear dynamic analysis, model has less value of design value than demand value, so need to rectify and strengthen models.

Keywords: RC Building, Ground Motion, Earthquake, Peak Ground Accelerogram

Read Full Paper · Download PDF · Back to index

62 An overview of RedTacton Technology- A ubiquitous computing

Paper ID V6I4-1310 · Pages 332-336 · Electronics And Communication Engineering

Nandini A. S., Assistant Professor, Brindavan College of Engineering, Bengaluru, Karnataka
Manjula K. B., Assistant Professor, Brindavan College of Engineering, Bengaluru, Karnataka
Shama Firdous, Assistant Professor, Brindavan College of Engineering, Bengaluru, Karnataka

RedTacton is a new innovative Human area networking technology that will allow to use the human body as a network transmitter path. RedTacton uses weak electric fields on the surface of the human body as a

© 2020, IJARIIT.COM All Rights Reserved

transmission medium instead of relying on electromagnetic waves to carry data. Thus RedTacton takes a different technical approach compared to infrared. RedTacton plays a very important role in healthcare domain and also it finds application in various fields such as military and security. In this paper we discuss about the working, applications of RedTacton technology in various fields.

Keywords: RedTacton, Human Area Networking, Ubiquitous Computing, Duplex Communication

Read Full Paper · Download PDF · Back to index

---

63 Structural and dielectric properties of ‘Ni’ doped (Bi_(2-x)Ni_xTi₃O₁₂) polymer thin film

Paper ID V6I4-1282 · Pages 337-349 · Applied Physics

Jyotiprakash Panda, Research Scholar, Centurion University of Technology and Management, Bhubaneswar, Odisha

A single phase crystal ceramic which was Aurivillus types belongs to B.L.S.F structure with general formula Bi(2-x)NixTi3O12. The ‘Ni’ doped Bismuth titranate (BT) ceramic was prepared by using solid state reaction technique. but the ceramics based polymer thin film was carried out by sol-gel process for characterization. Now a days Some research state’s that lead-free ferroelectric materials were widely used for many application like high sensitive sensors and memory devices due to their good di-electric property. The B.L.S.F types ferroelectric materials operates in low voltage. Recently various types of materials like BBT, BST, BNT have been take attention for their electrical conductivity properties. And these types of materials were lead-free and eco-friendly. So we make the crystallographic consideration of the Ni doped BT ceramics . it was study to know about structure of atoms , ions or molecules present in an materials. on a 3-D lattice it was arranged in an particular manner . In a aurivillius based compound the BLSF structure are found. This is a type of ferroelectric structure where the materials are well packed by a bismuth oxide layer that is (Bi2O2). It have not holds good for piezo electric and pyro electric compound .it holds good only for ferroelectric materials. The O-R group heve the perpendicular to the axis of materials. In Bismuth titranate ceramics there are only two main element was used. Bismuth oxide and titanium oxide. But it have some limitations .it does not showing any electrical and optical property. We know Ni was a transition element which was electrical conductor and temperature dependent. Show nickel oxide was used as doping element to enhance the dielectric property of the BT ceramics. Polymer shows relaxor behavior which required for censing device. Polymer synthesis was now a very good synthesis process which show very good result. polymer thin film was used for characterization .the x-rd was study by x-ray diffract meter. Morphology was studied by electron emitting process by using scanning electron microscope. by using LCR meter we find ph, conductivity,loss ,constant etc.

Keywords: Dielectric, Lcrmeter, X-Rd, Sem

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

64 E – Zyklus

Paper ID V6I4-1322 · Pages 350-357 · Mechanical Engineering

Suyant Dharwarkar, Student, Vishwakarma University, Pune
Abdulhasnain Akodiyawala, Student, Vishwakarma University, Pune.

The E - Zyklus is experimentation for converting the manually human-powered vehicle, in this case, a bicycle, into an electrically powered vehicle and optimizing its performance. The concept of E - Zyklus consist a Schnell Bicycle, in which the pedal and chain drive are eliminated. A 24 V Brushless DC motor is used with a simple chain-drive in case of the manual chain drive. The battery pack used is 4 pieces of the lead-acid gel battery. Also, a speed controller is introduced which is of 24 V for the speed control of the BLDC motor, with a Throttle. The objective of the experiment is to optimize the power required for the vehicle to operate, to achieve a top speed of 30 kmph, and also get enough torque for all operations performed by the vehicle like drive on a straight road and climbing up the slope and also achieve good traction on uneven surfaces. The other objective is to see whether a hybrid vehicle is feasible or not.

Keywords: E – Zyklus, Electrically Powered Vehicle, Battery Pack, Hybrid Vehicle, Bicycle, 24 V Brush Less DC Motor

Read Full Paper · Download PDF · Back to index

---

65 Chatuska – An idiosyncratic approach of Charaka Samhita

Paper ID V6I4-1267 · Pages 358-362 · Ayurveda

Dr. Samichha Neupane, Research Scholar, Rajiv Gandhi Government Post Graduate Ayurvedic College and Hospital, Paprola, Himachal Pradesh
Dr. Bikash Raj Ghimire, Consultant, National Ayurveda Research and Training Center, Kathmandu, Nepal

Background: Ayurveda is a science of life. It reflects a wonderful amalgamation of the combination of science and philosophy. This holistic knowledge of living is divine which was passed on to the disciples and then to the common man by various oral narrations and writings. Different Samhitas are available as authenticated ayurvedic texts. Charaka Samhita is the most important ancient authoritative writing. Sutrasthana of Charaka samhita comprises the essence of all sthanas. Aims and objectives: To highlight the methodology and specality of Chatuskas of sutrasthana of Charaka Samhita and thus explain the arrangement of Chatuskas. Material and methods: Charaka Samhita and its available commentary were thoroughly studied with special reference to sutrasthana. Conclusion: Chatuska methodology is distinctiveness of the Charaka Saṃhita and was adopted so as to conglomerate the similar descriptions under one heading. It is not only unique presenting way but stands as evidences of the practical approach of Charaka Samhita.

Keywords: Ayurveda, Charaka Samhita, Sutrasthana, Chatuska

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

66 Mobile charger using piezoelectric material

Paper ID V6I4-1276 · Pages 363-367 · Computer Science

Syed Ali Ahmad, Student, SRM Institute of Science and Technology, Chennai, Tamil Nadu
Apoorv Kumar Dwivedi, Student, SRM Institute of Science and Technology, Chennai, Tamil Nadu
Vinit Singh, Student, SRM Institute of Science and Technology, Chennai, Tamil Nadu
Saksham Mishra, Student, SRM Institute of Science and Technology, Chennai, Tamil Nadu

In today's world it can be observed that a large amount of inactivity and laziness is taking over mankind. It can be observed among human beings that they easily get tired by doing small works or some activity. Nowadays it can also be observed that people get highly impatient if they have to work for long time or has to wait for a task to be done. In today's world as new technologies are overtaking and being brought up in order to ease the work for human beings, the mankind is getting used to or addicted to the technology for making their work easily done and in very small amount of time. There is no doubt that technology play a vital role in in modern world and more or less has become our basic necessity and is very much required to make our tasks to be completed easily and save a lot of time for us. As it is well said a coin has two sides, so with ample amount of advantages there are also various disadvantages so it's up to us and the designer of new technologies to make it productive for their users. Our project is basically one such example of using technology for wellbeing of individual and for the Society. The basic idea of the project is to generate power by converting kinetic energy into electric energy. So, we will prepare a piezo electric device which will convert kinetic energy into electric energy and this further will lead to charging of device like mobile which is one of the basic

Keywords: Piezoelectric, Mobile Charger

Read Full Paper · Download PDF · Back to index

---

67 VLSI implementation of SPI and I²C communication protocols

Paper ID V6I4-1312 · Pages 368-374 · Vlsi Design And Embedded System

Muhammad Bakir, Research Scholar, N.M.A.M. Institute of Technology, Nitte, Karkala, Karnataka
Niju Rajan, Assistant Professor, Department of ECE, N.M.A.M. Institute of Technology, Nitte, Karkala, Karnataka

For the frequent communication between the integrated circuits in an electronic system, which is designed to work in a group rather than a standalone unit, it becomes necessary to adapt serial communication, which is an effective and simple protocol, that provides efficient communication among these various components as compared to parallel communication in terms of the pin count and the ease of implementation. The two most widely accepted, tried and true serial global standards are Serial Peripheral Interface (SPI) and Inter-Integrated Circuit (I2C), which are used for inter-chip and intra-chip serial communication for low or medium bandwidth. The Paper's focus is on the simulation of SPI and I2C protocols.

Keywords: Integrated Circuit, I2C Protocol, SCL(Serial Clock), SDL(Serial Data Line) SPI Protocol, and Protocol Conversion Unit

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

68 Flood modelling of Patu river in Tulsipur city of Nepal and analysis of flooding impact on encroached settlement along the river

Paper ID V6I4-1298 · Pages 375-384 · Civil Enginering

B. B. Sadadev, Student, Pashchimanchal Campus, Institute of Engineering, Tribhuvan University, Nepal
K. Basnet, Assistant Professor, Pashchimanchal Campus, Institute of Engineering, Tribhuvan University, Nepal
Bikash Sherchan, Assistant Professor, Pashchimanchal Campus, Institute of Engineering, Tribhuvan University, Nepal

Patu River flowing through the western part of Tulsipur city in Nepal has been encroached severely by human settlements during the last fifteen years. The settlements and infrastructures are at high risk when the river gets heavily flooded. With the help of images obtained from Google Earth, Landsat images, and application of ARC GIS, the land cover changes during the years 2004, 2010, 2015, and 2019 were observed. Since Patu is an ungauged river, the peak flood was estimated at 109.9 m3/s, 132.9 m3/s and 158.1 m3/s for 25, 50 and 100 years return period by Catchment Area Ratio method referring historical flood data of gauged Sharada River. Through the application of HEC-RAS modeling, the flood mapping was obtained for 25, 50, and 100 years return period. The inundation of settlement area back in 2004 was observed as just 0.009 km2 which was found to have been increased to 0.043 km2, 0.070 km2, and 0.096 km2 in the years 2010, 2015, and 2019 respectively following the linear trend with an R2 value of 0.99. The risk of flood in the settlement has been accelerating with increasing urbanization around the river. It can be concluded that the inundation of settlement could be increased to 0.16 km2 in 2024 if a similar trend follows for the next five years. Before the situation worsens, it is necessary to provide enough embankments on both sides of the river and control the haphazard urbanization around the river. In conclusion, river training and proper planning of the city has been found to be critical for controlling inundation which could increase more in the coming years.

Keywords: River Encroachment, River Flooding, Flood Management, Inundation, HEC-RAS

Read Full Paper · Download PDF · Back to index

---

69 Digital marketing and its role in India

Paper ID V6I4-1283 · Pages 385-394 · Digital Marketing

Yash Kotak, Student, NMIMS Anil Surendra Modi School of Commerce, Mumbai, Maharashtra

This paper offers views on the various marketing types and the role that digital marketing plays in India in today's digital era. Digital marketing has changed the way businesses function and has made work less complicated and it is now easier for the consumer to shop for products and services. Digital channels like the internet, mobile phones and email have provided brands with new pathways for advertising and customer interaction. Brands can now easily interact with their target audience using social media platforms like Facebook, Instagram and YouTube. This paper also talks about the role that digital marketing plays in India and the tremendous growth and the changes that took place in the digital landscape of India after the launch of 'Digital India' – A campaign that was launched by Prime Minister Narendra Modi in 2015 to improve India's digital infrastructure. This study conclusively proves how effective digital marketing can be if the campaigns are properly designed and executed.

Keywords: Digital marketing, Digital marketing in India. Types of digital marketing, Digital India, Evolution of Digital marketing, Traditional marketing v/s Digital marketing, SEO, SEM, Social media marketing, Content marketing, E-mail

© 2020, IJARIIT.COM All Rights Reserved

marketing, Role of Digital Marketing in India,

Read Full Paper · Download PDF · Back to index

70 A theoretical paper on the impact of a moving elevator on a person's apparent weight

Paper ID V6I4-1330 · Pages 395-402 · Mechanics

Mann Thakkar, Student, Independent Researcher

The following research paper provides a theoretical study on the weight, experienced by a person, traveling in an elevator, known as the apparent weight and its dependence on time. This apparent weight may be different from the actual weight, considering the fact that it is caused due to the net upward force from the ground of the elevator onto the man. It is due to this phenomenon that we sometimes feel heavier and sometimes lighter when traveling in an elevator. To find this dependence of apparent weight on time, we will also be determining the ratio of the apparent weight and the actual weight, and the fractional change of weight. Following this, the various graphical representations will be presented, showing the dependence of the velocity and the acceleration of the elevator and the ration of the apparent and the actual weight with time. To evaluate the overall comfort, a new variable, namely the Comfort Level (CL) will be introduced. As a whole, this paper aims to evaluate the overall mathematics behind the change in apparent weight during a journey in an elevator, going far beyond the qualitative study done in schools and textbooks.

Keywords: Weight, Apparent Weight, Actual Weight, Velocity, Acceleration, Elevator

Read Full Paper · Download PDF · Back to index

71 Small in Size …. Yet Big at Work- Role of Microrobot in health care context

Paper ID V6I4-1270 · Pages 403-406 · Nursing

K. Sasikala, Research Scholar, Vinayaka Mission's Research Foundation (Deemed to be University), Salem, Tamil Nadu
Dr. V. Selvanayaki, Principal, Vinayaka Mission's Research Foundation, (Deemed to be University), Salem, Tamil Nadu

Robots in medicine help by relieving medical personnel from routine tasks, that take their time away from more pressing responsibilities, and by making medical procedures safer and less costly for patients. They can also perform accurate surgery in tiny places and transport dangerous substances

Keywords: Microrobot, Robotics technology, Medical robots, Robot operating system (ROS), Micro Electro Mechanical Systems, (MEMS), Photoacoustic Computed Tomography (PACT), Laser-Guided Imagery, Jet-Powered Microrobot

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

72 Production of Bio diesel from Algae

Paper ID V6I4-1228 · Pages 407-411 · Chemical Engineering

Shivansh Juneja, Student, Thadomal Shahani Engineering College, Mumbai, Maharashtra
Vaibhav Mestry, Student, Thadomal Shahani Engineering College, Mumbai, Maharashtra
Sumit Pethe, Student, Thadomal Shahani Engineering College, Mumbai, Maharashtra

In today's world, the majority of the energy needed is derived from burning fossil fuels. The negative impact due to fossil fuels is heavy on the environment. The appropriate infrastructure to replace fossil fuels with more renewable and environmentally sound energy sources still being many decades away, biofuels seem like the best alternative. Biofuels emit the same amount of CO2 as regular fossil fuels, but the crops that produce biofuels consume a lot of that CO2 while growing such that the net CO2 is often negligible or zero. Algae biofuels have been found to be Carbon positive, meaning that they consume more CO2 while growing than they emit while burning. In the present review, we study the feasibility of producing biodiesel from algae.

Keywords: Biodiesel, Algae, Biofuel, Environment, Carbon positive

Read Full Paper · Download PDF · Back to index

---

73 Motor operated automatic ramming machine

Paper ID V6I4-1221 · Pages 412-421 · Mechanical Engineering

Rohit Tidke, Student, College of Engineering Pune, Pune, Maharashtra

Molding is one of the important metals forming process in manufacturing components for various applications in industry. It is important to make cast product precisely. Automation and sophisticated electronics in the ramming process helps to improve the foundry environment and accuracy of the cast parts. The reliability of the cast products depends on various parameters like permeability, compactness, adhesiveness, etc. Hence the process of ramming in molding plays a vital role in the process of casting. The defects that occur in the cast component lead to a great problem in foundry and all associated industries. Hence this ramming machine found large applications in the manufacturing industry. The machine is operating on electric drive motor. Even though skilled labor is employed for ramming operation, the packing of molding sand will not be even throughout the molding box. So we have selected the idea of fabricating "MOTOR OPERATED AUTOMATIC RAMMING MACHINE". This machine is operating mechanically. By using this machine molding sand will be packed evenly throughout the box. The machine is operated by five electric motors that are electronically operated. The ramming tool rod work as a connecting rod hence the rotary motion of motor converted into reciprocating motion of ramming tool. There are four lead screws that convert the rotary motion of the motor into linear movement of ramming tool and impart movement to it so that ramming tool moves within the entire working space so that ramming will be uniform on the sand. Two lead screws used for imparting transverse motion to tool in the plane perpendicular to the tool while the remaining two are used for elevating the tool position in the plane of tool for further compaction of sand.

Keywords: Ramming, Casting, Electronic controller, Compaction

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

74 Understanding the people's willingness to change their intensions towards bicycle

Paper ID V6I4-1223 · Pages 422-432 · Travel Behaviour

Sowmya Dumpala, Research Scholar, Center for Environmental Planning and Technology, Ahmedabad, Gujarat

Bicycles are the easiest and cheapest form of mode of transport which can be used to reduce pollution and other environmental negative externalities. Recently, with the awareness of its benefits, many cities around the world have successfully adopted bicycles in form of sharing scheme and inspired by this, Gandhinagar, the administrative capital of Gujarat also took initiatives to introduce Bike share Program. The planned city of Gandhinagar, compared to the other cities are endowed with a better bicycle-friendly environment with wide congestion free roads and surplus tree coverage, but yet saw a decline in the use of bicycles from the stands. Hence it becomes necessary to know the factors that stimulate individual to use (or not to use) the bicycles. As to modify the travel patterns, it is necessary to under- stand in detail the behavior of individuals and the reasons why they choose (or do not chose) a particular mode of transport. The aim of the present study was to understand the difference in the factors which determines people's willingness to adopt bicycling in Gandhinagar. In order to recognize these factors, use of Theory of Reasoned Action (TRA) components and the concept of transtheoretical model of change (TTM) were used. The study included a sample of 147 people drawn from the general public who already knew how to bicycle, traveled frequently every day and lived in the precincts of Gandhinagar. The results to an extent confirmed that the constructs, as measured by the TRA, only distinguished difference between Precontemplation, Contemplation, and Maintainers successfully, with exception of Active group which overall failed to form a linear relationship between all the stages. But in overall, the aggregate values of attitude are very low in all the stages with very small variations between them. Especially in case of their perceived benefits and the barriers, Majority of people agreed that cycling is good for their health and that it is an environmentally sound way to commute and similarly was observed in there perceived barriers especially the climatic related barriers. What differentiated them were the aspects of their personal and social norms, flexibility and their intentions which became more positive with advancing stages except the group who were already using bicycles in their daily basis (Active). The study also discussed about the short-term benefits of flexibility, which showed a very strong relationship with the process of change, and how the negative barriers has to be addressed and taken seriously if we wanted to persist a change in their decision to change. Implications of the current findings about the description of different characteristics which evolved out from the constructs were discussed in detail and ending the paper with plausible recommendation.

Keywords: Bicycles, Theory of Reasoned Action (TRA), transtheoretical model of change (TTM)

Read Full Paper · Download PDF · Back to index

---

75 SpO2 measurement and analysis for improvement in shooting performance

Paper ID V6I4-1342 · Pages 433-435 · Sports Engineering

Tejas, Student, RV College of Engineering, Bengaluru, Karnataka
K. N. Subramanya, Principal, RV College of Engineering, Bengaluru, Karnataka

SpO2 is a parameter that is widely used to measure the oxygen saturation level in the blood. During times of COVID 19 too, SpO2 was being used widely to assess the wellbeing of a patient. The concept of SpO2 is now

© 2020, IJARIIT.COM All Rights Reserved

applied to shooting sport to find the right timing of the shot. This timing is dependent on the individual shooter as each person's capacities would be different. The principles outlined here could be used to understand the optimal triggering time of any shooter.

Keywords: SpO2, Shooting sport

Read Full Paper · Download PDF · Back to index

---

76 Synthesis and characterization of (Zn) doped Bismuth Titranate (BZT) ceramics

Paper ID V6I4-1265 · Pages 436-447 · Applied Physics

Jyotiprakash Panda, Research Scholar, Centurion University of Technology and Management, Bhubaneswar, Odisha
S. Behera, Professor, Centurion University of Technology and Management, Bhubaneswar, Odisha
S. Sathpathy, Professor, Centurion University of Technology and Management, Bhubaneswar, Odisha

The thesis presents the effect of Zn on the structural, and dielectric properties of Bismuth Titranate ceramic with variation of temperature. The composition (Bi(1-x)Znx)4 Ti3O12(x=0.1 -0.4) was synthesized by solid-state route. The phase formation of the compounds are studied via X-ray diffraction analysis which revealed that the compositions are of orthorhombic symmetry. The dielectric behaviour with variation of temeparture shows an enhancement in phase transition temperature and decrement in dielectric constant with rise of Zn content.

Keywords: Dielectric, LCR METER, X-RD

Read Full Paper · Download PDF · Back to index

---

77 School van safety and surveillance system

Paper ID V6I4-1311 · Pages 448-451 · Internet Of Things

Abilash R., Student, SRM Institute of Science and Technology, Chennai, Tamil Nadu
Anantha Sanker R., Student, SRM Institute of Science and Technology, Chennai, Tamil Nadu
Kishan Kumar R., Student, SRM Institute of Science and Technology, Chennai, Tamil Nadu

Now a day's school van accidents are increasing day by day. This is mainly due to the negligence of van drivers. The major causes of accidents are due to alcohol consumption by the driver, over-speed, etc. It's always a headache for the parents to think about the safer journey of their children. It would be very convenient if there is a system to decrease these types of accidents. This Project is a new idea to implement the different kinds of safety features in the vehicle. If the driver consumed alcohol then the alcohol sensor senses the consumption of alcohol and stops the ignition of the vehicle at that instant. It also sends a message to all the parents and the police station nearby with the exact location using a GPS sensor used in our project. If the speed of the vehicle crosses the specified limit system, first it gives an alarm to the driver to let him know that he is over speeding and if still, he continues, it sends alerting message to the parents and concerned authorities. In case of any accident takes place, that also will be notified to nearby police stations and parents of all the students inside the bus. This system sends the information to the parents about the arrival of the bus prior to one-stop, also parents can access the information about the current location of the bus anytime. The phenomenon of forgetting kids on the bus is one of the problems suffered by the children. This project, through

© 2020, IJARIIT.COM All Rights Reserved

the entry and exit recordings, aims to create a suitable environment by following a certain set of criteria of security and safety for school buses that will have a positive impact on the student and their family. When a complete prototype of the proposed system is implemented, the system will promise safer transportation of school children.

Keywords: Alcohol, GPS Sensor, School Van, Ignition

Read Full Paper · Download PDF · Back to index

---

78 Implementation of CAN BUs in designing of smart vehicle control system using ARM7 Microprocessor

Paper ID V6I4-1320 · Pages 452-457 · Electronics And Communication

Kishora Achary, Student, N.M.A.M. Institute of Technology, Karkala, Karnataka
Lavanya B. L., Assistant Professor, N.M.A.M. Institute of Technology, Karkala, Karnataka

The reliable and high speed data communication between the sensing devices and actuating devices through a controller is the real time requirement in an automobile. The higher the speed lessens response time in critical situation. The parameter such as ABS, airbags, engine temperature need on time response. Otherwise the whole system may met with severe collapse or some time may threaten life also. To make all the factor be in a system that performs better, the communication between the controller with sensing and actuating devices should be with in a frame of high speed communication. The CAN bus is highly reliable and provides high speed communication between control input and resultant output. The earlier generation of CAN is a point to point communication that was using more number of wire. As a result, wired load lags the system speed. This is a major issue when threat is so critical. To overcome all these drawbacks CAN was introduced that reduces the load on system. CAN offers higher flexibility and expandability. The integration of CAN bus with automobile industry is new perception that created a proper link in controlling devices. The factors such as headlight, engine, wiper, door lock, car speed and location tracking are analyzed and taken a valid action against them. The director of the project is Advanced RISC Machine (ARM) 7 LPC2129 microprocessor. In CAN bus the communication arisen with the help of CAN Transceiver. The CAN transceiver is responsible for the CAN communication. The MASTER and SLAVE is controlled by CAN controller. The CAN communication enhances the flexibility, performance and security of the system.

Keywords: ARM7 Microprocessor, CAN Bus

Read Full Paper · Download PDF · Back to index

---

79 Vehicle detection based on deep learning

Paper ID V6I4-1329 · Pages 458-461 · Electronics Engineering

Debasmita Mishra, Student, College of Engineering and Technology, Bhubaneswar, Odisha
Rashmita Routray, Assistant Professer, College of Engineering and Technology, Bhubaneswar, Odisha

Vehicle detection is a challenging problem in autonomous driving systems, due to its large structural and appearance variations. In recent years convolutional neural networks (CNN) have achieved great success. Presently the state-of-art R-CNN and YOLO architectures are explored, implemented, and adopted for

© 2020, IJARIIT.COM All Rights Reserved

performance comparison on real-time data. From the experimental results, the R-CNN has faster detecting speed and accuracy in complex scenes. However, the transfer learning-based CNN model can be further analyzed and validated over other datasets and can be carried out. In comparison to the state-of-art, the proposed transfer learning approach may accurately regress the vehicle shape and classify vehicle fine-grained categories. Presently, the performances are validated over the UA-DETRAC datasets. The obtained performance strongly suggests the RCNN and has better classification accuracy. The proposed transfer learning approach can be a better alternative competing to the state-of-art approaches.

Keywords: Vehicle Detection, YOLO Architecture, R-CNN Architecture

Read Full Paper · Download PDF · Back to index

---

80 Voice over IP mobile telephony using Wi-Fi

Paper ID V6I4-1335 · Pages 462-465 · Software Engineering

Bharath M. S., Student, RV College of Engineering, Bengaluru, Karnataka
Dr. Padmashree T., Assistant Professor, RV College of Engineering, Bengaluru, Karnataka

Today, we are on the verge of wireless networking where everyone wants to be online without a bunch of cables. Colleges, B-Schools, corporate offices, and cafeterias provide Wi-Fi internet connectivity. The aim of this project is to make use of available resources to provide a free voice calls facility, without using a service provider. Pre-established Wireless Fidelity (i.e. Wi-Fi) service more often uses WLAN, which is offered as a voice transmission medium by Wi-Fi. Smartphones allowed by Wi-Fi can be connected to the router and can communicate with one another. This system will be the perfect alternative to the present intercom device.

Keywords: VOIP, Wi-Fi, Voice Transmission, Internet Protocol, WLAN Systems

Read Full Paper · Download PDF · Back to index

---

81 Software Defect Prediction by optimizing features weight with a CNN

Paper ID V6I4-1353 · Pages 466-470 · Computer Science

Asheesh Raju, Student, Alakh Prakash Goyal Shimla University, Shimla, Himachal Pradesh
Anuj Gupta, Professor, Alakh Prakash Goyal Shimla University, Shimla, Himachal Pradesh

Machine Learning approaches are helpful & have well-tried to be helpful in resolution issues & technical problems that lack data. In most cases, the package domain issues may be characterized as a method of learning that depends on the assorted circumstances and changes of the technical issue being addressed in keeping with the principles of machine learning, a prophetic model is made by exploitation machine learning approaches and classified into defective and non-defective modules. Machine learning techniques facilitate developers to retrieve helpful data when the classification of kinds of technical problems being addressed in an exceedingly specific field. This successively permits them to analyze knowledge from totally different views, which may be used because of the formation base of constructive concepts & varied techniques to handle the technical problems. Machine learning techniques are well-tried to be helpful within the detection of package bugs. during this analysis prediction by Convolution based mostly feature choice and Learning by Random forest. In the proposed approach, the accuracy and precision always improve and it also improves class wise.

© 2020, IJARIIT.COM All Rights Reserved

There is a significant enhancement in defective and non-defective class prediction as the random forest non-linearity features help to improve the selection of effective parameters by bagging approach. In the proposed approach, hybridization of three approaches such as deep learning, machine learning and sampling approach is done which significantly improve overlapping of features and imbalance of class like KC2 dataset.

Keywords: Machine Learning, CNN, Software Defect Prediction, Random forest

Read Full Paper · Download PDF · Back to index

---

82 Fleet optimization for time and cost factors in residential building

Paper ID V6I4-1351 · Pages 471-477 · Civil Engineering

Pravin Sable, Student, Maratha Vidya Prasarak Samaj's Karmaveer Baburao Thakare College of Engineering, Nashik, Maharashtra
S. M. Waysal, Proffessor, Maratha Vidya Prasarak Samaj's Karmaveer Baburao Thakare College of Engineering, Nashik, Maharashtra

Construction sectors are one of the widest sectors in the world. In which there is tremendous growth in terms of profit and development. it increases in terms of new inventions, new designs, new equipment, and a new concept in a wide manner. In that road transportation or road construction has a huge scope of work and chances of development of roads to connect cities and villages to each other. Basically roads of the particular area define their development of the area in terms of success, quality area of living, workplaces respectively. road construction is mainly considered as important work for connecting states, cities, and villages for transportation of goods and other things. In the construction sectors, mainly in road constructions, fleet management is one of the most important factors that define total cycle time, total cost, cost index, and total time required for completing the activity and related parameters. Fleet management can be defined by equipment assignment and optimization. Equipment assignment and optimization is the main reason many construction companies choose to implement fleet management systems in the first place. By enabling the scheduling and assignment of all types of equipment from multiple manufacturers as well as shift change management from a central office location, fleet management helps minimize unproductive machine wait time and optimize equipment usage on site.

Keywords: Time, Cost Optimisation

Read Full Paper · Download PDF · Back to index

---

83 Acute Sheehan’s Syndrome – An Update

Paper ID V6I4-1289 · Pages 478-481 · Obstetrical And Gynecological Nursing

Nithya Natarajan, Research Scholar, Vinayaka Missions Annapoorana College of Nursing, Salem, Tamil Nadu
Dr. V. Selvanayaki, Research Supervisor, Vinayaka Missions Annapoorana College of Nursing, Salem, Tamil Nadu

Sheehan’s syndrome (SS) remains a frequent obstetric complication in emergent and developed countries that to date still reports a relatively high prevalence of moderate to severe postpartum hemorrhage. Sheehan’s syndrome (SS), which is a common cause of parturition related hypopituitarism resulting from postpartum pituitary infarction. It is usually the result of severe hypotension or shock caused by massive hemorrhage

© 2020, IJARIIT.COM All Rights Reserved

during or after delivery. Patients with SS have varying degrees of anterior pituitary hormone deficiency. Several studies have shown that the latent period between symptoms and postpartum hemorrhage can be several years in Sheehan's syndrome.

Keywords: Sheehan's Syndrome, Postpartum Hemorrhage, Hypopituitarism

Read Full Paper · Download PDF · Back to index

---

84 Development of healthy fibrous brownies

Paper ID V6I4-1296 · Pages 482-487 · Nutraceutical

Sahaja Gajam, Student, Guru Nanak Khalsa College of Arts ,Science and Commerce(Autonomous),Mumbai ,Maharashtra
Shraddha Dinesh Dubey, student, Guru Nanak Khalsa College of Arts ,Science and Commerce(Autonomous),Mumbai ,Maharashtra
Dr. Gauri Vahalkar, Head of the Department, Guru Nanak Khalsa College of Arts ,Science and Commerce(Autonomous),Mumbai ,Maharashtra

Due to modernization, a sedentary lifestyle and unhealthy food habits has led to problems in recent times. A lot of gastrointestinal disorders arise due to unhealthy food. Disorders like indigestion, loose stools, diverticulosis, colon cancer, obesity, and diabetes. Phoenix dactylifera (dates), Avena sativa (oats) & Ipomoea batatas (sweet potatoes) were used in the preparation of brownies. This brownie was analyzed with respect to their physical, biochemical, and sensory properties. The quality of the brownie was determined on the basis of physicochemical characteristics such as- moisture content (28.37%), ash content (1.5%), total carbohydrate content (40.12g), fat content (5.36%), protein content (18.34g), dietary fiber content (6.35 g), Energy(282.08Kcal) including organoleptic analysis including the attributes such as color, odor, taste, texture, mouthfeel and overall acceptability. Microbiological testing and shelf-life studies were also carried out and sustainable packaging for the product was also developed

Keywords: Dates, Oats, Sweet Potato'S, Gastrointestinal Disorders, Diverticulosis

Read Full Paper · Download PDF · Back to index

---

85 Expected impact of reopening schools after lockdown in India

Paper ID V6I4-1334 · Pages 488-490 · Education

Pratik Darbhe, Darshan Academy, Pune, Maharashtra

Schools and colleges across the country have been closed since the second week of March in the wake of Covid-19. As the National Council for Educational Research and Training (NCERT) is working on guidelines for the reopening of schools after the lockdown. Some of the suggested measures include having no assembly sessions, seminars and gatherings in schools for a long time. Apart from this, schools are also likely to call only 30 per cent of students at a time to maintain social distancing.

Keywords: Covid-19, NCERT , Lockdown, Diksha

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

86 P VERSUS NP PARADOX

Paper ID V6I4-1341 · Pages 491-496 · Computer Science And Mathematics

Swostik Pati, Student, Delhi Public School, Navi Mumbai, Maharashtra

The P vs. NP problem has haunted scientists' minds for years. It is considered to be one of the most difficult and deepest unanswered questions in the field of computer science and mathematics. Intellectuals all over the world have tried to reach a possible solution for years but there still isn't any consensus regarding the same. In this article, we will try to revisit the problem and discuss it using layman examples. I will touch all major aspects of computer science and mathematics related to the problem. Finally, I will conclude by providing a paradox that will cause people to think in a completely different way towards the possibility of a solution to the problem.

Keywords: Polynomial Time, Computational Complexity, Non-Deterministic And Deterministic Algorithms, Conjecture

Read Full Paper · Download PDF · Back to index

---

87 The growth of lettuce under T5 led lamps in non-circulating hydroponics

Paper ID V6I4-1317 · Pages 497-502 · Agriculture Engineering

G. Sai Preetham, Student, Vignan's Foundation for Science, Technology and Research (Deemed to be University), Guntur, Andhra Pradesh
Bibek Bahadur Shreshta, Assistant Proffesor, Vignan's Foundation for Science, Technology and Research (Deemed to be University), Guntur, Andhra Pradesh
Anne Harsha Gopal, Student, Vignan's Foundation for Science, Technology and Research (Deemed to be University), Guntur, Andhra Pradesh
P. Sreeja, Student, Vignan's Foundation for Science, Technology and Research (Deemed to be University), Guntur, Andhra Pradesh

Lettuce is grown hydroponically by both circulating and non-circulating hydroponics. The present experiment was done under a wooden built cabin, stacking was done under iron racks. 1-liter bottles were covered with the black polythene covers to avoid the algae formation. The commercially available nutrient solution was grown in the first trail. Each rack was fitted with 3 T-5 led lamps equally spaced along the width of the rack. Each bottle was aerated with an air pump. Seeding was done directly in jiffy plugs and supported with net pots. Purified water was used for both nutrient solution and watering the seedlings. Basic N-P-K nutrition was given until seedling was grown and was transplanted when the seedlings obtained 3 leaves. Covered bottles were filled with nutrient solution leaving a 2 cm gap from the top of the bottle. Net cups were inserted with plants, 3cm of the net cups were covered with nutrient solution and the yield was measured. The PH and TDS were maintained an optimal range over the growing period. In the second trial, seeds were directly placed in the sterilized growing medium, lighting was increased by increasing one light in the seedling rack and seedling stage was measured in terms of the health of the seedling.

Keywords: Non-circulating hydroponics, Indoor Farming, T5 LED, Lettuce, Hydroponic Nutrients

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

88 Development of calcium-rich product- “Multipro Ragi Premix”

Paper ID V6I4-1319 · Pages 503-507 · Food

Sahifa Phoplunkar, Student, Guru Nanak Khalsa College of Arts, Science and Commerce, Mumbai, Maharashtra
Susan George, Student, Guru Nanak Khalsa College of Arts, Science and Commerce, Mumbai, Maharashtra
Aathira Sudhir, Student, Guru Nanak Khalsa College of Arts, Science and Commerce, Mumbai, Maharashtra
Vanita Narala, Student, Guru Nanak Khalsa College of Arts, Science and Commerce, Mumbai, Maharashtra

Over the years there has been a drastic change in the life style of consumers, there is a rising demand for nutritionally rich, easy to prepare dishes and also the shift of mindset to obtain nutrients through food for sustenance. Premixes are one such category of food. The present study was conducted to understand the acceptance of a preservative free, simple and nutritional blend that is cost-effective. The product “Multipro Ragi Premix”, has a unique blend of ragi, dates, flax seeds and oats. This makes the product calcium-rich, gluten-free and even suitable for lactose-intolerants. The acceptance was studied by conducting a sensory evaluation using the hedonic method based on a 9-point scale. The Evaluation was performed on sensory attributes like appearance, color, taste, texture, aroma, and the overall acceptability of the product. As per the RDA laid by ICMR, the product tends to serve 27% of the daily required calcium. Estimation of the Storage study data determined that it has a shelf life of minimum four weeks.

Keywords: Calcium-rich, Premix, Gluten-Free, Lactose-Intolerant, Ragi, Dates, Nutritional blend, Calcium-deficiency, Sensory Evaluation

Read Full Paper · Download PDF · Back to index

---

89 Fingerprint matching algorithm using multipoint minutiae matching algorithm using SVM approach

Paper ID V6I4-1344 · Pages 508-512 · Ece

Gurwinder Singh, Student, Adesh Institute of Engineering and Technology, Faridkot, Punjab
Puneet Jain, Assistant Professor, Adesh Institute of Engineering and Technology, Faridkot, Punjab

Abstract Fingerprints are considered as an interesting distinguishing proof of an individual and because of simple access it‟s the best and one of the quickest strategies utilized in biometric recognizable proof frameworks. They are exceptional, so secure and solid to utilize and does not change for one out of a lifetime. What’s more, next to these things unique finger impression acknowledgment exceptionally utilizing particulars coordinating system is modest, dependable, and precise up to an agreeable point of confinement. In the proposed system a fingerprint matching algorithm is developed by multi-point minutiae matching with the help of the SVM Algorithm. The performance of the proposed system is evaluated on various parameters and compared with the existing system.

Keywords: Minutiae Matching, Security, SVM Approach, Fingerprint Matching

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

90 The association of body mass index with high blood pressure among adults

Paper ID V6I4-1337 · Pages 513-519 · Clinical Research

Asma Mafiz Ansari, Student, Institute of Clinical Research India, Mumbai, Maharashtra
Dr. Arpita Verma, Professor, Institute of Clinical Research India, Mumbai, Maharashtra

AIM: The aim of this study was to determine the correlation between BMI and BP among adults. Methods: The descriptive research study (google form survey) was carried out on adult patient age group 30-90 years with hypertension disease, residing in Jogeshwari, Mumbai between 20 march to 10 April 2020, after being granted approval from the college. Results: We found that 55% of participants were overweight and 27% of participants were obese only 18% of participants were normal/healthy. Therefore, Overweight and obesity are risk factors for HBP. The majority of individuals in this study with HBP are over 50 years old which is further followed by 40-49 years old. Therefore, age is also significantly associated with BP. We also observed that positive family history of HT as well as diabetes was significantly associated with BP. CONCLUSION: The study demonstrated that BMI is closely associated with BP among the elderly population. Because From the results, it is very evident that overweight and obesity occur as a result of less physical activity. All the obese/over-weight participants do not engage in any form of exercise. Exercise is a very important factor to consider in decreasing the incidence of overweight and obesity in populations. This is because exercise helps the body to burn fat and utilizes excess calories. Therefore, the risk of hypertension was higher among population groups who were overweight or obese. BP is also associated with rising age independently. there was a positive and significant correlation among BMI, age, BP. The increased rate of obesity or weight with respect to an increase in age could be due to the fact that older people are less physically active but maintain the same energy intake as during their earlier years. Hence, the excess energy that is not expended is stored as fat, increasing their chances of becoming obese. Prevalence of 27% prehypertension among overweight/obese suggested an early clinical detection of prehypertension and intervention including life style modification, particularly weight management.

Keywords: BMI (Body Mass Index), BP (Blood Pressure), HBP (High Blood Pressure), HT (Hypertension)

Read Full Paper · Download PDF · Back to index

---

91 Operational modal analysis of a bike chassis

Paper ID V6I4-1318 · Pages 520-523 · Automotive

Mohamed Hafeez, Student, PES University, Bangalore, Karnataka
Varun V. Bhat, Student, PES University, Bangalore, Karnataka
V. Ajay, Student, PES University, Bangalore, Karnataka
Santhosh Kumar H. V., Asst.Professor, PES University, Bangalore, Karnataka

This paper is about Modal analysis performed on a bike chassis and validated simulated data with experimental data. This paper also has information for simulated data on operational conditions simulated on a bike for modal analysis.

Keywords: Vibration, Motorbike, Automotive, Resonance, Simulation, Experimentation, Validation

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

92 The role of the arts during a global pandemic

Paper ID V6I4-1331 · Pages 524-527 · Art And Psychology

Ariya Maskara, Student, Independent Researcher

This Research Paper describes the correlation between the arts and the Covid-19 lockdown. It explores the psychological implications of the lockdown and the role of the arts as a coping mechanism.

Keywords: Coping Mechanism, Art, Psychology, Covid-19 And Art, Art And Its Healing Power

Read Full Paper · Download PDF · Back to index

---

93 Wireless sensor networks for agricultural and other applications and routing protocols with challenges of routing protocols

Paper ID V6I4-1370 · Pages 528-536 · Wireless Sensor Networks For Agriculture

Anusha D., Student, RV College of Engineering, Bengaluru, Karnataka
Vanishree K., Assistant professor, RV College of Engineering, Bengaluru, Karnataka

Wireless Sensor Networks has sparked a modern path of industrial and technical science. India's agriculture sector is declining day by day, impacting biodiversity output efficiency. There's a pressing need in the sector to address the issue of recovering capital and getting it back to higher development. A dataflow model of information is built linking various dispersed inputs to the crop frameworks. The society around us is automating the substitution of manual operations with the advent of technology because it becomes energy-intensive and less man work becomes consumed

Keywords: Wireless Sensor Network, Sensors, Energy

Read Full Paper · Download PDF · Back to index

---

94 Solar-powered semi-autonomous vehicle for agricultural usage

Paper ID V6I4-1359 · Pages 537-542 · Multidisciplinary Engineering

Soubhik Mazumdar, Student, Vellore Institute of Technology Chennai, Tamil Nadu
Abhinav Bhattacharya, Student, Vellore Institute of Technology Chennai, Tamil Nadu
Kirti Bhagat, Student, Vellore Institute of Technology Chennai, Tamil Nadu
Aayush Kumar, Student, Vellore Institute of Technology Chennai, Tamil Nadu
Shivam Gupta, Student, Vellore Institute of Technology Chennai, Tamil Nadu
Kunal Sahni, Student, Vellore Institute of Technology Chennai, Tamil Nadu
Menaka R., Professor, Vellore Institute of Technology Chennai, Tamil Nadu

The Farm Assistant Robotic Mobile robot, abbreviated as F.A.R.M, is a four-wheel-drive, solar-powered semi-autonomous vehicle designed specifically to suit the needs of a typical Indian farm. Indian agriculture is composed of many crops, rice, and wheat being the most popularly consumed. F.A.R.M has been designed to keep commercial rice and wheat plantations as the primary focal point but can be extended to other farms with minor tweaks. The 20-kg robot can drive with a continuous transnational speed of 8 m/s on moderately rough terrain. The on-board solar panel generates about 150-W of average power when directly under the sun i.e., a 90-degree angle of elevation. The power-control system uses an MPPT based charging system to recharge the

© 2020, IJARIIT.COM All Rights Reserved

batteries and supply loads. The robot has two modes of control; first using a handheld controller, and second using control buttons through a web page. Various features include a pesticide sprayer, live video surveillance, internal system reporting, invasive animal detection using computer vision, and a self-sustained solar energy-based power system.

Keywords: Agriculture, Automation, Solar panel, Battery, MPPT, BMS, OpenCV, MQTT

Read Full Paper · Download PDF · Back to index

---

95 Ionic Liquids and it’s versatile applications : Blessings for Chemists

Paper ID V6I4-1368 · Pages 543-551 · Chemical Science

Pratik D. Saudagar, Institute of Chemical Technology (ICT) Mumbai, Maharashtra

An ionic liquid is a salt in which the ions are poorly coordinated, which results in these solvents being liquid below 100°C, or even at room temperature. At least one ion has a delocalized charge and one component is organic, which prevents the formation of a stable crystal lattice. Properties such as melting point, viscosity, and solubility of starting materials and other solvents, are determined by the substituents on the organic component and by the counter ion. Many ionic liquids have even been developed for specific synthetic problems. For this reason, ionic liquids have been termed "designer solvents”. The absence of volatility is one of the most important benefits of ionic liquids, offering much lower toxicity as compared to low-boiling-point solvents. Room-temperature ionic liquids, molten salts, ambient temperature molten salts/ionic liquids, sponge ionic liquids, liquid organic salts, fused salts, neoteric solvents this are synonyms for the ionic liquids.

Keywords: Ionic liquids, Ionic salts, Designer solvents , Ionic liquid solvent, Ionic liquid catalyst

Read Full Paper · Download PDF · Back to index

---

96 A brief review on various topologies of custom power devices

Paper ID V6I4-1343 · Pages 552-555 · Power Electronics

Mantu Kumar, Student, Scope College of Engineering, Bhopal, Madhya Pradesh
Eknath Borkar, Professor, Scope College of Engineering, Bhopal, Madhya Pradesh

Poor power quality reduces the system efficiency and increases the losses as well as the electricity consumption cost. Power electronic based customized power conditioning devices presents efficient and cost effective solution to various power quality problems. This paper presents a brief overview on one such power quality compensating device which can at the same time mitigates voltage as well as current related irregularity in system. UPQC is designed with shunt converter to mitigate current harmonics and series converter to regulate system voltage. Also UPQC has been energized through PV voltage to make the system eco-friendly.

Keywords: Active Power Filter (APF), Custom Power Devices (CPD), Power Quality (PQ), Unified Power Quality Conditioner (UPQC), Power Electronics Devices (PED) Dynamic Voltage Restorer (DVR)

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

97 Advancements in controlled Drug Release Systems

Paper ID V6I4-1363 · Pages 556-558 · Chemical Engineering

Akanksha Pradhan, Student, Indian Institute of Technology, New Delhi, Delhi
Saksham Rawal, Student, Indian Institute of Technology, New Delhi, Delhi

There is a prevailing problem of a drug overdose, due to the sudden release of medicines in the body. It is challenging to provide a precise drug release rate. But microencapsulated drugs and 'active-gel' mixtures continue to provide us with better solutions in the field. In this review, we discuss both of these methods briefly, including why they are advantageous over standard drug delivery procedures and what is the need for further research in this area.

Keywords: Drug delivery, Microspheres, Micro-encapsulation, Rate of Drug Release, Active-gel, Hydroxy-Gel

Read Full Paper · Download PDF · Back to index

---

98 Role of Carbon Markets in India to meet its Climate Commitments

Paper ID V6I4-1367 · Pages 559-568 · Environmental Economics

Aaditya Gupta, Student, Delhi Public School, New Delhi, Delhi

This paper is an exploratory study to understand the key features of a carbon market and the context in which a carbon market can possibly be introduced in India. The paper examines the potential for a Pilot Carbon Market in India based on a review of existing global carbon markets and an understanding of the attempts by the Indian authorities to usher in market-based instruments for emission control. In this context, the paper recommends a specific pilot and incorporates the views of a few stakeholders to get a sense of its feasibility.

Keywords: Carbon markets, Greenhouse gases, Carbon trading, Emissions trading scheme, Carbon dioxide, Carbon dioxide equivalent, Pilot markets

Read Full Paper · Download PDF · Back to index

---

99 Understanding urbanization and urban flooding scenario in India

Paper ID V6I4-1360 · Pages 569-574 · Urban Planning

Thoudam Sudha, Student, Madhav Institute of Technology and Science, Gwalior, Madhya Pradesh
Rachit K. Pamnani, Assistant Proffesor, AMITY University, Raipur, Chhattisgarh
Sanjay Singh Jadon, Professor, Madhav Institute of Technology and Science, Gwalior, Madhya Pradesh
Noopur Gupta, Assistant Professor, Madhav Institute of Technology and Science, Gwalior, Madhya Pradesh

With the ever-growing development in our country and due to its organic growth throughout the years ban flooding has become a matter of serious problem in many of the cities of India. Urban flooding is the flooding of various zones and pockets of an urban fringe due to overflow of drainage lines, waterlogging scenarios, etc. which creates a situation where the water through precipitation is not able to seep down to the earth but rather remain on the surface creating a situation of a health crisis for all the residents of the society. Urban flooding is defined as not only increase in the water table at the river basin resulting in the submergence of the land area but also waterlogging scenarios due to undulating topography and geography of the place, lack of softscapes in the urban fringe, improper land use, exploitation of the drainage patterns, etc. Urban flooding not only effects

© 2020, IJARIIT.COM All Rights Reserved

the health conditions of the residents but also hinders the basic urban functions like transportation, electric supply, drainage supply, etc. creating an unhabitable urban environment. Flooding has resulted in the outbreak of many epidemics due to an increase in diseases and also creates non-availability of important medical services resulting in loss of lives alongside a loss of property. In India, improper disposal of solid waste also is a major cause of waterlogging. People here tend to throw their waste from their residences and working places in the stormwater drainage lines resulting in clogging and waterlogging which in turn results in the birth of many vector-borne diseases. After a devastating flood in the year, the 1953 government of India came to know about the seriousness of the problem and started created policies and planning measures to cope out with flooding scenarios in urban cities. In recent years, heavy precipitation in our country and poor drainage services has led to extreme flooding scenarios around the country. The stormwater drainage systems in our country were designed earlier but the overall increased rainfall intensity has overwhelmed the structure which often also does not work due to the poor maintenance of the drains resulting in blockages and clogging of water. Natural streams and watercourses have formed over thousands of years due to the forces of flowing water in the respective watersheds. The drainage lines in an urban fringe should have been widened as according to the increasing strain on the system and according to the widening of the roads but on the contrary. The volume of the stormwater drainage system has been greatly reduced due to the encroachments done by the people resulting in a flood situation whenever rainfall occurs. In the absence of a proper solid waste disposal system, people tend to throw away their garbage in the stormwater drain which further clogs the drains and decreases its capacity even further. Whenever the question of drainage appears in our country, we cite the examples of the well planned and organized gravity-based drainage system in the cities of the Indus valley civilization like Mohan-jo-Daro (now Pakistan) and Lothal (Gujrat). Such examples of organized drainage systems are not to be seen anywhere in our country in modern times. Few of the notable examples of flooding of the urban areas in India are the Hyderabad in 2000, Ahmedabad in 2001, Delhi in 2002 and 2003, Chennai in 2004, Mumbai in 2005, Surat in 2006, Kolkata in 2007, Jamshedpur in 2008, Delhi in 2009 and Guwahati and Delhi in 2010, Srinagar in 2014, Guwahati in 2014, Chennai in 2015, Hyderabad in 2016, Ahmedabad in 2017, Kerala in 2018. So the flooding scenario in our country occurs in a part or another every year due to excessive rainfall, human encroachment in the softscapes, and inefficient drainage lines with overwhelming pressure. The unorganized and improper land use planning in our cities has also created zones that are geologically and topographically in the high vulnerability of flooding which poses a large number of population and property at risk. Generally, socially and economically backward class of people is forced to live here which faces the flooding scenario in their localities in every monsoon season. Unorganized developments of ever-growing habitations near the water sources like rivers and watercourses have disturbed the natural water streams and their courses resulting in surface runoffs and waterlogging.

Keywords: Urban flooding, Surface runoff, Waterlogging, Topography, Risk management

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

100 Candidate talent assessment through recommender systems using machine learning techniques

Paper ID V6I4-1369 · Pages 575-578 · Computer Science And Engineering

Swathi V., Student, BNM Institute of Technology, Bengaluru, Karnataka
Suraksha S. Tasgaonkar, Student, BNM Institute of Technology, Bengaluru, Karnataka
Shubhashri T. V., Student, BNM Institute of Technology, Bengaluru, Karnataka
Prarthana T. V., Assistant Professor, BNM Institute of Technology, Bengaluru, Karnataka

The world is moving towards complete automation where most of the systems are being automated, one of the examples of this trend is the automation of IT industry. The candidate recommender system helps in the selection of candidates for a company. The candidate recommender system looks into the various profile of the candidates chooses a Candidate whose profiles best matches that of the company and the job.

Keywords: Recommender Systems, Machine Learning, Candidate Recommender, K-Nn, Matrix Factorization, Collaborative Filtering

Read Full Paper · Download PDF · Back to index

---

101 Approach to help choose right data warehousing tool for an enterprise

Paper ID V6I4-1372 · Pages 579-583 · Computer Science Engineering

Madhusudhan Reddy Sureddy, Associate Director, Santander Bank, Holmdel, NJ, USA
Prathyusha Yallamula, Vice President, Natixis CIB Americas, New York, New York, USA

Data warehousing tool market space is currently filled with many tools each having its unique pros and cons making it very difficult for enterprises to make the choice of tool. The breadth of data warehousing has also moved beyond data integration, ETL, and presently encompasses data integration, data quality, master data management, metadata management, reference data management, big data Management. Enterprises expect the data warehouse tool providers to meet the requirements of all of these functionalities. This paper provides a point model approach using key performance indicators (KPI), Weightage and Scores to help choose the right data warehousing tool for enterprises.

Keywords: Business Intelligence (BI), Data Warehousing (DW), Approach, Choose, Applications, Big Data, Data, Tools, Enterprise, Organization, Data Integration, Data Quality, Master Data Management, Metadata Management, Reference Data Management, Big Data Management, Extraction Transformation Loading (ETL)

Read Full Paper · Download PDF · Back to index

---

102 Water demand prediction using Machine Learning

Paper ID V6I4-1375 · Pages 589-594 · Computer Engineering

Disha A. P., Student, Sai Vidya Institute of Technology, Bangalore, Karnataka
Lahari T. K., Student, Sai Vidya Institute of Technology, Bangalore, Karnataka
G. Jananisri, Student, Sai Vidya Institute of Technology, Bangalore, Karnataka
Soniya R., Student, Sai Vidya Institute of Technology, Bangalore, Karnataka

Water is one of the critical resource for sustainable economic and social development of a country. To maintain

© 2020, IJARIIT.COM All Rights Reserved

health & hygiene, energy & agricultural products, and the environment management water plays a key role. Water demand prediction is very much essential to analyze the requirement which indicates emergency state for water management decisions. The explores usage of water for dairy plants to understand the spatial and well as temporal patterns for future water requirements, to optimize the water demand estimation. It uses concept of Machine learning algorithms to compare and achieve an effective and reliable system for water prediction.

Keywords: Water, Demand, Machine Learning

Read Full Paper · Download PDF · Back to index

---

103 Smart grid demand side management using hybrid combination of bat and firefly algorithm

Paper ID V6I4-1377 · Pages 595-599 · Electrical Engineering

Kirtanpal Singh, Research Scholar, Adesh Institute of Engineering and Technology, Faridkot, Punjab
Puneet Jain, Assistant Professor, Adesh Institute of Engineering and Technology, Faridkot, Punjab

A smart grid is the advanced power grid, and electricity demand is managed and controlled by it. The electricity demand is increased during the peak hours of the day. Thus, to fulfill the electricity demand either generate the extra electricity in the peak hours that increase the cost or reduce the load in the peak hours. The load during peak hours is reduced by adopting a demand-side management technique. These techniques reduce the generation cost, and the performance of the smart grid is improved. This paper provides proposed a new/latest approach known as a hybrid of BAT, and Firefly optimization is used to control the switching time of devices so that the overall load can be minimized. The experimental results are performed for different devices (3 and 5). The simulation results show that the proposed algorithm reduces the cost as compared to the original cost. In the last, we have compared the performance of the proposed algorithm over the existing Particle Swarm Optimization (PSO) algorithm and found that 47.02% and 36.48% cost reduction for 3 and 5 devices, respectively.

Keywords: Bat, Firefly Algorithm, Load Data Management, Smart Grid

Read Full Paper · Download PDF · Back to index

---

104 UNO-Phobia vs. Islam-Phobia

Paper ID V6I4-1355 · Pages 600-629 · Apriori Science

Jamir Ahmed Choudhury, Research Scholar, Assam University, Silchar, Assam

Equal & Opposite is the Apriori Framework of this Manifested Nature.

Keywords: Sirius Binary System, Mercurial System, Uranian System, Natural Magnetism, Barrier between Equal & Opposite Natural Mechanism [Solar System]

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

105 Solar tracker

Paper ID V6I4-1380 · Pages 630-638 · Mechanical Engineering

Mithilesh Rai, Student, ABES Engineering College, Ghaziabad, Uttar Pradesh

The renewable energy source is a non-depleting energy source, which is abundantly present in our climate. At present, the existing research areas are focused on renewable energy sources. This source of energy is clean and pollution-free. The only significant problem associated with this is its performance and profitability. We come across several solar panels every day. Those panels are fixed. We took this further on with tracking devices to solar panels. These solar tracking devices come in fixed structures with a single axis and dual axis. The Dual-axis tracking mechanism is quite effective as it is capable of capturing more irradiance than the other. These are capable of shifting the system in various co-ordinates of latitudes and longitudes according to the position of the sun. Fixed axis devices are capable of capturing the maximum intensity of the sun for one particular moment throughout the day when the sun is at zenith. These trackers are powered by small solar cells that provide motion to the panel according to the location of the sun. Also, it is not recommended to use solar trackers with small PV arrays because of the energy consumption of the driving systems, which vary from 2% to 3% of the energy increase delivered by the solar trackers. This paper intended to review different solar tracking system that increases the solar power output.
A solar tracking system, using a photovoltaic device to monitor the changing solar position, is disclosed. The photovoltaic
The override system is clock-
driven and moves the tracking system to approximate the solar position so that when the sun re-
energizes as the brightest object in the sky, the photo-voltaic device can immediately reacquire the sun.

Keywords: Solar Device, Tracker, Renewable Energy Harvesting

Read Full Paper · Download PDF · Back to index

---

106 Experiment on different indoor vertical gardening by hydroponic method for sustainable infrastructure

Paper ID V6I4-1381 · Pages 639-642 · Civil Engineering

Dr. Aravinthan K., Doctrate Degree Holder, Raja Rajeshwari College of Engineering, Bengaluru, Karnataka
Haseeb Baig, Graduate, Raja Rajeshwari College of Engineering, Bengaluru, Karnataka
Aanchal P., Graduate, Raja Rajeshwari College of Engineering, Bengaluru, Karnataka
Gnaneshwari S., Graduate, Raja Rajeshwari College of Engineering, Bengaluru, Karnataka
Khalid Pasha R., Graduate, Raja Rajeshwari College of Engineering, Bengaluru, Karnataka

This paper discusses about conducting experiment on different indoor vertical gardening for the room dimension of 10’ x 10‘as specimen area aimed to improve indoor environment. Here four types of plants namely Tulsi, Aloe Vera, Money Plant, and spider plants are used for vertical gardening. Four residential single room located in different places in Bangalore is considered for this experiment. Each day these plants were increased from 0, 5, 10, 15 plants and checked for environmental parameters. The indoor environmental monitoring parameters are Air Quality index, Temperature, Noise, Humidity Check, Air Pressure. These parameters are checked in real time for the four days. The plants were grown by using Hydroponic method and the plants rooted by 80% soil and 20percent coco peat. The result shows that maximum of 37% of Indoor Air

© 2020, IJARIIT.COM All Rights Reserved

Quality index is improved by using Aloe Vera plants, Indoor temperature is reduced up to 2º C between indoor and outdoor, and 12% of increase in humidity by Tulsi plant. This project recommends that vertical gardening helps stabilizing the indoor environment and promotes sustainable infrastructure.

Keywords: Indoor Vertical Gardening, Hydroponic Method, Sustainable Infrastructure, Air Quality Index, Eco-City

Read Full Paper · Download PDF · Back to index

---

107 Scenario behind the water color changed from green to pink/red of Lonar Crater Lake, Maharashtra, India

Paper ID V6I4-1338 · Pages 643-650 · Buldhana District

Raju D. Jadhav, Independent Researcher
Harishchandra B. Mali, Independent Researcher

© 2020, IJARIIT.COM All Rights Reserved

Earlier Lonar Crater Lake water was green colored due to presence of green pigmented algae, and suddenly, it changed to pink/red by growing of pink/red pigmented organisms on the surface of the water. There are two reasons for the water of the crater to look pink/red colored i) halophilic bacteria (salts loving) and halophilic archaea suggested by Dr. Kanekar (scientist) and Dr. Khadse (scientist) (NEERI), ii) Fungus which survives on decaying organic matter this study. The news appeared in the newspaper Lokmat dated 11-6-2020, stating that the water of Lonar Crater Lake turned pink/red. As per Dr. Kanekar (scientist), the organisms that grows on highly saline nature of water body is responsible for the pink/red color, which grows on high salt content water body or field land, which are called as per Dr. Kanekar, the salt loving microorganisms names of those microorganisms are halophilic bacteria and halophilic archaea, which are similar to dunaliella salina (found in saline lakes), due to high evaporation, the water of the lake decreased and the concentration of the salts (NaCl) increased, These microorganisms survive where saline lakes exist. These organisms are photosynthetic organisms and have ability to produce large amount of carotenoid pigment which imparted pink coloration to the Lake water. As per Dr. Khadse (scientist), due to high evaporation, water level decreased and concentration of salts (NaCl) increased, due to which certain microorganisms such as halophilic bacteria and halophilic archaea (salt loving) similar to dunaleilla salina, found in saline lakes, capable to produce red pigmented carotenoid increased and the water looked pink/red color, they are similar to green algae, which are photosynthetic organisms. Our postulation or our assumption is that or it is of the opinion that the crater lake, being highly eutrophic, fungus growth may be possible on dead debris and decaying organic matter and pink color of growing fungus may have spread over the surface, which may have imparted pink/red color to the water body. Fungus is capable to produce pink red coloration. Since the first observation of the appearance of red pigmented algal bloom were observed on 9th November, 2019, by the authors of this paper as brownish pink coloration amidst the green algae on a large scale, and when the news about pink coloration of the lake first appeared in Lokmat dated 11-6-2020, it was felt necessary to study this phenomena in detail about the cause and the reasons for the pink coloration of the lake. This paper concentrates on fungus, which grows on dead debris of aquatic life. On the basis of earlier studies by different researchers, and the present situation of Lake, to search the answers to the questions, why the lake water looked pink/red colored, what are the causes and the reasons behind this phenonmena? A detailed study was conducted and is reported and discussed in detail of the whole phenomena in this paper. Being of preliminary investigations, a small attempt has been made to search the answers to the above questions.

Keywords: Lonar Crater Lake, Green Algae, Halophilic Bacteria, Fungus Growth, Pink/Red Coloration

Read Full Paper · Download PDF · Back to index

---

108 Grid-Connected PV system using Single and Three Phase Neutral Point Clamped ML

Paper ID V6I4-1387 · Pages 651-655 · Power Electronics

Lalit Mishra, Student, NRI Institute of Information Science and Technology, Bhopal, Madhya Pradesh
Sachindra Kumar Verma, Guide, NRI Institute of Information Science and Technology, Bhopal, Madhya Pradesh

In grid-connected photovoltaic systems, a key consideration in the design and operation of inverters is how to achieve high efficiency with power output for Various modes of operation. The classical inverters are three level having reduced complexity and robust design, but efficiency is low and harmonics are high. Hence increased

© 2020, IJARIIT.COM All Rights Reserved

power losses. These power quality issues can be over-come by designing a multi-level inverter (MLI). MLIs have a higher number of output voltage levels as compared to the two/three levels in traditional inverters. The advantage of MLIs is its staircase-like output waveform, which resembles more closely to sinusoidal waveform than the traditional inverters; hence THD is very low. In the proposed work a neutral point clamped MLI is designed for grid integration of PV system. The performance analysis have been carried out for both single as well as three phase system to obtain low THD and high efficiency.

Keywords: Multi level inverter (MLI), Neutral point clamped inverter (NPCMLI), Flying capacitor inverter (FCMLI), Cascaded H Bridge inverter (CHBMLI), Grid tied solar system (GTSS)

Read Full Paper · Download PDF · Back to index

---

109 A review of implementations in wearables to detect stress

Paper ID V6I4-1393 · Pages 656-660 · Wearable Devices

Manish Kumar Sharma, Samsung Research Institute, Noida, Uttar Pradesh
Sheshank Kumar, Samsung Research Institute, Noida, Uttar Pradesh

In this era where robustness is in high demand, relying on medical professionals for your regular health checkup is a bit tedious. One of the major concerns in today's world is the stress experienced by a user, which can have adverse effects on health, also known as cognitive stress, psychological stress or psychosocial stress. There are a lot of devices present to monitor and record rudimentary information of a user's physiology. Groundbreaking and advanced technologies such as Polyplethysmography (PPG) which provides a wide spectrum of features which can be used to observe physiological changes and compute the stress level of a person. Use of wearable devices in health monitoring has increased exponentially over the past few years. In all these devices PPG sensor has been a key component. In this paper uses of PPG sensors are discussed for obtaining values for parameters such as blood flow, heartbeat, oxygen consumption etc. These features are further used to derive complex features, e.g. heartbeat is used to get heart rate variability which in turn can be used to detect sleep stages. Other sensors in smart watches can provide skin conductance which when collaborated with features like body temperature can provide hydration level of the body. In this paper, multiple algorithms and state-of-the-art researches that use PPG technology in wearables to monitor the above mentioned features are mentioned. It is discussed that stress can be detected using sleep history, hydration, heart rate variability and oxygen consumption.

Keywords: Polyplethysmography, Cognitive Stress, Heart Rate Variability, Sleep, Hydration, Health Monitoring

Read Full Paper · Download PDF · Back to index

---

110 Impact of GST on FMCG companies in India

Paper ID V6I4-1395 · Pages 661-667 · Economics

Aalya Jhelumi, Student, The Shri Ram School Moulsari, Gurugram, Haryana

GST (Goods and Services Tax) is a recent taxation policy introduced in India in 2017. This "one nation, one tax" aims at a simpler tax regime and transparency in all transactions. The Fast-Moving Consumer Goods (FMCG) sector is an important player in the market when it comes to GDP contribution and is the 4th largest sector in

© 2020, IJARIIT.COM All Rights Reserved

the Indian economy. GST has had a significant impact on the FMCG sector. This paper aims to understand the impact of the implementation of an Indirect Tax on the companies which contribute to the FMCG sector. The research of this paper is based on both primary and secondary sources. The outcomes aim to understand the overall effect of a major change on many small and medium sized enterprises.

Keywords: GST, Indian Economy, Positive Impact, Long-Term Effects, Central Government, State Government, Need for GST, FMCG Sector,

Read Full Paper · Download PDF · Back to index

---

111 Accuracy of Machine Learning Models for Plant Disease Detection

Paper ID V6I4-1396 · Pages 668-669 · Information Science

Harshith P. K., Student, Sai Vidya Institute of Technology, Bengaluru, Karnataka
Bitopan Deka, Student, Sai Vidya Institute of Technology, Bengaluru, Karnataka
Nikhil N., Student, Sai Vidya Institute of Technology, Bengaluru, Karnataka
Sumanth T. S., Student, Sai Vidya Institute of Technology, Bengaluru, Karnataka

Agriculture is the backbone of a nation. India has about 96 million hectare of irrigated land. With the amount of land that is cultivated as farmland, detection and prevention of diseases in crops is paramount. When diseases affect plants, particularly through their leaves it effects the production of agricultural produce and decreases profitability of a given crop. Timely identification of these diseases is very challenging in affected plants. A reliable and fast way for the detection of diseases is necessary. Detecting disease may be a key to stop agricultural losses. The aim of this is to develop a software system that is able to efficiently find and classify diseases occurring in plants. The pictures of leaves can be used for detecting the plant diseases. Therefore, use of image process technique to find and classify diseases in agricultural applications is useful.

Keywords: Machine Learning, Models, Plant Diseases

Read Full Paper · Download PDF · Back to index

---

112 Polymer-concrete composites: Impregnation

Paper ID V6I4-1404 · Pages 670-672 · Civil Engineering

Ankur Kapooria, Student, Indian Institute of Technology Delhi, New Delhi, Delhi

We see monuments and beautiful old buildings around us that were built ages before. They not only provide great visual joy but also remind us of our history and connects to our ancestors. With time, several of these have deteriorated causing the risk of demolition at any time. Clearly these buildings require reinforcement for sustainment. Advancement in concrete technology has led to polymer impregnated concrete which can be used for the restoration of such structures.

Keywords: PIC, Polymer Concrete, Monomer, Restoration

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

113 Design and analysis of cocoon extractor

Paper ID V6I4-1410 · Pages 673-675 · Mechanical Engineering

Yeshwant J., Student, SJB Institute of Technology, Bengaluru, Karnataka
Samarth B. Deshpande, Student, SJB Institute of Technology, Bengaluru, Karnataka
Yashvanth Naik M. M., Student, SJB Institute of Technology, Bengaluru, Karnataka
Sadan Gowda V., Student, SJB Institute of Technology, Bengaluru, Karnataka
Manjunath Naik H. R., Project Guide, SJB Institute of Technology, Bengaluru, Karnataka

This paper tells us about Design and Analysis of Cocoon Extractor machine. One of the traditional methods for growing cocoon is by using chandrika. This method is widely used in SOUTH INDIA. The removal of cocoon from chandrika is art and it's a careful practice followed by farmers. During extraction process of cocoon farmers face many problems i.e., labour problem, wearing of bamboo strips due to continuous strips, pricking of bamboo strips into fingers, time management and many such problems. The major problem we are facing while building the machine is that the texture of cocoon is too delicate. To solve these problems, we decided to use air as medium to extract cocoon from chandrika. This can be achieved by vacuum pressure. The basic principle we are using in this machine is vacuum cleaner's principle. After survey we found that we need high suction pressure to suck the cocoon from the chandrika. We will be using centrifugal impeller to create high suction pressure which is driven by universal DC motor.

Keywords: Chandrika, Universal Motor, Vacuum Cleaner, Sericulture

Read Full Paper · Download PDF · Back to index

---

114 Over-dues forecasting using ARIMA Technique

Paper ID V6I4-1392 · Pages 676-679 · Computer Science

A. Kalyan Aravind Kumar, Student, Indian School of Business, Hyderabad, Telangana

The work presented in this paper establishes an enrichment in modeling and forecasting over-dues for Beverages manufacturing company. A time-series modeling technique used to forecast over-dues for ABinBEV (Beer manufacturing company). Our work demonstrates how historical over-dues data utilized to predict future over-dues. The historical over-dues information used to develop several Autoregressive Integrated Moving Average (ARIMA) models by using Root mean squared error (RMSE) and the most suitable ARIMA model found to be ARIMA (2, 1, 0). and validation performed by comparing the accuracy of the models with three types of accuracy criteria, which are Mean square error (MSE), Root Mean Squared Error (RMSE), and Mean absolute error (MAE).

Keywords: Forecasting, Time Series Modeling, ARIMA

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

115 A study on influence of store ambience on consumers purchase behaviour

Paper ID V6I4-1397 · Pages 680-686 · Retail Management

S. Ilakya, Student, PSG College of Technology, Coimbatore, Tamil Nadu
S. Sandhya, Assistant Professor, PSG College of Technology, Coimbatore, Tamil Nadu
Dr. D. Vijayalakshmi, Head of the department, PSG College of Technology, Coimbatore, Tamil Nadu

Store ambiance is referred to as a store's physical characteristics which are used to develop a retail unit image and gaining customers. The project is to study the influence of the store ambiance on consumer purchase behavior. It includes factors such as storefront, marquee, entrance, display, flooring, lighting, colors, fragrance, music, fixtures, and so on. Some factors majorly affect consumer purchase behavior they are lighting, fragrance, music, window display, color co-ordination, product set-up. Therefore by analyzing the already existing ambiance of a retail store, a survey is conducted to know the consumer's preferences on store ambiance that affects their purchase and then concluded based on the results obtained.

Keywords: Store Ambiance Factors, Store Environment, Shopping Experience, Consumer Preferences, Purchase Behavior, Consumer Satisfaction

Read Full Paper · Download PDF · Back to index

---

116 Review on credit card fraud detection and classification by Machine Learning and Data Mining approaches

Paper ID V6I4-1419 · Pages 687-692 · Computer Science And Engineering

Aaushi Sharma, Student, Yamuna Group of Institutions Engineering and Technology, Yamuna Nagar, Haryana
Neha Bathla, Assistant Professor, Yamuna Group of Institutions Engineering and Technology, Yamuna Nagar, Haryana

The strategies for this are divided into 2 broad types: fraud detection as well as consumer activity analysis. The initial category of strategies works with controlled recognition processes at transaction stage. Transactions are classified as illegitimate or regular depending on preceding historical evidence in such systems. This dataset can then be used to construct classified models that can forecast the status of new documents (normal or fraudulent). A standard two-classification function, including rule inference, decision trees, as well as neural networks, has various model development approaches. This method has been shown to accurately identify most previously found fraud techniques, often known as identification of misuse essential to illustrate the main discrepancies in an overview of consumer behaviour and methods to fraud investigation. The system of fraud detection can identify established tricks from fraud, with a small false positive rate. Such schemes derive the sign as well as pattern of fraudulent strategies provided in the revelation data set as well as can therefore quickly decide precisely that frauds; the machine is witnessing at the moment.

Keywords: Credit, Card, Fraud, Machine Learning, Analysis

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

117 Review on software defect prediction with role of Machine Learning and Feature Selection

Paper ID V6I4-1420 · Pages 693-699 · Computer Science And Engineering

Megha Saloni, Student, Yamuna Group of Institutions Engineering and Technology, Yamuna Nagar, Haryana
Sucheta, Assistant Professor, Yamuna Group of Institutions Engineering and Technology, Yamuna Nagar, Haryana

Machine Learning approaches are helpful & have well-tried to be helpful in resolution issues & technical problems that lack data. In most cases, the package domain issues may be characterized as a method of learning that depends on the assorted circumstances and changes of the technical issue being addressed in keeping with the principles of machine learning, a prophetic model is made by exploitation machine learning approaches and classified into defective and non-defective modules. Machine learning techniques facilitate developers to retrieve helpful data when the classification of kinds of technical problems being addressed in an exceedingly specific field. This successively permits them to analyze knowledge from totally different views, which may be used because of the formation base of constructive concepts & varied techniques to handle the technical problems. Machine learning techniques are well-tried to be helpful within the detection of package bugs

Keywords: Software, Defect, Estimation, Features, Machine Learning

Read Full Paper · Download PDF · Back to index

---

118 Effectiveness of mHealth app on self –management of ascites in terms of knowledge and attitude of chronic liver disease patients

Paper ID V6I4-1425 · Pages 700-706 · Nursing

Rachna Sharma, Student, Institute of Liver and Biliary Sciences, New Delhi, Delhi
Dr. Mini George, Research Guide, MN MPhil PhD RN RM, Principal College of Nursing, Institute of Liver and Biliary Sciences, New Delhi, Delhi
Dr. Shasthry SM, Clinical Guide, Associate Professor, Hepatology, Institute of Liver and Biliary Sciences, New Delhi, Delhi

Among all the chronic diseases, Liver Diseases was ranked as the fifth most common cause of death (National Statistics of UK, 2010). The presence of Ascites is a sign of poor prognosis in patients with Chronic Liver Diseases. So, the aim of the present study was to provide an emphasize on Self-Management of Ascites for patients who are living with Chronic Liver Diseases. For this purpose Quantitative approach with Two groups, Pretest-Posttest designs were adopted and a study conducted in Hepatology OPD, ILBS. A total of 60 patients were enrolled based on sampling criteria and consent has been taken. The data was collected by assessing Knowledge and Attitude with Structured Knowledge Questionnaire and Likert Attitude Scale, respectively. These scales were highly reliable and valid. On the same day of assessment of the Experiment group, the mHealth app was introduced and given to the subjects. MS Excel and SPSS 22.0 were used for analysis. The data obtained were analyzed using Descriptive (Mean, Percentage, and chi-square) and Inferential statistics (Paired t-test, Independent t-test, Karl Pearson's correlation, and Krushkal Wallis test). The study results showed that the majority of patients in both the Experiment and Comparison group were upper-middle-class, male, aged between 47-60 years, married, and residing in urban areas. Independent t-test was computed which showed a

© 2020, IJARIIT.COM All Rights Reserved

significant (p= 0.04) difference between the post-test Knowledge score of Experiment and Comparison group. In the Experiment group, a statistically significant positive correlation (r=0.37, p=0.04) was found between Posttest Knowledge and Posttest Attitude score. Based on the findings of the study, it is concluded that mHealth app was effective in Self –Management of Ascites in terms of Knowledge of CLD Patients.

Keywords: CLD, Self-Management, Knowledge, Attitude, mHealth app

Read Full Paper · Download PDF · Back to index

---

119 Soil Based, Aeroponic and Hydroponic Systems in Space with Microgravity and Hypogravity Conditions

Paper ID V6I4-1408 · Pages 707-713 · Science

Saranyaa Kashyap, Student, Delhi Public School, New Delhi, Delhi

Colonizing space in the future is a widely discussed topic in this generation, and sustaining it requires a strong agricultural system in the hypogravity and microgravity conditions. Potential agricultural systems have been considered to be put into action since Tsiolkovsky’s works in the early 20th Century. Some of these systems include soil based hydraulics and bioregenerative systems, hydroponic and aeroponic systems which are suitable means to support plants in lower gravity conditions. Testing and data collection on soils and other controls have been done for each method by NASA, Kyushu University etc; and it has been evaluated along with results broadly in terms of input and output factors. The input includes conditions such as water (or medium such as soil), nutrient control, atmospheric control, temperature, humidity and output refers to the yield received. The Controlled Ecological Life Support Systems (CELSS) Program at NASA’s Kennedy Space Centre did hydroponic testing that focused on controlled environment production of wheat, soybean, potato, lettuce, sweet potato etc. Further experiments of Silverstone in Biosphere 2 tested the growth of crops in a Martian-like environment that could fulfill the calorie requirement of a four person crew. At Kyushu University, aeroponic nutrient delivery is tested in a microgravity plant growth unit containing radish seeds. The effect of gravity has also been brought about in each method where soil based agriculture loses points due to the toxic gas emissions and suffocation of roots. Even in the comparison of efficiency between aeroponic and hydroponic systems, aeroponic systems are more suitable than soil based space agriculture. A relative weighted comparison between hydroponics and aeroponics reveals that aeroponics is a slightly more efficient system due to higher nutrient control, less space consumption, high nutrient intake, low water requirement, less nutrient wastage, fast growth and germination rate, fewer chances of disease transmission and better utilization of water supply.

Keywords: Space, Farming, Aeroponics, Hydroponics, Soil Based Bioregenerative Systems, Microgravity, Agriculture, Mars, Moon, Soil, Nutrient Control

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

120 Autism Action Plan of Canada and Northern Ireland – A comparative review

Paper ID V6I4-1385 · Pages 714-716 · Public Health Policy

Joshitha Sankam, Student, Department of Public Health, Prasanna School of Public Health, Manipal, Karnataka

Autism Spectrum Disorder refers to a range of conditions characterised by some degree of impaired social behaviour, communication and language, and a narrow range of interests and activities that are both unique to the individual and carried out in repetition. This paper reviews the Autism Action Plan of two countries, Canada and Northern Ireland and to find out the similarities and differences in their Action Plan and to throw light on their vision, personnel involved (actors) and the policy process. To do this, the health policy triangle has been chosen as a tool to compare and analyse these policies.

Keywords: Autism Spectrum Disorder, Action Plan, Health Policy

Read Full Paper · Download PDF · Back to index

---

121 Evaluation of crop depredation by Asian Elephant (Elephas maximus) in Badrama Wildlife Sanctuary, Odisha, India

Paper ID V6I4-1432 · Pages 717-723 · Biology

Barun Kumar Behera, Research Scholar, North Orissa University, Baripada, Odisha
Rabindra Kumar Mishra, Lecturer, North Orissa University, Baripada, Odisha
Hemanta Kumar Sahu, Professor, North Orissa University, Baripada, Odisha
Prithwiraj Sahu, Environmentalist, Balda Iron Ore Mines, Balada, Odisha
Sanath Kumar N., Divisional Forest Officer, Bamra Wildlife Division, Bamra, Sambalpur

We investigated the human-elephant conflict in eight different ranges in Badrama Wildlife Sanctuary under Bamra (Wildlife) Division, Odisha, India. Elephants were responsible for human casualty, large-scale crop, and property damage; which caused serious human-elephant conflicts in the region were assessed. During 2011-12 – 2015-16, a total of 03 nos. of human killing and 380 human injury cases caused by elephants were recorded. Damage to agricultural crops by elephant was of varying extents i.e. 212.89 acres. As a result, people have developed an antagonistic attitude towards the elephant which adversely affects conservation efforts.

Keywords: Human-Elephant, Conflict, Asian Elephant, Crop Damage, Depredation, BWLS

Read Full Paper · Download PDF · Back to index

---

122 Accelerating sales for Citrix Education Services using Logistic Regression

Paper ID V6I4-1394 · Pages 724-733 · Computer Science

A. Kalyan Aravind Kumar, Student, Great Lakes Institute of Management, Chennai, Tamil Nadu

This paper aims to establish an efficient model for predicting company sales by leveraging logistic regression's strengths. A real dataset of Citrix used to figure out a significant variable affecting sales acceleration and to find an appropriate metric to measure unstructured information. To build an efficient model, we used two statistical methods; logistic regression and linear discriminant analysis. The classification accuracy of the models compared using Fisher Analysis, ROC curves, and confusion matrix. In regression analysis, it is evident

© 2020, IJARIIT.COM All Rights Reserved

that response and predictors some times may suffer from correlation issues. By definition, Multicollinearity is that two or more predictors are correlated; if this happens, the coefficients' standard error will increase. Increased standard errors mean that the coefficients for some or all independent variables may be significantly different from 0. In other words, Multicollinearity makes some variables statistically insignificant by overinflating the standard errors when they should be significant. In this paper, we concentrate on logistic regression analysis, linear discriminant analysis, Multicollinearity, fisher analysis, and consequences and effects on the reliability of the regression model

Keywords: Logistic Regression, Linear Discriminant Analysis, Multicollinearity, Fisher Analysis

Read Full Paper · Download PDF · Back to index

---

123 Experimental study on characteristics of bacterial concrete

Paper ID V6I4-1402 · Pages 734-737 · Civil Engineering

Dr. Aravinthan K., Doctrate Degree Holder, RajaRajeswari College of Engineering, Bengaluru, Karnataka
Arshad Rashid, Student, RajaRajeswari College of Engineering, Bengaluru, Karnataka
Syed Afnan Asad, Student, RajaRajeswari College of Engineering, Bengaluru, Karnataka
Hyder Ali, Student, RajaRajeswari College of Engineering, Bengaluru, Karnataka
Abdul Bhasha, Student, RajaRajeswari College of Engineering, Bengaluru, Karnataka

Concrete is a building material and is widely used in all types of construction works. As we know the concrete is good in compression and week in tension due to microcrack occurs when the load applied on it. Due to these micro-cracks, the concrete loses its strength and water enters through these cracks which causes corrosion to steel. This initiates corrosion makes the whole structure vulnerable and leads to the failure of the structure. Thus, to overcome this problem a technique of adding bacteria into the concrete in order to enhance its properties like compressive strength. The Bacteria may be of liquid or powder form. Together it is called bacterial concrete, in this concrete, the bacteria (Bacillus subtillis) and calcite react with water forms a by-product called calcium carbonate (limestone), which fills the crack and makes the structure sound as it was earlier. This process is called microbiologically induced calcite precipitation. The tests on materials were conducted for the best results and the tests are specific gravity, consistency, Impact Value Test, Shape Test, Sieve Analysis, PH Value (Bacteria), Bacteria Count, etc. The different percentages of bacteria we used in order to know which percentage gives maximum strength. The percentages were made with reference to the amount of cement added into the concrete, the percentages by weight of cement we tried are 1.68%, 2.52%,3.17%,10%,15%, and 20%. And we found 15% of bacterial concrete gave the highest compressive strength in 3 and 7 days test, the result of all tests are given in compressive strength table 2.

Keywords: Bacterial Concrete Materials, Material Tests, Mix Design, Compressive Strength Test

Read Full Paper · Download PDF · Back to index

---

124 Modeling and data analysis for the evolution of COVID-19 in Ethiopia

Paper ID V6I4-1391 · Pages 738-744 · Statistics

Wudneh Ketema, Professor, Debre Berhan University, Debre Berhan, Ethiopia

© 2020, IJARIIT.COM All Rights Reserved

COVID-19 is currently affecting over 215 countries worldwide and poses serious threats to public health not only the health system but also economics, education, transportation, politics. The objective of this paper was modeling the evolution COVID-19 data using deterministic and stochastic models and investigates how the model parameters depend on the population sizes in Ethiopia and we extend the deterministic SEIR (Susceptible, Exposed, Infectious, Recovered) model to simulate disease outbreak scenarios and to quantify the potential impact of a host-based early warning capability to mitigate pathogen transmission during an outbreak. Here, we show that real-time predictions of COVID-19 infections are extremely complex to errors in data collection and crucially depend on the last available data. We test these ideas in both using deterministic and stochastic models (susceptible–exposed–infected–recovered) models that are currently used to forecast the evolution of the COVID-19 epidemic. Our goal is to show how uncertainties arising from both poor data quality and inadequate estimations of model parameters (incubation, infection, and recovery rates) promulgate to long-term extrapolations of infection counts. Finally is to be better to understand the evolution of COVID-19 in Ethiopia, we apply a susceptible–exposed–infected–recovered (SEIR) model to the analysis of data from the Ethiopian Department of Health. Based on systematic and numerical results, as well on the data, the basic reproduction number is estimated to R_0= 1.12, we have analyzed SEIR model and concluded with saturated incidence rate and we observed that the reproduction number plays an important role to control the disease, when R_0 1, the endemic equilibrium is locally asymptotically stable, so based on the analysis of the result was indicates the diseases was reached outbreak time so that the responsible body will create more awareness in the society for the seriousness of the diseases

Keywords: SEIR, COVID-19, Compartmental Model, Statistical Model, Reproduction Number

Read Full Paper · Download PDF · Back to index

125

The motion of weak spherical shock waves in highly viscous medium

Paper ID V6I4-1407 · Pages 745-747 · Shock Wave

Dr. Arvind Kumar, Assistant Professor, Daryao Singh Rathore Memorial Mahavidyalaya, Baduan, Uttar Pradesh
Dr. Kamlesh Kumar, Assistant Professor, Agra College, Agra, Uttar Pradesh
Dr. Satyendra Prakash, Lecturer Physics, Saraswati Vidya Mandir, Etah, Uttar Pradesh
Dr. Harminder Singh, Lecturer Physics, Government College, Bareilly, Uttar Pradesh

The interaction of shock waves with viscosity is one of the central problems in the supersonic regime of compressible fluid flow. The propagation of weak spherical shock waves in highly viscous uniform medium has been investigated by CCW method. It is found that the shock velocity and shock strength both decreases as shock advances for low viscous region of a medium to the high viscous region. The pressure and particle velocity behind strong shock decreases with adiabatic index and Small decreasement in the pressure and particle velocity is found with the increase in viscosity coefficient. It is shown that applications of the CCW method and the neglect of overtaking disturbances are equivalent.

Keywords: Shock Wave, CCW, Method aAnd Viscosity

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

126 Pets and stress

Paper ID V6I4-1423 · Pages 748-751 · Psychology

Khushboo Hemnani, Student, Mithibai College of Arts, Mumbai, Maharashtra
Ayushi Dhanesha, Student, Mithibai College of Arts, Mumbai, Maharashtra

There is increasing recognition of the therapeutic functions pets play in relation to mental health. Many studies have been carried out proving that the effects of pets are beneficial to overall human health. This descriptive analysis explored the relationship between pet ownership, attachment, and psychological health among college students in Mumbai. Animals that one keeps as a pet offers mental as physical health benefits. This existing evidence mentioned in this study is surveyed and responses show a direct correlation between pets and lower stress.

Keywords: Pets, Stress, University Students, Happiness

Read Full Paper · Download PDF · Back to index

---

127 Study and compare the photodegradation efficiency of clay based compound with semiconductor oxide nanomaterials

Paper ID V6I4-1436 · Pages 752-754 · Chemistry

G. Ida, Assistant Professor, Research and Development Centre, Bharathiar University, Dhanalakshmi College of Engineering, Manimangalam, Tamil Nadu
D. Easwaramoorthy, Professor, Research and Development Centre, Bharathiar University, B. S. Abdur Rahman Crescent Institute of Science and Technology, Chennai, Tamil Nadu

Improvement of semiconductor oxide nanomaterials play a vital role in the photocatalytic activity of the photodegradation process. In this article, we compare the characterization property of photocatalytic activity of Bentonite clay supported ZnWO4 with heterostructured compound of BiVO4 – ZnO, and DyVO4 − ZnO. The active nanomaterials exhibit high reusability without any loss of photocatalytic property up to four successive stages. Our results give a new impact on the performance of photocatalysts on environmental remediation.

Keywords: Bentonite clay, BiVO4 − ZnO, Photocatalyst, Rhodamine B, Methylene Blue

Read Full Paper · Download PDF · Back to index

---

128 Performance evaluation of helicoidal flow jet flocculator

Paper ID V6I4-1429 · Pages 755-760 · Civil Engineering

Pradnya Telang, Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded, Maharashtra
Dr. L. G. Patil, Professor and Head, Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded, Maharashtra

Potable and safe drinking water is an essential component of livelihood. The treatment plant performance suffers due to failure of various mechanical components; hence many researchers have proposed rapid mixing of coagulant and flocculation process assisted with jet flow as a promising unit. Dhabadgaonkar, (2008) had designed helicoidal flow jet floccu-clarifier but, the formation of helicoidal flow and actual performance in the basin is still not clear. To get better understanding of this unit, only flocculator was designed and tested by

© 2020, IJARIIT.COM All Rights Reserved

using CFD approach. The study was undertaken by designing single basin flocculator using dual tangential jet with different inlet positions. The performances were compared with non-tangential single jet flocculator. Performance indicators like Morrill index, percentage of dead space and plug/mixed flow were calculated and analyzed to understand its impact. Among the three types of inlet positions studied, the basin with non-tangential single jet flocculator performed better compared to tangential jet flocculator. This study corroborates the findings of Pani and Patil (2007).

Keywords: Jet Flocculator, Retention Time, Flocculation, Tracer Study

Read Full Paper · Download PDF · Back to index

---

129 Modelling parking for public health and education institutions in Srinagar City

Paper ID V6I4-1441 · Pages 761-765 · Engineering

Sheikh Abdul Hanan, Student, Himgiri Zee University, Dehradun, Uttarakhand
Vikram Kaintura, Assistant Professor, Himgiri Zee University, Dehradun, Uttarakhand

Parking is mostly seen in a strategic point of view in terms of demand and supply and not much effort has been made in the developing world to forge the relationship between parking demand with the factors affecting the demand for educational institutions. The focus of this work is on modeling off-street parking at educational institutes based on user's behavior. This work is an effort to determine the distinguishing factors affecting parking. In this study two types of multiple linear regression models using SPSS software were developed. Disaggregate model and aggregate model. The demand for this model is expressed in terms of parking usage per person per day in hours at educational institutions in Srinagar city. The disaggregate model analysis revealed that the most influencing independent variables for this model are travel distance and income per month for employees and visitors with the coefficient of variation (R) = 0.96 and coefficient of determination (R2) = 0.92 and family income and travel distance for students with the coefficient of variation (R)= 0.98 and coefficient of determination (R2)=0.96. Aggregate model study determines the most suitable independent variable for estimating the parking demand (vehicle hours) or parking supply (space hours) at educational institutions. The formula emulated can be used to establish the number of parking bays to be provided to accommodate the parking needs at educational institutions. The aggregate model analysis predicts that most fitting independent variable for determining the parking demand formula is the number of employees working at the institution with the coefficient of variation(R)=0.997 and coefficient of determination (R2) = 0.993. The most suitable model is that for which the coefficient of variation(R) and coefficient of determination (R2) is nearly equal to one. Goodness of fit test or significance test and validation test has been conducted on the developed equations and can be used with a high level of confidence.

Keywords: Parking, City, Institutes, Disaggregate, Aggregate Model

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

130 E – Moped

Paper ID V6I4-1446 · Pages 766-773 · Mechanical Engineering

Abdulhasnain Murtaza Akodiyawala, Student, Vishwakarma University, Pune, Maharashtra
Suyant Yugant Dharwarkar, Student, Vishwakarma University, Pune, Maharashtra
Amit Harishchandra Jadhav, Student, Vishwakarma University, Pune, Maharashtra
Ayush Kunkulol, Student, Vishwakarma University, Pune, Maharashtra
Dhruv Gopal Suratwala, Student, Vishwakarma University, Pune, Maharashtra
Aman Gulab Bargir, Student, Vishwakarma University, Pune, Maharashtra

The E – Moped is an experimentation for converting an engine powered vehicle to an electrically powered vehicle. In this case, a scooter is considered. It focuses on converting a readily available engine powered moped in the market and then striping the engine drive and introducing an electric drive for propulsion. The new electric drive comprises of hub motor, battery pack and ECM. The body design and framework will remain same as the manufacturer has provided. The design and implementation of electric drive is the objective. The purpose of E – Moped is to introduce an electric and affordable version of scooter which has a no adverse effect on nature and does not uses any carbon based fuel. The objective is to achieve same specification as that are observed in engine driven vehicle . The paper has a brief explanation of E – Moped with CAD design, integration procedure and testing and review.

Keywords: E – Moped, Electrically powered vehicle, Battery pack, Scooter, Hub motor

Read Full Paper · Download PDF · Back to index

---

131 Suspicious and Terror Message Detection Using NLP and Web Minning

Paper ID V6I4-1447 · Pages 774-775 · Computer Science Engineering

Ashwin Nair, Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
Shashank T. V., Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka
Rakesh S., Student, Sai Vidya Institute of Technology, Rajanukunte, Karnataka

Terrorism has increased its roots quite deep in certain parts of the world as identified internet is a major source of spreading terrorism through speeches and videos. Terrorist organizations use the internet to brainwash individuals .so here to detect this we use our system which works on the principle of web mining, natural language processing(NLP) and supervised learning algorithm to analyze textual data of different web pages and detect patterns, keywords and relevant information in unstructured texts in web pages and messages and after detection taking appropriate action against the web page.

Keywords: EU (European Union), NLP (Natural Language Processing)

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

132 Biosynthesis of silver nanoparticle from pasteurized milk and their effects on raw milk to control spoilage

Paper ID V6I4-1443 · Pages 776-779 · Nanotechnology

Shailesh Saurabh, Aasma Foods and Beverages Private Limited, Hajipur, Bihar

Controlling bacterial growth in fluid milk is of economic interest, and supplemental methods to stop or reduce bacterial growth before and during the cooling chain may be valuable. Silver is effective in controlling growth of single-celled organisms, but has no effect on tissue cells. Smaller diameter (6-8 nm) silver nanoparticles were produced, with purity (no chemical reaction used in the process), It's purely biosynthesis. Using pasteurized toned milk with added concentration of silver nitrate and kept for incubation overnight. The color of milk has been changed from white to dark red indicate that the nanoparticles has been synthesized. The first trial investigated effects of time, and temperature, on total aerobic bacteria count in control milk and milk treated with silver nanoparticles. The AgNP particles were effective at all treatment temperatures and durations except for 10h, which indicated that the treated milk could be used after 10h for other dairy products such as yogurt, which require microbial activity. Small-diameter, silver nanoparticle can stop or reduce bacterial growth in fluid milk. Silver nanoparticles inhibited microbial growth and may be useful in complementing the cooling chain and the thermal processes. These results warrant more research on the sensory properties and long-term safety of the use of silver nanoparticles in dairy products. Recent rodent studies have shown that nanoparticles are distributed to breast milk, Here, used mice to investigate the safety of nanoparticle use during lactation. When Ag and Au nanoparticles were intravenously administered to lactating mice, the nanoparticles were distributed to breast milk without producing apparent damage to the mammary gland, and the amount of Ag nanoparticles distributed to breast milk increased with decreasing particle size. Orally administered Ag nanoparticles were also distributed to breast milk and subsequently to the brains of breast-fed pups. Ten-nanometer Ag nanoparticles were retained longer in the pups' brains than in their livers and lungs. Nevertheless, no significant behavioral changes were observed in offspring breast-fed by dams that had received orally administered 10 nm Ag nanoparticles. These data provide basic information for evaluating the safety of nanoparticle use during lactation.

Keywords: Breast Milk, Distribution, Gold Nanoparticle, Infant, Lactation, Silver Nanoparticle, Toxicity

Read Full Paper · Download PDF · Back to index

133 Hawking Radiation and its Implications as the Information Paradox

Paper ID V6I4-1445 · Pages 780-787 · Astrophysics

Shivam, Student, Greenwood High International School, Bangalore, Karnataka

© 2020, IJARIIT.COM All Rights Reserved

In this project, a precursory knowledge of black holes, their formation, and a black holes event horizon will be given. Hawking Radiation will be introduced, along with its discovery and proof of its existence. Quantum Field Theory is required for understanding the proof and thus a small description of Quantum Field Theory is given. The Bogoliubov Transformations required for explaining Hawking's proof will be outlined and its implicationswill be pointed out. The way to physically perceive the phenomenon of Hawking Radiation is also discussed.The Black Hole Information Paradox is also introduced and explained using the no-hair theorem, its proposed resolutions are outlined and finally, its implications are briefly described.

Keywords: Black Holes, Hawking Radiation, Information Paradox

Read Full Paper · Download PDF · Back to index

---

134 Assessment of functional requirements for the development of a smart village

Paper ID V6I4-1449 · Pages 788-791 · Civil Engineering

A. Muthu Veeran, Student, Sri Ramakrishna Institute of Technology, Coimbatore, Tamil Nadu

The future of India lies in its village Mahatma Gandhiji. A smart village knows about its citizen, available resources, and schemes. It knows what it needs and when it needs it. The concept of the smart village makes the villages self-sufficient in respect of their needs. This study was carried out with the main focus to develop the Maruthur village into a smart village. The household survey was carried out through the village to understand the needs of the peoples of that village. Like any other villages, Maruthur village also lacks some basic infrastructure like hospitals, education, transport, cleaning, rainwater harvesting. The future land use pattern of Maruthur village with recommendations of basic infrastructural facilities to the Maruthur village to develop into a smart village.

Keywords: Smart Village, Development

Read Full Paper · Download PDF · Back to index

---

135 Impact of the human-animal bond on stress

Paper ID V6I4-1450 · Pages 792-795 · Psychology

Saumya Swamy, Student, Mithibai College of Arts, Science and Commerce, Mumbai, Maharashtra
Rhea Bedi, Student, Mithibai College of Arts, Science and Commerce, Mumbai, Maharashtra
Yusra Nadeem Dawnak, Student, Mithibai College of Arts, Science and Commerce, Mumbai, Maharashtra

The animal-human bond is quite easily one of the purest bonds that exist out there. A research study was conducted by Swamy, S., Bedi, R., and Dawnak, Y. in order to establish and explore how the animal-human bond impacts an individual's general stress levels and welfare. A review of literature for some recent papers on the same topic have been included so as to understand the relationship between pets and stress better. The formulated hypothesis was – pets bring about a significant difference in general stress levels. To investigate whether having pets has an effect on an individual's stress responses, conducted a field study. A survey was conducted in order to get data that was later scored to verify our hypothesis. We identified two independent variables (IV) – sex (at two levels – male and female) and pets (at two levels – people with and without pets).

© 2020, IJARIIT.COM All Rights Reserved

The questionnaire was administered to 60 participants (n = 60), between the ages of 15 to 35. Equal number of males and females were randomly selected for the study (m = 30 & f = 30). Further, the number of males was divided into 15 males who are pet parents and 15 males who are not petted parents through random selection. Similarly, the number of females was divided and 15 females who are pet parents and 15 females who are not petted parents were randomly selected. In order to gather data for this study, an unstandardized questionnaire was developed. It had 11 items in total. The rating scale used to measure the responses was a 5-point-Likert-type scale (one that allows the individual to express how much they agree or disagree with a particular statement). The psychometric properties of this rating scale can be found as a result of further research. A parametric inferential statistical analysis was employed, i.e., a 2x2 ANOVA. The two independent variables identified were sex and people with pets and people with no pets. It was observed that the f value for the interaction effect between gender and pet ownership is 1.106, $p>0.05$. This suggests that there are no significant differences between males and females who own pets and those who don't. Therefore, the results were not in line with the aforementioned research since there were so significant differences found between pets and stress. However, discussions about why that could have happened has been mentioned in the paper under the Results/Discussion section.

Keywords: Pets, Stress, Stress Levels, Human-Animal Bond, Research, Questionnaire, Likert-Scale, Psychometric, Psychology, Dogs, Cats, Animals, Relationship, Calm, Anxiety, Values, ANOVA, Unstandardized, Descriptive Statistics, Parametric, Inferential Statistics, Pet Owners, Non-Pet Owners, Sex, Population, Sample, Randomization

Read Full Paper · Download PDF · Back to index

---

136 The effect of activities of daily living on depression among elderly people

Paper ID V6I4-1451 · Pages 796-798 · Nursing

Pradhiba S. P. M, Assistant Professor, KMCH College of Nursing, Coimbatore, Tamil Nadu

Age is an important determinant of mental health. Depression creates the greatest burden among the elderly when compared to other mental disorders. Depression decreases an individual's quality of life and increases dependence on others. A descriptive study to assess the effect of activities of daily living on depression among elderly people in selected community settings, Coimbatore. Methods: The study was conducted in the Vagarayanpalayam area of the community in Coimbatore, The sample size consists of 50 elderly aged between 60-80 years. Non-probability convenience sampling technique was used. The level of depression, the functional ability was assessed by using a modified geriatric depression scale, modified Barthel ADL index. Results: It was found that there is a significant association between depression and activities of daily living among elderly people at p

Keywords: Depression, Activities of Daily Living, Elderly People

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

137 Mood recognition emotion ontology with texts

Paper ID V6I4-1453 · Pages 799-802 · Computer Science And Engineering

Jacquelin Anushya P., Student, CSI College of Engineering, Ketti, Tamil Nadu
P. Nisha Priya, Professor, CSI College of Engineering, Ketti, Tamil Nadu

Emotion can be expressed in many ways where we can see recognition from speech, image or video frames, facial expression, gestures. Deep Learning has increasing attention to its significant processing power. The rapid development and universal availability of Social Media analyzing these data using traditional tools and technologies are tough to examine the fundamental behavior of occurrence in networking sites. Emotion detection in the text files is essentially content in social media. In this paper, we are seeing emotion recognition based on textual data and the techniques are the basic operation of arithmetic such as addition and statements of for loop, else if condition with deep learning and its features.

Keywords: Text, Social Media, Emotion Ontology

Read Full Paper · Download PDF · Back to index

---

138 A Review on Effect of Different Nanofluids on Thermal Performance in Trapezoidal Corrugated Channel

Paper ID V6I4-1459 · Pages 803-806 · Mechanical Engineering

Aaditya Sharma, Student, Patel College of Science and Technology, Bhopal, Madhya Pradesh
Brijendra Kumar Yadav, Professor, Patel College of Science and Technology, Bhopal, Madhya Pradesh

Using corrugated channels is one of the passive heat transfer enhancement techniques in the fabrication of heat exchange devices. Designing more effective energy systems is a challenge for researchers and engineers to minimize the consumption of energy in order to improve energy system efficiency. In recent years, many industries have a strong need to achieve higher thermal performance in order to gain high efficiency, reduce the cost and weight, and minimize the size of heat exchangers. The use of corrugated channels can decrease the thermal resistance where it acts to reduce the thermal boundary layer thickness of the heat exchanger surface. Therefore, corrugated surface geometry is one of the numerous appropriate procedures to upgrade the heat transfer in these devices due to the appearance of the secondary flow regions in the trough of the corrugated channel which leads to improve the blending of the fluid and consequently maximize the heat transfer exchange. This paper presents the review of studies done by different researchers on the similar topic.

Keywords: Corrugated channels, Nanofluids, Thermal fields, Forced convective flows

Read Full Paper · Download PDF · Back to index

---

139 Medicinal weed plants in paddy (Oryza sativa L.) fields

Paper ID V6I4-1371 · Pages 807-808 · Agricultural Botany

Rajasekaran S., Assistant Professor, A.V.C. College (Autonomous), Mayiladuthurai, Tamil Nadu
G. Thiyagarajan, Assistant Professor, Government Arts College for Men Kumbakonam, Tamil Nadu

The present paper prescribes twenty-one weed species used as medicinal plants belonging to fifteen families,

© 2020, IJARIIT.COM All Rights Reserved

such species along with other scientific names, family and common name and plant parts used, and medicinal properties/used are brought in to light. The data are based on the personal survey, observation, and discussion with Kadamangudi village people of Palaiyur Panchayat, Mayiladuthurai, and District, of Tamil Nadu.

Keywords: Medicinal plants, Oryza sativa L.

Read Full Paper · Download PDF · Back to index

---

140 Ludwig’s Angina – Case Study

Paper ID V6I4-1456 · Pages 809-812 · Nursing

Santhipriya A., Ph.D (Nursing) Scholar, VMRF(DU) Vinayaka Missions Annapoorana College of Nursing, Salem, Tamil Nadu
Dr. V. Selvanayaki, Principal, VMRF(DU) Vinayaka Missions Annapoorana College of Nursing, Salem, Tamil Nadu

Ludwig's angina is extremely dangerous as it causes edema, distortion, and airway obstruction and can appear as a result of airway problems. The first phase of the management of patients with this disease is observation and intravenous antibiotics. Protecting the airway with surgical drainage will be the management of advanced diseases. In addition to this infection; pain, trismus, airway swelling, and tongue displacement lead to weak airways. Therefore, airway management is a major concern in these situations [1]. Although “normal” airway management for patients with deep neck disease is a tracheostomy with local anesthesia, in extreme cases the infection is difficult or sometimes not possible due to the required tracheostomy position or due to external neck distortion. [2]

Keywords: Ludwig's Angina, Airway Obstruction, Tracheostomy

Read Full Paper · Download PDF · Back to index

---

141 Effect of Different Nanofluids on Thermal Performance in Trapezoidal Corrugated Channel

Paper ID V6I4-1460 · Pages 813-819 · Mechanical Engineering

Aaditya Sharma, Student, Patel College of Science and Technology, Bhopal, Madhya Pradesh
Brijendra Kumar Yadav, Professor, Patel College of Science and Technology, Bhopal, Madhya Pradesh

© 2020, IJARIIT.COM All Rights Reserved

Using corrugated channels is one of the passive heat transfer enhancement techniques in the fabrication ofheat exchange devices. Designing more effective energy systems is a challenge for researchers and engineersto minimize the consumption of energy in order to improve energy system efficiency. In the present research,an experimental study of forced convective flows of different nanofluids through a trapezoidal corrugatedchannel at a constant wall temperature condition was performed. Numerical simulation of a corrugated channelwas applied by using the nanofluid to probe the characteristics of the flow and thermal fields. For the purposeof solving the governing equations with corresponding boundary conditions, the finite volume method isemployed by implementing the CFD commercial software ANSYS-FLUENT-V16. The channel was tested under aconstant heat flux of 10 KW and the volume fraction of nanofluid is taken as 0.08. it was found that thepressure drop is found highest in the nanofluid tio2-water and is decreasing in the sequence is TiO2>SiO2>Fe2O3> Al2O3> ZnO> CuO.

Keywords: Corrugated channels, Nanofluids, Thermal fields, Forced convective flows

Read Full Paper · Download PDF · Back to index

---

142 E-health care system

Paper ID V6I4-1457 · Pages 820-823 · Computer Science Engineering.

Gontla Bhargava Sai Sathvik, Student, Vellore Institute of Technology, Vellore, Tamil Nadu
Guna Sekhar Tirumalasetti, Student, Vellore Institute of Technology, Vellore, Tamil Nadu

Contrasted with different nations, India has moderately low wellbeing index. This is because of the discovery of many compositedisorders examples every day. Of the numerous practices, one approach to take care of this issue is to utilize the Smart Health idea, which empowers observing of wellbeing stateof patient by medicinal services organizations, to avoid infections. There have been several researches regarding the observance of wellbeing of patient. A large portion of them concentrate just on the perusing and perception of sensor information, yet the management of information including information storage, preparing and coordination among framework, patients and human services establishments are not grown until now. This research studysuggest a plan of wellbeing observing framework named Heacam (Health care monitoring), an application to observe patient health state and to counteract maladies as right on time as could be expected under the circumstances. Heacam comprises of three subsystems: web application, database storage and API plan, and versatile framework on android stage. In any case, this study will just concentrate on the structure and advancement of the web application. Theseanalyses comprises of three fundamental viewpoints: framework structure, implementation and testing. The framework will be created utilizing Rational Unified Process (RUP) system. At last, this examination will lead to a web framework to be utilized by users.

Keywords: Smart Health, E-Health, M-Health, Health Monitoring System, Mobile Application, Android

Read Full Paper · Download PDF · Back to index

© 2020, IJARIIT.COM All Rights Reserved

143 Impact of COVID-19 in India and its effects on different sectors of Indian Economy and it's relation to the second-largest Post Independence Mass Migration of people

Paper ID V6I4-1384 · Pages 824-832 · General Knowledge

Debarthy Dutta, Student, Amity Institute of Biotechnology, Kolkata, West Bengal
Dr. A. N. Sahi, Assistant Director, Amity Institute of Biotechnology, Kolkata, West Bengal

COVID-19 pandemic is subjected to be the most pivotal worldwide health crisis of the century, and the biggest threat since 2nd World war, for the human population. It emerged in Wuhan, Hubei (China) in 2019 December. The causal virus of COVID-19 is SARS-CoV-2 (Severe Acute Respiratory Syndrome CoronaVirus 2). According to a report by WHO (World Health Organization), COVID-19 has currently affected almost 6.2 Million people worldwide and more than 370,000 people have died. (Stats updated till 31st May 2020, 19:15 PM) No clinically proven vaccine has been designed for it yet. It has spread among the world very quickly disturbing the world's economy and life-style drastically and accordingly ruining it. Currently, all the nations are concerned with people's safety and have provided for their treatment and established lockdown to flatten the curve of cases. This paper studies the major impacts COVID-19 had on Indian Economical Sectors and how it lead to India's second largest mass migration of people since post-Independence.

Keywords: Active Pharmaceutical Ingredients, Micro, Small and Medium Enterprises, Severe Acute Respiratory Syndrome Corona Virus 2, World Health Organization

Read Full Paper · Download PDF · Back to index

---

144 Maternal and neonatal health care status in Somalia: A descriptive, facility-based survey

Paper ID V6I4-1448 · Pages 833-836 · Maternal Health

Omar O. Hasan, Professor, Somali National University, Mogadishu, Somalia

Background information: It is estimated that 287,000 women worldwide die annually from pregnancy and childbirth-related conditions, and 6.9 million under-five children die each year, of which about 3 million are newborns. Most of these deaths occur in sub-Saharan Africa. According to WHO, a woman in Somalia has one in 10 chance of dying for pregnancy or childbirth-related causes. This study assessed the availability, accessibility, and quality of emergency obstetric and neonatal care services in Somalia. Methods: From February to April 2019, a descriptive, cross-sectional health facility survey was conducted in 9 purposively selected referral Hospitals and 28 randomly selected health centers in Somalia. Multistage, cluster sampling method was used to make sure that we have subjects from all administrative areas of Somalia. The health facility tools developed by the Averting Maternal Death and Disability program were adapted for local use. A structured questionnaire and observation methods were used for data collection. Descriptive, bivariate, and multivariate logistic regression analyses were conducted. Results: Only 10.8 % of the health facilities qualified as functioning comprehensive EmONC (Emergency Obstetric and Neonatal Care) facilities and 29.7 % were Basic EmONC Facilities. 35.1% were partially performing basic EmONC and the remaining 24.3% were not providing EmONC. Neonatal resuscitation was performed in 62 % of health facilities that were surveyed. The study found that there was limited availability of human resources in all visited health facilities. Conclusion:

© 2020, IJARIIT.COM All Rights Reserved

There is a need to strengthen human resource capacity at both Health centers and Hospitals through training of health care providers as well as the provision of essential drugs, equipment, and supplies to improve EmONC services, and to reduce workload at the comprehensive EmONC facilities and increase geographic access

Keywords: Maternal and Neonatal Health Care, Pregnancy, Maternal Mortality, EmONC, Somalia

Read Full Paper · Download PDF · Back to index

---

145 Gender and family roles: A survey in urban India

Paper ID V6I4-1462 · Pages 837-845 · Gender Studies

Tanya Chugh, Student, Symbiosis Centre for Management Studies, Pune, Maharashtra

The society has certain preconceived notions formed through the generations preceding us about how a person, who is assigned a particular gender is supposed to act, dress, behave and present themselves. These are known as the gender role. ‘Gender roles in society means how we’re expected to act, speak, dress, groom, and conduct ourselves based upon our assigned sex.’ These roles exist in all cultures, sub-cultures and societies of the world, these are usually shaped with the experiences and changes that occur over time. For example, Blue was considered to be associated with girls as it was viewed as delicate and on the contrary pink was considered as strong and thus, associated with boys. Another example would be that high heels were first invented for male aristocrats to make them appear taller and thus more formidable or intimidating. These roles might feel like a natural part of our lives, but these adversely affect our lives in ways that are inconspicuous. These may be in the form of personality traits, domestic behaviours, occupations and even physical appearances. With the presence of these roles come expectations and that is followed by stereotypes that get attached to a certain gender. And any aversion to said stereotypes is called a rebellion and the person to be an outcast. This paper attempts to understand the stereotypes, gender roles as well as the family roles which are associated with particular genders, that currently exist, with a survey conducted in urban India.

Keywords: Gender, Gender roles

Read Full Paper · Download PDF · Back to index

---

146 The effect of caffeine and nicotine on different plant growth

Paper ID V6I4-1461 · Pages 846-858 · Biotechnology

Asma Mafiz Ansari, Student, Ismail Yusuf Arts, Science, and Commerce College, Mumbai, Maharashtra

This science fair project was performed to find out the effect on plant growth of adding caffeine to the soil. This experiment was done by using Mung bean (Vigna radiata L.) plants, and watering them daily with normal water, water mixed with caffeine bean and with a coffee mixture. Height of plant was measured as a daily parameter to check effect on growth. On fifteen day of germination the plant was removed to evaluate dry weight and spectrophotometric measurement for chlorophyll content. The result of the experiment found that caffeine with low amount gives best results which can be reconfirmed by height, Chlorophyll a, b, carotenoid estimation. The result indicate that mung bean grows faster in soil with caffeine. Another experiment was carried out to show that the effect of nicotine on plant growth fenugreek seeds (Trigonella foenum-graecum) by using cigarette and chewing tobacco. Nicotine is an addictive drug that is found mostly in cigarettes, cigar, chewing snuff. Cigarette

© 2020, IJARIIT.COM All Rights Reserved

and chewing tobacco contain thousands of chemical compounds but nicotine is a major constituent of cigarette and tobacco, kills insect pests and used in many organic insecticides to protect plants. Our study investigated the impact of pure tobacco (chewing tobacco) and cigarette on seed germination of fenugreek. We had three plants of same type and plant them in the same soil and give them same amount of water. One had just water with no nicotine making this plant the control. Second plant had pure tobacco mixed with soil, third plant had cigarette contents mixes with soil. The result showed that if we use cigarette, the plant will grow taller" as compare to the normal plant. But there was significant decrease in germination rate at pure tobacco or at high concentration of tobacco.

Keywords: Mung bean (Vigna radiata), fenugreek seeds (Trigonella foenum- graecum), coffee, coffee bean crushed (caffeine bean), cigarette, chewing tobacco.

Read Full Paper · Download PDF · Back to index

---

147 Evaluating gaps in interdepartmental communication and assessing their relation to employee motivation: An action research study

Paper ID V6I4-1454 · Pages 859-862 · Internal Communication

Navneet Kaur Babbra, Deputy Head of Communications, The British School, New Delhi, Delhi

The study examined members of the administrative staff of a leading international school in New Delhi to identify the underlying causes of gaps in interdepartmental communication and find probable solutions to overcome them. A Professional Learning Community (PLC) of 3 members was formed which undertook action research and presented the findings at the administrative staff In-Service Education and Training (INSET) in January 2020. The paper explores the factors that influence flow of communication within the workplace and how effective internal stakeholder communication is a great contributor to employee satisfaction. Outcomes suggest that the efficacy of interdepartmental communication is directly proportional to people's understanding and appreciation of the work that other departments do, and their relationships with people and teams.

Keywords: Interdepartmental Communication, Internal Stakeholders, Employee Satisfaction, Professional Learning Community, Action Research

Read Full Paper · Download PDF · Back to index

---

148 Symmetric and asymmetric mixed convection heat transfer through vertical channel with porous medium with different oxide nanofluids

Paper ID V6I4-1464 · Pages 863-869 · Mechanical Engineering

Dr. G. Srinivasa Rao, Assistant Professor, Kakatiya Institute of Technology and Science, Warangal, Telangana

The problem of mixed convection fluid flow and heat transfer flow through a porous medium, over an infinite vertical plate, is studied numerically. The effect of nanofluid properties and concentration and Prandtl numbers are considered in the present study. The governing non-linear partial differential equations of this phenomenon are transformed into a non-linear algebraic system utilizing finite difference methods. Numerical results for the velocity, temperature and as well as the skin friction, heat transfer are obtained and reported in tabular form and graphically for different values of physical parameters of the problem The solutions for velocity and

© 2020, IJARIIT.COM All Rights Reserved

temperature are obtained. The effects of Grashof number, Prandtl number of a nanofluid, and porous parameter on velocity, and temperature are presented graphically.

Keywords: Mixed Convection, Porous Medium, Prandtl Number, Nanofluid, Symmetric Parameter, Asymmetric Parameter, Brinkman Number

Read Full Paper · Download PDF · Back to index

149

Evaluation on predictive analysis of rain disaster using Adaptive Neural Turing Networks

Paper ID V6I4-1470 · Pages 870-873 · Computer Science

Satwik P. M., Research Scholar, Garden City University, Bengaluru, Karnataka
Dr. Meenatchi Sundram, Assistant Professor, Garden City University, Bengaluru, Karnataka

The research is mainly focused on the evaluation parameters of the Machine learning algorithm Adaptive Neural Turing net-works which have been developed for the prediction of Rainfall based Disasters. Based on the Previous Research it's observed that the Neural Turing networks have been performing the prediction of the rainfall-based disasters for the consecutive years of 10,15 and 20 with 93.8% accuracy. Here the Research is analyzed with various parameters and Comparing it with the other researches which are implemented with other machine learning algorithms

Keywords: Rainfall Disaster, Machine Learning, Neural Turing Networks, Evaluation Parameters

Read Full Paper · Download PDF · Back to index

© 2020, 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.

© 2020, IJARIIT.COM All Rights Reserved