Virtual Conference

ICIRET-2021

29th - 30th September, 2021

IFERP®
connecting engineers... developing research

International Conference on Innovative Research in Engineering and Technology

Organized By

Institute For Engineering Research and Publication (IFERP)

ISBN : 978-93-92105-07-4

International Conference on

Innovative Research in Engineering and Technology

(ICIRET-2021)

29th – 30th September' 2021

Organized By

Institute For Engineering Research and Publication

www.iferp.in

Publisher: IFERP Explore

Acknowledgement

IFERP is hosting the ***International Conference on Innovative Research in Engineering and Technology*** this year in month of September. The main objective of ICIRET is to grant the amazing opportunity to learn about ground breaking developments in modern industry, talk through difficult workplace scenarios with peers who experience the same pain points, and experience enormous growth and development as a professional. There will be no shortage of continuous networking opportunities and informational sessions. The sessions serve as an excellent opportunity to soak up information from widely respected experts. Connecting with fellow professionals and sharing the success stories of your firm is an excellent way to build relations and become known as a thought leader.

I express my hearty gratitude to all my Colleagues, staffs, Professors, reviewers and members of organizing committee for their hearty and dedicated support to make this conference successful. I am also thankful to all our delegates for their pain staking effort to make this conference successful.

Mr. Rudra Bhanu Satpathy
Chief Executive Officer
Institute for Engineering Research and Publication (IFERP)

Keynote Speakers

Prof. (Dr.) Sunil Kumar Khatri

Director Of Campus,
Amity University Tashkent,
Uzbekistan at Amity Education Group
Toshkent, Uzbekistan

Message

Riding on the success of its past conference over several unique themes and critical acclaim, I am immensely ecstatic to know that Institute for Engineering Research and Publications (IFERP) is organizing an International Conference on Innovative Research in Engineering and Technology (ICIRET) during 29-30 September, 2021 virtually.

I believe that ICIRET'2021 will provide a unique platform to researchers, academicians, industry experts, young professionals and scholars to widen their knowledge domain, explore and exchange new ideas, provide different insights and deliberate on various significant topics of today's competitive world developments, research challenges and unsolved open problems in the field of Engineering and Technology. The conference is covering important and significant areas including Robotics, Mechatronic Systems and Applications, Human-Robot Interfaces, Aeronautical Engineering, Power Plant Engineering, Biomechanical Engineering, Aerospace Engineering, Medical Robots and Systems, Marine Engineering, Energy-Aware Computing, Managing Big Data, Nanotechnology, Information Retrieval Techniques, Robotic Surgery, Human Genome Mapping, Reconfigurable Computing, Data Visualization Techniques, Bio-Inspired Computing, Cloud Computing, Bio Informatics, Animation and Artificial Intelligence and Blockchain Technology.

Conference is also hoping to bringing together the renowned experts from the core field and other allied areas to forge linkages and bonds for mutual research benefits.

I congratulate Organising team for their remarkable efforts for organising such Conference during this pandemic time in online mode. It is only through such dedication and perseverance that one can achieve excellence.

I take this excellent opportunity to express my heartiest greetings and best wishes to the organizers and also to delegates, speakers and researchers from all over the world and wish them a great learning experience.

Wishing ICIRET'2021 a grand success!

Mr. Oscar Correia

Acting Deputy Vice-Chancellor,
Cavendish University Zambia,
East Africa

Message

Dear ladies and gentlemen,

Today we stand at an unprecedented time in the history of technology. There was never a better time for one to be involved in technology. And yet we are just pioneers staring out the wild west, surveying oceans of mystery and potentially endless possibilities. It is these steps that we shall take individually and together as a community that will set the course of history and create a new map for future researchers. But our map must be not just a direction but also a foundation for the future where truth and human brotherhood will survive and prosper. As much as technology may come to dominate the world in so many ways we must still retain our humanity in all its clear distinction. It is with these words that I would like to welcome each and every to contribute in an open and respectful way to build our communal knowledge.

Dr. Charyna Ayu R

Vice Dean For Academic, Students Affairs, And Alumni
Lecturer Faculty Of Psychology,
Universitas Pancasila,
Indonesia .

Message

It is a privilege and honor for me to welcome you to the "International Conference on Innovative Research in Engineering and Technology (ICIRET-21)" which will be held on 29th –30th September 2021 as a Virtual Conference. This conference will provide an opportunity to exchange ideas among all members of the global experimental and research society through their expertise in contemporary developments.

The main objective of this conference is to deliberate some various issues which needed to be identified in adapting and application of new innovations made in respective fields. Therefore, it is a great opportunity for all delegates from various fields of study to share and collaborate extensive knowledge for gaining the best applications.

I believe all delegates ' presentations are hallmarks of a valuable concern for human welfare

On that note, I am delighted to invite you all to take part in this conference. I look forward to your participation and wish you a grand success.

ICIRET -2021

International Conference on Innovative Research in Engineering and Technology

29th – 30th September 2021

Organizing Committee

Advisory Committee

Ashwin Perti
Assistant Professor & Head, Information Technology
ABES Engineering College
Ghaziabad India

Dr. Thirunavukkarasu Pathmathas
Senior Lecturer And Head Of Department, Department Of Physics
University of Jaffna
Jaffna Sri Lanka

Nai Shyan, LAI
Associate Professor, School Of Engineering
Asia Pacific University of Technology & Innovation
kuala Lumpur Malaysia

R Logeswaran N Rajasvaran
Professor & Head, Asia Pacific Centre For Analytics
Asia Pacific University of Technology and Innovation
Kuala Lumpur Malaysia

Ts. Dr. Hafiza Abas
Senior Lecturer, Advanced Informatics Department
Universiti Teknologi Malaysia
Kuala Lumpur Malaysia

Ts. Ir. Dr. Solehuddin Bin Shuib
Associate Professor, Faculty Of Mechanical Engineering
Universiti Teknologi MARA
Selangor Malaysia

Organizing Committee

Assoc. Prof. Dr. Sathish Kumar Selvaperumal
Program Leader & Project Manager, Electrical And Electronics Engineering
Asia Pacific University of Technology and Innovation
Kuala Lumpur, Malaysia

Dr Mohd Rafie Bin Johan
Director & Deputy Vice Chancellor, Nanotechnology & Catalysis Research Centre
University of Malaya
Kuala Lumpur, Malaysia

Dr. Jitendra Gaur
Associate Professor & Head, Applied Sciences And Humanities
B.R.C.M. College of Engineering & Technology
Haryana, India

Prof. Dr. Yumnam Jayanta
Director, Computer Science And Engineering
National Institute of Electronics and Information Technology
Maharashtra, India

CONTENTS

SR.NO	TITLES AND AUTHORS	PAGE NO
1.	An Analysis on Container-Based Management System and Virtual Machine in Developing and Deploying the Applications ➢ ***Aparna Vodapalli*** ➢ ***Naveen Kumar Vodapalli*** ➢ ***Hafeezuddin Shaik***	1
2.	Optimization and analysis of MANET using DSP ➢ ***Atmeshkumar Patel*** ➢ ***Dr. Vipulsangram Kadam***	2
3.	Integration of Land Use and Transportation Planning: Smarter Solution to Reduce Traffic Congestion ➢ ***Urvi B Rathod*** ➢ ***Dr. Manoj J Gundalia***	3
4.	A Review on Speed Control and Torque Ripple Minimization Approaches for SRM ➢ ***Rekha P S*** ➢ ***Dr.Vijayakumar T***	4
5.	Design and Development of Multi-parametric Optical Measurement System for Biosensing Application ➢ ***Deeparati Basu*** ➢ ***Jayoti Das*** ➢ ***Syed Minhaz Hossain***	5
6.	Experimental Investigation on Open Graded Friction Course Using Recycled Concrete Aggregates ➢ ***Sharanabasava Patil*** ➢ ***Vidyashree Hallur*** ➢ ***Ravichandra A H*** ➢ ***Shivakumar K***	6
7.	Challenges and Experiences of Single Lady Traveler: A Study (With special reference to Hotels in Delhi City) ➢ ***Anjali Xess*** ➢ ***Gurjeet Kaur***	7
8.	Selection of a suitable material for 3D printing of Lower Limb Exoskeleton Frame ➢ ***B V N R Siva Kumar*** ➢ ***Dr Raghavendra Sharma*** ➢ ***Dr D. Sreenivasa Rao***	8
9.	Optimal Power Flow Solutions Incorporating Distributed Generator Using Hybrid Particle Swarm Optimization and Bat Algorithm ➢ ***Houari BOUDJELLA*** ➢ ***Larouci Benyekhlef*** ➢ ***Ayad Ahmed Nour El Islam***	9

CONTENTS

SR.NO	TITLES AND AUTHORS	PAGE NO
10.	Factors Affecting the Public Higher Education Institution (PHEI) Acceptance of Online Meetings Applications During Covid-19 Pandemic: An Empirical Study ➢ ***Ebrahim Hamid Hasan Sumiea*** ➢ ***Dr. Suhaidah Binti Hussain***	10
11.	DevOps and Cost Optimization ➢ ***Mahesh Sankaran*** ➢ ***Dr E.N.Ganesan***	11
12.	A Novel Method for Traffic Light Management using Fuzzy Logic ➢ ***Neeraj Kumar Jain*** ➢ ***Prof. (Dr.) Rajesh Kumar Saini*** ➢ ***Preeti Mittal***	12
13.	Survey Paper on Underwater Image Enhancement Using Neural Style Transfer ➢ ***Apeksha Jain*** ➢ ***Prof. DA Mehta***	13
14.	Automated Billing and Fruit Warehouse Monitoring Using Convolutional Neural Networks ➢ ***Supriya Patil*** ➢ ***Shivaprasad. N***	14
15.	Development of Rescue boat during Flood disaster ➢ ***Shubham Warne*** ➢ ***Vijay Bhosale*** ➢ ***Pranay Mohite***	15
16.	Analysis of Peak to Average Power Ratio and its Minimization for OFDM Low-Power Systems ➢ ***Dr. Lokesh C*** ➢ ***Manjunath Lakkannavar*** ➢ ***Channakka Lakkannavar*** ➢ ***B V Manjula*** ➢ ***Dr. Shobha Shankar*** ➢ ***Dr. Rekha K R***	16
17.	Three Tier Rainwater Harvesting Planning for a City Where Ground Water is Depleting in an Alarming Rate ➢ ***Ashwani Kumar*** ➢ ***Dr. S.M. Veerabhadrappa***	17
18.	Analytical Method for Calculating the Mutual Inductance between two Coaxial Rectangular PCB Coils ➢ ***Salah-Eddine BENDIMERAD*** ➢ ***Selma BAGHLI*** ➢ ***Abdelghani AYAD***	18

CONTENTS

SR.NO	TITLES AND AUTHORS	PAGE NO
19.	Finite Element Analysis of ATV Roll Cage ➢ ***Naresh Hans*** ➢ ***Harish Kumar***	19
20.	Hydrodynamic Analysis of Freestanding Risers under Waves and Current Effects ➢ ***Praise Earnest*** ➢ ***Ahmad Mahamad Al- Yacouby*** ➢ ***Ehsan NikBakht Jarghouyeh***	20
21.	Cosmetic Herbal Hair Oil: Preparation and Evaluation ➢ ***Aishwarya Rastogi*** ➢ ***Semimul Akhtar*** ➢ ***Aparna Gupta***	21
22.	The Use of Plant Derived Ingredients in the Treatment of Hair Loss Due to Alopecia Androgenetica and Alopecia Areata ➢ ***Aishwarya Rastogi*** ➢ ***Semimul Akhtar*** ➢ ***Aparna Gupta***	22
23.	Evidence from Thailand on an IoT-based temperature and humidity control system in a microelectronic factory ➢ ***Monsiri Balsook*** ➢ ***Poonpisamai Kotikula***	23
24.	Flexural Strengthening reinforced concrete beams using GFRP strips under cyclic loading ➢ ***Sandeep G. Sawant*** ➢ ***H. S. Jadhav***	24
25.	The Development Models Integration of Quality Control, Maintenance, and Buffer Stock in an Imperfect Production System ➢ ***A. Kuncaraningrum*** ➢ ***N. Kurniati*** ➢ ***P. D. Karningsih***	25
26.	Fundamental Financial Literations of Medium Small Micro Enterprises in the Era of Covid-19; Case in Indonesia ➢ ***Nurdiana Mulyatini*** ➢ ***Elin Herlina*** ➢ ***Eva Faridah*** ➢ ***M. Apip***	26

CONTENTS

SR.NO	TITLES AND AUTHORS	PAGE NO
27.	Electrospun Nanofiber based Drug Carrier for Anti-Inflammatory Activity: A Review ➢ ***Gaurav Agrawal*** ➢ ***Surabhi Aswath*** ➢ ***Anindita Laha***	27
28.	Human Body Parts Detection Using Viola- Jones Algorithm ➢ ***Ahmad Salihu Ben Musa*** ➢ ***Zaharadeen Sufyan*** ➢ ***Anas Muhammad Sani***	28
29.	Bitcoin Adoption in Banking and Finance: The Critical Factors of its Implementation ➢ ***Naby Nouhou Conde*** ➢ ***Adamu Abubakar Ibrahım*** ➢ ***Norbik Idris*** ➢ ***Hazwani Mohd Mohadis***	29
30.	Augmented Anxiety Therapy Using an Ensemble of Virtual Reality and Motion Capture Technology ➢ ***Gopinath Devaraj*** ➢ ***Kathiravan Srinivasan***	30
31.	Enhanced Light Trapping in ITO/c-Si based Plasmonic Solar Cells with Silica Nanospheres using FDTD Simulation ➢ ***Manju Rani*** ➢ ***Dr. Udaibir Singh***	31
32.	DenseNet Convolutional Neural Network Application for Prediction of Covid-19 Using CT scan Images ➢ ***Arifa Tadvi*** ➢ ***Dr. Sudhir Sawarkar*** ➢ ***Dr. Shubhangi Waikole***	32
33.	Handwriting -Based Personality Prediction using Machine Learning ➢ ***Yashomati Dhumal*** ➢ ***Arundhati Shinde***	33
34.	Embedded based Resonant Converters for PV Battery Hybrid systems ➢ ***W. Abitha Memala*** ➢ ***C. Bhuvaneswari*** ➢ ***M. Kavitha*** ➢ ***E. Priyadharshini*** ➢ ***M. Vijayasri*** ➢ ***M. Mahalakshmi***	34

CONTENTS

SR.NO	TITLES AND AUTHORS	PAGE NO
35.	Ontology Oriented Machine Learning and Deep Learning in the Field Of Agriculture: An Overview Survey ➢ ***Kushala V M*** ➢ ***Dr.M.C.Supriya*** ➢ ***Dr.H.R.Divakar***	35
36.	Design and Development of Instructional Equipment for Instrumentation and Control Course of the B.S. Electrical Engineering Program of the University of Batangas ➢ ***Marizen B. Contreras*** ➢ ***Jermhel M. Solis*** ➢ ***Henry I. Cabatay***	36
37	The Effect of Glass Fiber on Fly Ash Based Geopolymer Concrete Using Recycled Aggregates ➢ ***Murtaza Joya*** ➢ ***Shalika Mehta***	37
38.	Reverse Engineering of Hemorrhoidal Circular Stapler using the Principles of Frugal Innovation to make it Reusable ➢ ***Siddhant Shrivastava*** ➢ ***Abhishek Verma*** ➢ ***Dr. Janakarajan Ramkumar*** ➢ ***Pankaj Mittal***	38
39.	Environmental Analysis of the Sugar Industry Press Mud of North Karnataka, India ➢ ***Gamal Juma Aboulgasem*** ➢ ***Roopa Belurkar*** ➢ ***Mallikarjun S Yadawe***	39
40.	A Study on the Effectiveness of Animation-based Lectures in Enhancing Students Learning Ability and Cognitive Load ➢ ***Praveen C.K*** ➢ ***Kathiravan Srinivasan***	40
41.	Prediction of Cardio-vascular disease risk using various vital Parameters through applied Machine Learning Model ➢ ***Dr. A. Suresh Rao*** ➢ ***Dr. B. Vishnu Vardhan***	41
42.	Investigation on the effect of yoga and meditation on physical and mental stress of IT professionals using classification techniques through Machine Learning Algorithms ➢ ***S Ravikumar*** ➢ ***E Kannan***	42

CONTENTS

SR.NO	TITLES AND AUTHORS	PAGE NO
43.	Reduce Energy Consumption in various areas: A Review ➢ ***Kalpana D. Vidhate*** ➢ ***Dr. Pragya Nema***	43
44.	Transient Stability Enhancement using Coordinated Control by PSS and TCSC ➢ ***Niharika Agrawal*** ➢ ***Dr.Mamatha Mahesh Gowda***	44
45.	Semantic Word Disambiguation using Sense Embedding ➢ ***Prashant Y. Itankar*** ➢ ***Dr. Nikhat Raza***	45
46.	Development of software system for data mining of students' surveys for assessment of courses teaching quality in Engineering college of Baghdad ➢ ***Amenah Hasan Flaih Al - Obaidi***	46
47.	A Framework For Academic Information Services ➢ ***Richki Hardi*** ➢ ***Ahmad Naim Che Pee*** ➢ ***Nanna Suryana*** ➢ ***Muhammad Haziq Lim Bin Abdullah***	47
48.	Nottingham University Community Evaluation of Using Public Transportation in the City of Nottingham ➢ ***Dr. Siham I. Salih*** ➢ ***Aseel J . Rahma*** ➢ ***Wafaa kh. Luaibi***	48
49.	Upgrading the urban space according to the rehabilitation of green spaces ➢ ***Tahri Djelloule***	49
50.	Hybrid Algorithm Approach for Performance Improvement in Brain Tumour Segmentation and Classification ➢ ***Kiran Venneti*** ➢ ***M. Kishore kumar*** ➢ ***P.Ramesh*** ➢ ***Murapaka Dhanalakshmi Bhavani***	50
51.	Medical Image processing using wavelet on cloud and big data processing based on Hadoop ➢ ***Syed Tanzeem Ahmed*** ➢ ***Dr. Nikhat Raza***	51
52.	The Review of Automotive Industry in Malaysia: Good Governance Perspective ➢ ***Malani Manimaharan*** ➢ ***Suhaidah binti Hussain*** ➢ ***Muhammad Ashraf Bin Fauzi***	52

ICIRET-21

International Conference on

Innovative Research in Engineering and Technology

29th – 30th September' 2021

ABSTRACTS

ICIRET-21

Organized by

Institute For Engineering Research and Publication (IFERP)

An Analysis on Container-Based Management System and Virtual Machine in Developing and Deploying the Applications

Aparna Vodapalli, Senior Application Architect,DXC Technologies, Denmark.
Naveen Kumar Vodapalli, Business Intelligence Specialist, AMBU, Denmark.
Hafeezuddin Shaik, Assistant Professor, TKR College of Engineering and Technology

Abstract
Technology is evolving at a very fast pace. One of the most common problems that any developer faces while developing an application is, the application may work in a localized environment. When the same application is deployed in production or migrated to a remote node the same application may not work due to the difference in the computing environment between the production and development. Also, developing the application is easy when it is divided into small chunks of code, these small chucks collectively called as microservices run on various virtual machines on the same host or a different host. In virtual machines as the resources are reserved, there is a high probability of resources being in an idle state. In this paper, we shall compare the performance of Container-based management systems and virtual machine systems in developing and deploying the applications.

Index Terms
Docker, Virtual Machines, Container-Based Management Systems, Microservices.

Optimization and analysis of MANET using DSP

Atmeshkumar Patel, Dr. Babasaheb Ambedkar Marathawada University. Aurangabad (MS) India
Dr. Vipulsangram Kadam, Dr. Babasaheb Ambedkar Marathawada University. Aurangabad (MS) India

Abstract
In this modern era of Artificial Intelligence (AI) and Internet of Things (IoT) which are acknowledged as the most significant areas of upcoming technology and is gaining attention from a wide range of different fields like Military application, Automation of Industries, Smart irrigation and Agriculture, e-learning platform of Education, The pandemic Tele health services, etc. IoT is a combination of different network like Wireless sensor network and Mobile Ad hoc Network. In these networks the limited Battery power is very serious issue. Maintaining connectivity for the longer time is also a big challenge considering the self-organizing nature of the network topology and the dynamic change in the behavior and position of nodes result in failures of communication link and node availability. This research paper present the kinetic energy harvesting Dynamic source of Power to supply the energy to the node battery, so that the failure of communication network will be avoided and hence it maximizes the life of Mobile Ad hoc network for the reliable communication in critical situation like Military operation and Emergency rescue operation. The overall focus of this research is to handle the challenges in MANET for prolong life of MANET. The paper deals with an analysis and experimental tests on a push to generate generator known as a Dynamic Source of Power has a built-in linear moving- coil generator with stationary magnet A Lithium-ion battery is charged to supply the power to the nodes of MANET. Analytical equations for the induced EMF, current, voltage, electromagnetic force and power have been derived. A prototype has been made and performs experimental tests on it. The results of laboratory tests have been compared with analytical calculations. The output electric power in comparison with other energy harvesting devices is high with low cost and more reliability.

Index Terms
Artificial intelligence, Internet of Things, Electromagnetic induction, push to rotate, residual energy. MANET, NS2.

Integration of Land Use and Transportation Planning: Smarter Solution to Reduce Traffic Congestion

Urvi B Rathod, Ph.D. Scholar and Assistant Professor, Uka Tarsadia University
Dr. Manoj J Gundalia, Associate Professor, Department of Civil Engineering, CGPIT, UTU

Abstract
The Urbanization is increasing all around the world especially in developing country like India. It is an unavoidable outcome of economic development, refers to the shift from a rural area to urban area which cause serious pressure of traffic congestion, pollution and other related problems. Dispersion of urban land use over large areas leads to traffic congestion, poor air quality and finally urban decay problems. More than half of the world's population now lives in urban area and is predicted up to 60% of global population by 2030. Many developing countries are suffering severe traffic congestion due to its rapid urbanization and booming of motorization which put high pressure on urban transport systems. Urbanization has a major impact on land use characteristics. Travel behaviors in any city mainly relay on its land use distribution and transport planning. This study indicates that the integration of land use with transportation planning reduces the use of motorization transportation and promotes the use of public transport. The paper mainly focuses on the traffic problem and how the transportation planning depends upon the land use distribution and transportation network in developing cities.

Index Terms
Transportation planning, Land use planning

A Review on Speed Control and Torque Ripple Minimization Approaches for SRM

Rekha P S, SJB Institute of Technology, Bengaluru and Affiliated to Visvesvaraya Technological University, Belagavi, Karnataka, India

Dr.Vijayakumar T, SJB Institute of Technology, Bengaluru and Affiliated to Visvesvaraya Technological University, Belagavi, Karnataka, India

Abstract

Switched reluctance motor torque ripple is more complex by the influence of many factors. It is predominantly included; doubly salient construction of the motor body; spreading with extreme non linearity; nonlinear impacts of mechanical parameters lead to incessant working of SRM. The main deficit of SRM is torque ripple which then upsurge acoustic noise due to its non-linearity comportment. To attenuate the torque ripple and the noise associated with it many tumbling techniques has been offered with results. From the outcomes it has been clinched that there are numerous controllers that gives the least torque ripple when it is used in Switched reluctance motor drive.

Design and Development of Multi-parametric Optical Measurement System for Biosensing Application

Deeparati Basu, Jadavpur University, Kolkata, India
Jayoti Das, Jadavpur University, Kolkata, India
Syed Minhaz Hossain, Jadavpur University, Kolkata, India

Abstract

Multi-parametric sensors are preferred over single parameter sensor due to their increased efficiency, accuracy and precision measurements. In optical biosensing field, though there is large number of highly sensitive instruments available, most of them are extremely costly and provides single parameter detection only. So in this work, we have designed a simple optical breadboard based assembly with laser source and camera connected to PC, which provides a study of four different optical parameters (transmission, reflection, scattering and absorption) simultaneously. We have performed noise level analysis of different type of laser sources and cameras for achieving minimum limit of detection (LOD) for the biosensor system. A MATLAB based GUI platform has been designed for interfacing purpose and image processing is done on the picture data collected by the camera to achieve highly sensitive results. Chitosan-Silica nanocomposite (CSNC) membranes were used as semitransparent biosensing platform for glucose detection and optimization of our instrument performance.

Experimental Investigation on Open Graded Friction Course Using Recycled Concrete Aggregates

Sharanabasava Patil, Department of Civil Engineering, Ballari Institute of Technology and Management, Ballari, India
Vidyashree Hallur, Department of Civil Engineering, RYMEC, Ballari, India
Ravichandra A H, Department of Civil Engineering, Ballari Institute of Technology and Management, Ballari, India
Shivakumar K, Department of Civil Engineering, Ballari Institute of Technology and Management, Ballari, India

Abstract
OGFC also known as porous asphalt is being used as surface course in flexible pavement since 1950. The advantages of using OGFC as surface layer are increase in permeability, good drainage properties and reduction in noise, slip resistance and enhanced surface friction. OGFC mix contains more quantity of coarse aggregates, small proportion of fine aggregates and it requires more percentage of binder content to produce the mix compared to dense graded mixes. Gap graded aggregates results in more air voids in OGFC mix. Polymer modified binder usage in OGFC mix showed improved performance. In this paper, research is carried out to decrease the cost of the mix using recycled concrete aggregates. Natural aggregates were replaced by recycled concrete aggregates (RCA) with increase in 10, 20, 30, 40, 50% using PMB-40 as binder and Arbocel fiber as stabilizing agent to reduce the drain down of the mixes. To assess the feasibility of RCA in OGFC Marshall Stability test to determine % air voids, Drain down test, Cantabro abrasion test and permeability test were carried out. Optimum Binder Content of both conventional and C&D replaced OGFC mix was determined by considering % air voids, Cantabro abrasion loss and drain down. From the laboratory investigation, it was concluded that 40% of natural aggregates can be replaced with recycled concrete aggregates in OGFC mix.

Keywords
OGFC mix, Arbocel fiber, Recycled concrete aggregates, % air voids, Cantabro abrasion loss, Drain down.

Challenges and Experiences of Single Lady Traveler: A Study (With special reference to Hotels in Delhi City)

Anjali Xess, Chitkara College of Hotel Management, Chitkara University, Punjab
Gurjeet Kaur, Chitkara College of Hotel Management, Chitkara University, Punjab

Abstract

The concept of female's solo traveller has become a relevant tourists segment. Despite recent changes, as visitors, these women are searching for journeys that will take longer than a trip from one location to another. They chose to search for adventure, freedom, a sense of personal fulfilment, individuality, and escape. They are not flying alone because they do not have a choice or because they are lonely. They are motivated by particular motives for consciousness. The survey of our study shows that women from almost all age groups have expressed their interest in travelling whether for leisure or business purposes. This study also helps to allow hotel owners and managers to make the required changes in order to focus more proactively on the future in order to meet the needs of female customers and to evaluate the quality and technological interface properly, as some SLTs have indicated their concerns about safety and security during the trip. Hotels should give priority to ensuring that their SLT guests feel safe and comfortable. Some of the respondents pointed out that hotel rooms were not up to the mark because they lacked the facilities required by the SLTs. Hotel designers should also reflect on the planning of in-room hotel facilities. The survey extracted the measures to be taken by those making their first solo trip. It was suggested that future travellers select those hotels to stay in Delhi that offer priority to women's safety and protection. Before planning any trip, the first and foremost thing to do is research the hotel in depth, the travel history of the place and the experiences of other travellers to get an idea of the location. Most of the ladies advised that they should send a location link to their guardian while travelling as it would be convenient for them to keep track of them. The findings showed that the only way to feel better when travelling is by careful preparation prior to travel, such as background checks, destination information and knowledge of the local language for interaction with other travellers or locals.

Selection of a suitable material for 3D printing of Lower Limb Exoskeleton Frame

B V N R Siva Kumar, Associate Professor, Dept. of ECE, Lakireddy Bali Reddy College of Engineering, Mylavaram, Andhra Pradesh
Dr Raghavendra Sharma, Professor & Head, Dept. of ECE, ASET, AMITY University Madhya Pradesh, Gwalior, Madhya Pradesh
Dr D. Sreenivasa Rao, Professor, Dept. of ECE, JNTU HYDERABAD, Hyderabad, Telangana

Abstract
In this paper, the process of selecting a material for the frame of Lower limb rehabilitation exoskeleton is discussed. Exoskeleton technology is fast developing and still it requires more to meet individual needs. Exoskeletons are made for Military, Industrial and Medical applications. In case of Military, they have to work in a harsh environment where as a rugged environment for industrial and sensitive environment for Medical applications. Exoskeletons could be "Human performance augmentation exoskeletons" for expanding physical abilities of Healthy people, "Assistive devices for individuals" with disorders like Neural Stroke, spinal cord injury, muscle weakness, and Post operative Patients and "Rehabilitation exoskeletons" for restoration. In specific, these are to be designed and fabricated by considering the patient condition for medical applications,. The design considerations should be of light weight, user friendly, maintenance free and should not be hazardous. These should be easily configurable for various applications. Rapid Prototyping, Mass customization and personalised design were proven in fields like Automobile, Consumer and Spare parts using 3D printing.
Lower limb Exoskeletons are mainly used to assist the people with walking difficulty. Rehabilitation exoskeletons are used to restore the people from GAIT disorders. Selection of a material for the fabrication of the exoskeleton frame is crucial. As exoskeletons are to be made as custom built with modification in specific parts during development, production and maintenance, 3D printing being used by various manufacturers and Research organizations. Apart from the conventional metals, the 3D printing materials Nylon, ABS, PLA, PET and Carbon Fibre were considered. Printing process is discussed with required settings as Infill percentage, shell thickness, Orientation of the part and selection of material.
Based on the parameter specifications of printing materials, application and availability, the above five materials are considered. The frame is designed in CATIAV5 and Finite Element Analysis was performed in Ansys WorkBench18. Also, Theoretical parameters are compared. Based on the results, suitable materials were suggested for different applications, duly considering the cost and durability.

Key words
Lower limb, Exoskeleton, 3D Printing, Finite Element analysis, Personalised designs, Custom made Products

Optimal Power Flow Solutions Incorporating Distributed Generator Using Hybrid Particle Swarm Optimization and Bat Algorithm

Houari BOUDJELLA, Kasdi Merbah University, Ouargla, Algeria
Larouci Benyekhlef, Kasdi Merbah University, Ouargla, Algeria
Ayad Ahmed Nour El Islam, Kasdi Merbah University, Ouargla, Algeria

Abstract
Optimal power flow (OPF) is a non-linear complex optimization problem where the steady state parameters of an electrical network need to be determined to find a stable operating point with an economic, technical and environmental context. The complexity of the problem increases with the presence of constraints in the problem. In this paper, a hybridization between Particle Swarm Optimization (PSO) and Bat algorithm (BA) as population-based algorithms abbreviated as HBAPSO have been proposed and applied to find optimal solutions with different objectives of OPF. The proposed approaches is tested on a standard IEEE 30 bus system incorporating distributed generator units for several OPF objectives such as fuel cost, emissions, voltage deviation, voltage stability and power losses. Single objective and weighted sum multi-objective cases of OPF are studied under the scope of this paper. Simulation results are analyzed and compared with most recent studies on the problem.

Index Terms
OPF, Power System Optimization, PSO, BA

Factors Affecting the Public Higher Education Institution (PHEI) Acceptance of Online Meetings Applications During Covid-19 Pandemic: An Empirical Study

Ebrahim Hamid Hasan Sumiea, Faculty of Industrial Management, Universiti Malaysia Pahang (UMP)
Dr. Suhaidah Binti Hussain, Faculty of Industrial Management, Universiti Malaysia Pahang (UMP)

Abstract

For effective staff's performance using online meetings applications during covid-19, it is mandatory that staff have the behavioral intention to measure, test, and manage their own data. Understanding of Public Higher Education Institution (PHEI) staff' intention and behavior toward online meetings platforms is needed to develop and implement effective and efficient strategies. The objectives of this research to identify the factors that affect staff to use online meetings applications, to develop a model that examining the factors that affect PHEI staff to online meetings applications and to validate the proposed model. This study used a cross-sectional quantitative correlational study with using UTAUT2 model by validating the model and mediating variables to enhance the model's explanatory power and to make it more applicable to PHEI staff' behavioral intention.

The data was collected from employees at the PHEI in east coast Malaysia, with 108 people responding to the survey. The completed questionnaire survey was sent to the selected respondents through social media, and the WhatsApp application. The data was then analyzed using SmartPLS software (PLS-SEM) version 3.0 to corroborate the hypotheses that had been developed previously.

Findings show that there are significant impacts between 5 factors, namely Behavioural Intention (BI), Effort Expectancy (EE), Facilitating Conditions (FC), Habit (HT) and use Behaviour, which are influence the acceptance and usage of online meeting platforms using by PHEI staff. The usage and adoption of online meeting platforms by PHEI staff was found to be more influenced by habit in this research. This suggests that the need to use such applications will become more addictive in the future.

DevOps and Cost Optimization

Mahesh Sankaran, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Chennai
Dr E.N.Ganesan, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Chennai

Abstract

With Agile development getting attraction there has been huge increase in the need to do software application development in highly organized, process driven and efficient way. With DevOps there can be numerous ways in which the software development can optimized both in terms of quality and in terms of cost. Optimization of cost using our existing resources can be challenging. We can look at ways to optimize the cost using the DevOps methodology existing tools in the market

A Novel Method for Traffic Light Management using Fuzzy Logic

Neeraj Kumar Jain, Department of Mathematical Sciences and Computer Applications, Bundelkhand University, Jhansi, India.
Prof. (Dr.) Rajesh Kumar Saini, Department of Mathematical Sciences and Computer Applications, Bundelkhand University, Jhansi, India.
Preeti Mittal, Department of Mathematical Sciences and Computer Applications, Bundelkhand University, Jhansi, India.

Abstract

Developing an intelligent traffic monitoring and control system is a significant issue in solving the traffic congestion problem. In a traditional traffic light controller, the green light phase is constant irrespective of the traffic volume. A number of traffic-light-controller systems have been implemented in the literature, which decides the green phase based on the time of the day. These systems do not find the optimum time management for unsteady traffic. The objective of the method is to minimize the delays and to increase the throughput. This paper presents a traffic light controller system based on the Mamdani Fuzzy Logic system. The triangular membership function is used to fuzzify the length of the queue and the length of the green light phase. The rules are designed based on the protocol used by the traffic policeman. The method is compared with the traditional approach. The supremacy of the proposed fuzzy traffic control system is observed by measuring the time delay for both approaches.

Index Terms

fuzzy logic, traffic congestion, intelligent traffic control system, traffic volume, green light phase

Survey Paper on Underwater Image Enhancement Using Neural Style Transfer

Apeksha Jain, Shri G.S. Institute of Technology and Science
Prof. DA Mehta, Shri G.S. Institute of Technology and Science

Abstract
In this paper, survey on different methods for enhancing quality of underwater images has been done. Underwater images comprises of blue or green haze. Presence of blue or green haze reduces understanding of the image. The goal is to help the researchers to understand underwater images clearly by removing green or blue haze from the images without losing important contents of the image. In order to achieve minimal content loss, the requirement of dataset is more. This goal makes haze removal a tedious task. To achieve this goal of obtaining enhanced underwater image neural style transfer has been proposed. Papers on methods like CNN, CycleGAN for removing haze from underwater images have been discussed. Further, different papers on neural style transfer have been studied. After studying all the ways to improve the image quality of underwater images neural style transfer has been proposed.

Keywords
CNN, CycleGAN, Style transfer, enhancement, haze

Automated Billing and Fruit Warehouse Monitoring Using Convolutional Neural Networks

Supriya Patil, PG Scholar, Dept of ECE, JSS Science and Technology University, Karnataka, India
Shivaprasad. N, Assistant Professor, Dept of ECE, JSS Science and Technology University Karnataka, India

Abstract
Detection and object recognition is a challenging task in the area of Computer vision. The objective of this paper is to introduce a new approach for billing that is more efficient and accurate than current billing systems employed in fruit stores. The classification of fruits is done with deep learning neural networks, and load capabilities are calculated with strain gauge. Open CV and NumPy libraries are used to implement the image processing algorithms in Raspberry Pi boards. In this paper, the system can recognize the type of fruit, estimates the weight in gram, calculates the overall price, and allows customers to pay using RFID. Furthermore, this system offers smart warehouses that perform multi parameter monitoring and convey the data to the owners, allowing them to take appropriate measures at the right time for its longer shelf life.

Index Terms
Deep neural networks, Open CV, Raspberry pi, RFID TAG reader, Smart warehouse monitoring

Development of Rescue boat during Flood disaster

Shubham Warne, Mtech student in Mechanical Engineering, , K.J. Somaiya College of Engineering, Mumbai, (MS), India
Vijay Bhosale, Assistant Professor in Mechanical Engineering, K.J. Somaiya College of Engineering, Mumbai, (MS), India
Pranay Mohite, Mtech student in Mechanical Engineering, , K.J. Somaiya College of Engineering, Mumbai, (MS), India

Abstract
There are by and large three sorts of watercraft, in-land (utilized on lakes and streams), in-shore (utilized closer to shore) and off-shore (into more profound waters and encourage out to ocean). A rescue lifeboat may be a watercraft outlined with particular highlights for searching, protecting and sparing the lives of individuals in peril at ocean or in estuaries. In the United Kingdom and Ireland rescue lifeboats are typically vessels manned by volunteers, intended for quick dispatch, launch and transit to reach a ship or individuals in trouble at sea. Livestock rescue is one of the most important issue faced by rescue teams during flood. Livestock due to their size and weight are difficult to carry through boats. Also, no special craft is present to carry them during flood. This leads to loss of livestock lives in flood. Literature review was done on the animal searched and rescued operations during disaster. Small boats liked jon boats were useful to rescued small sized livestock liked dogs, hens, etc. but for livestock liked cattle and buffalos, ropes and lifebuoys were utilized and escorted out of water. Finally, in this paper we have discussed about the various parameters of rescue boat which will be used to rescue livestock during flood disaster. Also, we have discussed about the materials which will be used to design such kind of boats along with the information of fabrication in the later part of the paper.

Keywords
Livestock, Rescue Boat, Fabrication

Analysis of Peak to Average Power Ratio and its Minimization for OFDM Low-Power Systems

Dr. Lokesh C, Associate Professor, Department of EEE, Vidyavardhaka College of Engineering, Mysuru, Karnataka, India
Manjunath Lakkannavar, Assistant Professor, Department of ECE, Ramaiah Institute of Technology, Bengaluru, Karnataka, India.
Channakka Lakkannavar, Assistant Professor, Department of ECE , SDMCET, Dharwad, Karnataka, India. channakka
B V Manjula, Associate Professor, Department of Electronics, KVT Polytechnic, Chikkaballapura, Karnataka, India
Dr. Shobha Shankar, Professor, Department of EEE, Vidyavardhaka College of Engineering, Mysuru, Karnataka, India.
Dr. Rekha K R, Professor, Department of Electronics and Communication Engineering, SJBIT, Bangalore, India.

Abstract
In a conventional Orthogonal Frequency Division Multiplexing (OFDM) based communication systems, the major deterrent factor which mainly impact over the efficiency of transmission is Peak to Average Power Ratio (PAPR) and it take place in the circuit due to the use of higher order linear amplifiers. This article mainly focuses on the iterative based algorithm for the minimization of PAPR in low power based OFDM module by a factor of 3 dB and for the clipping probability corresponding to10^{-2}, and in comparison, with 5 dB equivalent for 10^{-5} resulting in asymmetrical minimum or no loss of symbols in code rate to achieve minimum signal to noise ratios (SNR). Lower rating of PAPR make the system to operate with improved efficient model of linear amplifier circuit, therefore for maximum minimization in power dissipation in transmitter by a factor of 3 at minimum SNR. Also, the algorithm used for the reduction of PAPR does not consists of any side data bits which are to be transmitted to the receiver module in order to perform decoding of information.

Index Terms
Orthogonal Frequency Division Multiplexing (OFDM), Peak to Average Power Ratio (PAPR), signal to Noise Ratios (SNR), Complimentary Cumulative Distribution Function (CCDF), Pulse Position Modulation (PPM), synthesis algorithm.

Three Tier Rainwater Harvesting Planning for a City Where Ground Water is Depleting in an Alarming Rate

Ashwani Kumar, Research Scholar, Amity Institute of Geo-Informatics and Remote Sensing, Amity University, Noida, Uttar Pradesh
Dr. S.M. Veerabhadrappa, Acting Director, Amity Institute of Geo-Informatics and Remote Sensing, Amity University, Noida, Uttar Pradesh

Abstract
Ground water is the most reliable and replenishable resource which can be put into direct usage without much processing. The city of Greater Noida, like many other Indian cities uses ground water as the source for its domestic, commercial, industrial and agricultural purposes. Thus, this water surplus area turns into over exploited. As more and more villages turn into urban, its recharge surface reduced considerably and rainwater whatever received is flowing into drains without much recharge to ground water. The time series analysis of the ground water levels indicates corresponding depletion of water levels. This, coupled with increase in population forced authorities to drill more and more deeper wells in the area to cater the needs of the population and evolved industries. If this kind of ground water extraction and thereby lowering of water levels keeps on unabated there will be serious water crisis in the near future and enforcing additional stress to coming generations. The solution is refilling the extracted water to the aquifers through artificial means. Artificial recharge to aquifers can be possible by effectively harvest rainwater and send to aquifers by several available methods. This study suggests a three-tier system for rainwater harvesting for augmenting ground water levels. These levels of interventions are on different scales. Some of the rainwater harvesting methods needs to tackle on a city level and some others are on house hold level. Thus, three levels of rainwater harvesting are city level, community level and house hold levels of rainwater harvesting. Thus, a need of scale-based methods and practices are required for the city. City developments need to be water sensitive. All policies and infrastructure development need to have a line item on water resources, its conservation and prevention from getting polluted. Traditional water harvesting methods and sites need to be preserve along with newer methods of rainwater harvesting. The increase in impermeable surfaces has been created water logging on one side and scarcity of ground water on the other side. To mitigate these issues rainwater harvesting and augmentation of ground water levels are planned in three levels. On a city level, rainwater can be harvesting and used for augmenting ground water levels by reviving traditional percolation ponds, constructing recharge pit all along the major transportation network specially areas where water logging experiences and by proper usage of storm water. On a community and house hold levels roof top rainwater harvesting and its immediate usage and overflows to be used for recharging the ground water is suggested. This study also details a model for roof top rainwater harvesting. Maintenance procedure of artificial recharge structures are also explained here in this study.

Key words
Ground water augmentation, artificial recharge, rainwater harvesting, water logging

Analytical Method for Calculating the Mutual Inductance between two Coaxial Rectangular PCB Coils

Salah-Eddine BENDIMERAD, APELEC Laboratory
Selma BAGHLI, MATHEMATICS Laboratory, Exact Sciences Faculty, Djillali Liabes University of Sidi Bel-Abbes, Algeria
Abdelghani AYAD, ICEPS Laboratory, Electrical Engineering Faculty, Djillali Liabes University of Sidi Bel-Abbes, Algeria

Abstract
In this study, the mutual inductance M of PCB coils was investigated, and an analytical method was developed for calculating the mutual inductance between two coaxial rectangular planar PCB coils. The results were acquired through calculations by using the Biot–Savart law. The complete integral calculations and the detailed demonstrations of this method is presented. The obtained formula was introduced in some code examples of coils with different number of turns. The analytical and experimental results were compared, and a strong agreement between them was observed.

Keywords
Mutual Inductance, Rectangular planar PCB coil, Biot–Savart law

Finite Element Analysis of ATV Roll Cage

Naresh Hans, Assistant Professor, CDLSIET, Panniwala Mota, Sirsa Haryana
Harish Kumar, Assistant Professor, CDLSIET, Panniwala Mota, Sirsa Haryana

Abstract
With the development of new software tools and their application in different fields, the development of safe and dynamically balanced ATV with the help of finite element analysis method attracts the growing competition in design of ATV roll cage. Finite Element Analysis is a high cost and time-devour technique, and simulating the issue statement is excessively time-consuming in the early stages of design. Perform a static stress study first to understand the adjustments that need to be made to the design. This will provide a simple simulation standard for the problem assertion that will take less time to compute; and then dynamic analysis will be used to assess the preliminary design's safety. Material collection, chassis and frame drawing, cross section determination, establishing roll cage strength requirements, stress analysis, and simulations to test the ATV against failure are all part of the design and development process. The impact force, loading point, mesh size dependence of generated stress, factor of safety and deformation all are investigated in the study.

Index Terms
ATV, chassis, finite element analysis, roll cage, stress

Hydrodynamic Analysis of Freestanding Risers under Waves and Current Effects

Praise Earnest, Civil and Environmental Engineering Department, Universiti Teknologi Petronas, Seri Iskandar, Perak Darul Ridzuan, Malaysia
Ahmad Mahamad Al- Yacouby, Civil and Environmental Engineering Department, Universiti Teknologi Petronas, Seri Iskandar, Perak Darul Ridzuan, Malaysia
Ehsan NikBakht Jarghouyeh, Civil and Environmental Engineering Department, Universiti Teknologi Petronas, Seri Iskandar, Perak Darul Ridzuan, Malaysia

Abstract
Freestanding Risers are vertical steel pipes clamped by a near surface buoyancy can. These risers are affected by a variety of loads that lead to fatigue damages. As a result, the goal of this study is to anticipate the stresses experienced by freestanding risers subjected to hydrodynamic loads. The Morison equation was used to compute the wave and current loads operating on the risers in this work. The pipe diameter D, the wave height H, the wave period T and the water current Uc are the essential parameters explored. The study's findings demonstrate that the maximum stress on the risers is affected by wave height, wave period, pipe diameter, and water current.

Keywords
Hydrodynamic parameters, Freestanding riser, Wave loads, Current

Cosmetic Herbal Hair Oil: Preparation and Evaluation

Aishwarya Rastogi, Department of Pharmacy, SRMS College of Engineering and Technology, Bareilly, U.P
Semimul Akhtar, Department of Pharmacy, SRMS College of Engineering and Technology, Bareilly, U.P
Aparna Gupta, Department of Pharmacy, SRMS College of Engineering and Technology, Bareilly, U.P

Abstract
Hair is a crucial component of a person's personality, and we use a variety of cosmetic items to care for it. Herbal formulations always have action and, in comparison to synthetics, have fewer or no negative impacts. The goal of this research was to assess the value of herbal hair oil in the treatment of common hair issues including baldness, alopecia, hair loss, grey hair, dryness, and dandruff.Rosemary oil, Cedarwood oil, thyme oil, chamomile oil, and tea tree oil, as well as carrier oils such as pumpkin seed oil, olive oil, coconut oil, and castor oil, are utilised in the formulation using a mechanical stirrer. To maintain proper sebaceous gland activity, all components provide important nutrients such as vitamin, antioxidant, protein, terpenoids, and many essential oils.

Keywords
hair, herbal, cosmetics, formulation, viscosity

The Use of Plant Derived Ingredients in the Treatment of Hair Loss Due to Alopecia Androgenetica and Alopecia Areata

Aishwarya Rastogi, Department of Pharmacy, SRMS College of Engineering and Technology, Bareilly, U.P
Semimul Akhtar, Department of Pharmacy, SRMS College of Engineering and Technology, Bareilly, U.P
Aparna Gupta, Department of Pharmacy, SRMS College of Engineering and Technology, Bareilly, U.P

Abstract
Hair loss commonly referred to as alopecia or baldness, is the loss of hair on one's head or body. At the very least, the head is usually engaged. Hair loss can range in intensity from a tiny patch to the full body. Here we are discussing about alopecia with its classic and atypical forms. With the aid of this paper, we believe that certain natural medicines can treat alopecia without side effects. These multi-phyto constituent herbal extracts may cure alopecia either by offering dietary supplements or by serving as blockers of DHT and 5-alpha-Reductase.

Index Terms
Hair loss, Androgenetic alopecia, Natural oil, Minoxidil, Aromatherapy.

Evidence from Thailand on an IoT-based temperature and humidity control system in a microelectronic factory.

Monsiri Balsook, Hana Microelectronics Public Co., Ltd
Poonpisamai Kotikula, Hana Microelectronics Public Co., Ltd

Abstract

In recent years, temperature and humidity monitoring in the microelectronic manufacturing industry grows increasingly significant in product quality. The Internet of Things (IoT) is the new challenge for moving from a traditional to a digital platform. This project begins with a collaboration between industry and university. It aims to improve the IoT temperature and humidity relative control system in a manufacturing cleanroom by connecting a factory's ancient model temperature and humidity recorder with a Raspberry Pi. This program transmits data to a MongoDB server-internal web service, displays it on a website, and uses the Line application to send an automated email when not meet the specification. Real-time notification is sent to the relevant team to resolve the issue. It's such a challenge project management. In conclusion, this project can aid in increasing productivity and efficiency way. Furthermore, a reliable temperature and humidity environmental control system ensure that product quality is maintained.

Flexural Strengthening reinforced concrete beams using GFRP strips under cyclic loading

Sandeep G. Sawant, Ph.D. Candidate, Department of Civil Engineering, Shivaji University, Maharashtra, India
H. S. Jadhav, Professor, Rajarambapu Institute of Technology, Rajaramnagar, Islampur, Maharashtra, India

Abstract
Glass fiber-reinforced polymer (GFRP) application is a very competent way to repair and strengthen structures that have to develop into structurally weak over their life span. GFRP repair systems afford an economically reasonable replacement to traditional repair systems and materials. The purpose of this research is to investigate the flexural behavior of reinforced concrete beams strengthened with varying configurations and layers of GFRP strips under cyclic loading.
The experimental program included strengthening and testing 30 rectangular cross-section beams. Each beam was tested under reversed cyclic loading tested under a two-point loading system. The experimental results show that an increased strengthened RC beam load carrying capacity is observed to be in the range of 0 % to 25% for forwarding loading (Positive load) and 33.33 % to 66.66% for reverse loading (Negative load) and deflection is increased in the range 10.55% to 85.15% for forwarding loading (Positive load) and 17.73 % to 130.85% for reverse loading (Negative load) as compared to the control beam.

Keywords
Flexural behavior, Strengthening. GFRP, Cyclic loading.

The Development Models Integration of Quality Control, Maintenance, and Buffer Stock in an Imperfect Production System

A. Kuncaraningrum, Institut Teknologi Sepuluh Nopember
N. Kurniati, Institut Teknologi Sepuluh Nopember
P. D. Karningsih , Institut Teknologi Sepuluh Nopember

Abstract
This study considers the integrated problem of inspection, maintenance, and inventory in an imperfect production system. The production system can be performed in two state is in-control and out-of-control state, where some proportion of defective items are produced by the production system during both the in-control and out-of-control states. A production system, maintenance, and quality need more coordination to increase productivity and efficiency to reduce costs. A mathematical model is developed to representing the expected total cost per item is derived for an imperfect production system. This study aims to determine the optimal amount of buffer stock and inspection policies to expect costs per item during the production process. This study proposed an extended product inspection policy for an imperfect production system. A buffer stock is established to meet demand while maintenance is performed. Product inspections are performed any arbitrary time of a production cycle, and after the inspection, all defective products produced until the end of the production run are fully reworked. The non-inspected items are sale with free minimal repair warranty. The inspection policy is imperfect, permitting type I and type II errors are considered to make the model more realistic. A numerical experiment along with graphical representations are to illustrate the proposed model. Sensitivity analysis of the optimal solution with respect to model parameters of the system which have direct influence on the optimal decisions, and the implications are discussed.

Index Terms
Inspection errors, maintenance, inventory, imperfect production

Fundamental Financial Literations of Medium Small Micro Enterprises in the Era of Covid-19; Case in Indonesia

Nurdiana Mulyatini, Management Study Program-Faculty of Economics, Galuh University, Indonesia
Elin Herlina, Management Study Program-Faculty of Economics, Galuh University, Indonesia
Eva Faridah, Accounting Study Program-Faculty of Economics, University of Galuh, Indonesia
M. Apip, Accounting Study Program-Faculty of Economics, University of Galuh, Indonesia

Abstract
Since Covid-19 was established as a pandemic, many sectors were affected including small and medium industries. This study provides an overview of the efforts made by small and medium enterprises to minimize the negative impact of a pandemic on business continuity through financial literacy. The purpose of this study is to determine the extent of business actors' financial knowledge which includes budgeting decisions, profit allocation, savings, credit and investment decisions. The research method used is quantitative analysis with an explanatory survey approach to 100 MSME actors. The results showed that the financial literacy of business actors was still low, as indicated by the difficulty of financial management in the midst of a pandemic that caused losses and disrupted business stability. The conclusion of this study shows that financial literacy has a positive effect on financial decision making and promotes long-term economic growth.

Keywords
Financial literacy, MSMEs, Covid-19 Pandemic

Electrospun Nanofiber based Drug Carrier for Anti-Inflammatory Activity: A Review

Gaurav Agrawal, Manipal Institute of Technology, Manipal
Surabhi Aswath, Manipal Institute of Technology, Manipal
Anindita Laha, Manipal Institute of Technology, Manipal

Abstract

Electrospun nanofibers have drawn a lot of attention lately to researchers across various fields of study. Their excellent and desirable properties such as high specific surface area, tunable porosity, timely and sustained drug release have put them into consideration as a potential system for drug delivery. Nonsteroidal anti-inflammatory drugs (shortened as NSAIDs) are one of the most popular pain relief medicines in the world which are used to cure headaches, sprains, swellings, fever, and a few symptoms of arthritis. However, the major downside of using these NSAIDs is that they can cause severe side effects or discomfort in the patients. Studies regarding NSAIDs' delivery using electrospun nanofibers are found to allow site-specificity and requires a lower overall drug dosage, thus curbing the extent of the side effects caused. This review aims to analyze the current research on the promising and innovative application of NSAIDs loaded nanofibers as a drug delivery system.

Human Body Parts Detection Using Viola- Jones Algorithm

Ahmad Salihu Ben Musa, Federal College of Agricultural Produce Technology, Kano
Zaharadeen Sufyan, Federal University Dutse
Anas Muhammad Sani, Federal College of Agricultural Produce Technology, Kano

Abstract
This Paper explains the Human Body Parts Detection, application and importance. Human Parts are detected using Viola - Jones Algorithm. Matlab is the tool used to implement the algorithm. Several Human Faces, eyes, Noses, Mouths, and Upper bodies were detected using the algorithm with high precision. The algorithm is efficient and robust.

Keywords
Cascade Detector, Adaboost, Haar

Bitcoin Adoption in Banking and Finance: The Critical Factors of its Implementation

Naby Nouhou Conde, Kulliyyah of Information Technology, International Islamic University Kuala Lumpur, Malaysia
Adamu Abubakar Ibrahım, Kulliyyah of Information Technology, International Islamic University,Kuala Lumpur, Malaysia
Norbik Idris, Kulliyyah of Information Technology, International Islamic University, Kuala Lumpur, Malaysia
Hazwani Mohd Mohadis, Kulliyyah of Information Technology, International Islamic University, Kuala Lumpur, Malaysia

Abstract
Bitcoin is a e-currency created by the computational result of blockchain technology. It is the world's first decentralized anonymous digital circulation which accepts online transactions without relying on any third-party institutions or government. Though, its technology is considered as one of the secure online ledgers with strong cryptography integrated payment systems in financial sector, it is still struggling to integrate banks and finances for payment and people are reluctant to accept its adoption. The aim of this study it is to investigate the influential factors such as perceived trust, perceived risk, self-efficacy, resource appropriateness and intention to use of its adoption in our daily use. Therefore, to address this gap, the research utilized a quantitative method survey built on previous theories of Technological Acceptance Model (TAM), Theory of Reasoned Action (TRA), Delone and McLean Information System Success Model and Self-determination Theory Model (SDT) to lift up the barriers of bitcoin implementation. We used a sample of 402 participants for the analysis where seven main variables and nine hypotheses got formulated and tested using the partial least squares (PLS) path modeling with SPSS. The result shows that the analysis of the data provided support for all the hypotheses and established a positive relation between variables and the findings obtained have both academic and practical worth in terms of Information Systems technology adoption for improving the understanding of factors influencing bitcoin adoption in banking and finance.

Keywords
Bitcoin, blockchain, cryptocurrency

Augmented Anxiety Therapy Using an Ensemble of Virtual Reality and Motion Capture Technology

Gopinath Devaraj, Department of Multimedia, VIT School of Design
Kathiravan Srinivasan, Department of Analytics, School of Computer Science and Engineering, VIT

Abstract
In today's world, identifying the person with anxiety disorder is a challenging task. These days' physicians have the option of deploying various advanced technologies for achieving effective results in anxiety disorder treatment. Usage of Virtual Reality (VR) for the physical simulation therapy could be a convenient and cost effective solution. This work discusses and analyses the effectiveness of various VR based anxiety disorder therapies. Moreover, this study also explores the possibility of using VR-assisted motion capture technology (MOCAP) for augmenting the effectiveness of anxiety disorder therapies. Further, it also discusses the various potentials and future directions for the VR technology based anxiety disorder treatment. The paper concludes with theoretical and managerial implications, as well as a future research agenda.

Keywords
Anxiety disorder, Motion Capture Technology, Physical Simulation Therapy, Virtual Reality.

Enhanced Light Trapping in ITO/c-Si based Plasmonic Solar Cells with Silica Nanospheres using FDTD Simulation

Manju Rani, Department of Electronic Science, University of Delhi
Dr. Udaibir Singh, Department of Electronic Science, University of Delhi

Abstract

Effective employment of metal nanoparticles for improved efficiency of solar cells is well demonstrated. Adoption of dielectric nanoparticles for enhancing the performance of plasmonic solar cells has also been reported in recent years. In this work, scattering of incident radiation by silica (SiO2) dielectric nanospheres has been presented for enhanced light trapping in ITO/c-Si based plasmonic solar cells. Scattering efficiency of SiO2 nanospheres of various sizes (250nm-400nm) deposited on the top of ITO/c-Si structure has been simulated using the open-source software MEEP (MIT Electromagnetic Equation Propagation) via finite-difference time domain (FDTD) simulation. Transmittance at ITO/c-Si interface and spatial distribution of electric field have also been investigated. Simulation shows that SiO2 nanospheres exhibit relatively high scattering efficiency over a broad region of the electromagnetic spectrum including near infra-red region. Also, scattering efficiency and transmittance of incident radiation into the absorber layer rise significantly with the size of SiO2 nanospheres leading to effective light trapping.

DenseNet Convolutional Neural Network Application for Prediction of Covid-19 Using CT scans Images

Arifa Tadvi, affiliated to the University of Mumbai
Dr. Sudhir Sawarkar, affiliated to the University of Mumbai
Dr. Shubhangi Waikole, affiliated to the University of Mumbai

Abstract
Now days human health and lives are recently impacted by Coronavirus. Due to the unavailable of proper vaccine of COVID-19 to control rather than cure, early and accurate detection of the virus can be a promising technique for tracking and preventing the infection spreading (e.g., by isolating the patients). This situation indicates to improve auxiliary COVID-19 detection technique. Computed tomography (CT) imaging is a mostly used technique for pneumonia because of its common availability. The application of DenseNet CNN systems integrated with images can be a promising alternative for the identification of COVID-19. This paper presents a promising technique of predicting COVID-19 patients from the CT image using convolutional neural networks (CNN). The novel approach is based on DenseNet is the updated CNN architecture in the present state to detect COVID-19. The results outperformed 89% accuracy, with 90% recall showing good performance for the identification of COVID- 19.

Keywords
Covid-19, CT-image , DeepLearning, DenseNet-121.

Handwriting -Based Personality Prediction using Machine Learning

Yashomati Dhumal, Bharati Vidyapeeth's (Deemed to be University)College of Engineering, Pune
Arundhati Shinde, Bharati Vidyapeeth's (Deemed to be University)College of Engineering, Pune

Abstract
Personality is a blend of the person's different traits and skills. They may be used for forensic control, recruiting screening, medical symptoms, and a variety of other purposes. Handwriting samples were used in lieu of a graphologist online system that may be helpful for personality analysis and writer identification. Graphology is the expression of the human brain's subconscious thoughts via handwriting. Handwriting analysis may indicate traits such as mental and emotional instability by looking at the patterns produced by the handwriting. On the other hand, determining personality, particularly when it comes to the law, is challenging since there is no benchmark or scale that can provide comprehensive analytical findings. This article introduces a novel technique for predicting personality from handwriting that is based on the merging of Gabor Filters with Deep Neural Networks (DNN). In terms of better accuracy and recognition, the findings reported in this article were achieved by applying Convolutional neural networks. The suggested method has an accuracy rate of 98 percent. The suggested system is able to extract deep features and is resilient.

Keywords
Deep Neural Networks (DNN),Gabor Filter,Max Pooling,Graphology

Embedded based Resonant Converters for PV Battery Hybrid systems

W. Abitha Memala, Department of EEE Sathyabama Institute of Science and Technology Chennai, India
C. Bhuvaneswari, Department of EEE Sathyabama Institute of Science and Technology Chennai, India
M. Kavitha, Department of EEE Sathyabama Institute of Science and Technology Chennai, India
E. Priyadharshini, Department of Mathematics Sathyabama Institute of Science and Technology Chennai, India
M. Vijayasri, Department of EEE Sathyabama Institute of Science and Technology Chennai, India
M. Mahalakshmi, Department of EEE Sathyabama Institute of Science and Technology Chennai, India

Abstract
The relevance of the renewable energy sources like solar photovoltaic, fuel cell, wind etc., is increasing in a rapid manner and they are widely used in the various types of applications like Mining areas, Islands, hybrid electric vehicle, micro grid and aerospace industries etc., Combination of more than one source is an effective way to provide efficient output for these applications. So the concept of hybrid energy system attains a major role in the field of modern power generation. Combinations Such as solar PV/wind, solar PV/battery, wind/fuel cell, ultra-capacitor battery, fuel cell/solar PV etc., are used for power generation. But for the best integration of these hybrid sources, a proper method of interfacing of circuit's power is mandatory. This paper proposes the integration of solar-PV/battery hybrid system for PV Hybrid system application with a converter. This is Combination of Two Inputs dc sources with Isolated Resonant Converter with Zero Voltage Switching to get a Single output. The Simulation is done in MATLAB/Simulink platform and the results are presented.

Keywords
Dual input, Single output, Hybrid systems, Resonant converter

Ontology Oriented Machine Learning and Deep Learning in the Field Of Agriculture: An Overview Survey

Kushala V M, Research Scholar, Sri Siddhartha Academy of Higher Education & Research, Tumkur, Karnataka, India.
Dr.M.C.Supriya, Professor, Dept. of MCA,Sri Siddhartha Academy of Higher Education & Research,Tumkur, Karntaka, India
Dr.H.R.Divakar, Asst. Professor, Dept. of MCA, PES College of Engineering, Mandya, Karnataka, India

Abstract
Agricultural plays a very important role in the scenario of growing population with extent of cultivation land. Adopting new technologies helps in improvising the cultivation and the yield. Knowledge of data management and usage of data is the key technology that can be adopted in improving the agricultural practices. The knowledge of agricultural field can be captured and can be utilized with artificial intelligence techniques. Collaborating artificial intelligence with knowledge management technique like ontology helps in achieving a better goals. A study of these technologies and there implementations in the agriculture practices is briefed in this paper.

Design and Development of Instructional Equipment for Instrumentation and Control Course of the B.S. Electrical Engineering Program of the University of Batangas

Marizen B. Contreras, University of Batangas
Jermhel M. Solis, University of Batangas
Henry I. Cabatay, University of Batangas

Abstract

The need for quality education is in demand nowadays and is parallel with the industrial companies' efforts to level up their standards. The Electrical Engineering course which is an engineering steam that comprises study and understanding about electricity and electronics which main contribution to industrial applications is distribution of energy for different devices, design, and also the installation and monitoring of equipment to control engineering systems.

Understanding and developing the skills and concepts of the advanced process control (APC), distributed control systems (DCS), programmable logic controllers (PLC) and supervisory control and data acquisition (SCADA) for the Electrical Engineering course is challenging for both the trainers and instructors.

This paper showcases the hybrid instructional equipment for instrumentation and control systems, which is composed of laboratory equipment and laboratory manual that can be easily grasped by students to enhance their skills and knowledge about the course and which includes PLC ladder programming. This innovative method of teaching of instructional equipment is more effective compared to the conventional way of teaching with the supporting data gathered.

The Effect of Glass Fiber on Fly Ash Based Geopolymer Concrete Using Recycled Aggregates

Murtaza Joya, M.E student, Chandigarh university, Punjab India
Shalika Mehta, Assistant professor,Chandigarh university,Pb, India

Abstract
This study highlights the role of glass fibre in Geopolymer concrete made of fly ash and recycled aggregates. The recycled aggregate is sourced from the storage of waste materials at Chandigarh University concrete laboratory. The recycled aggregates were incorporated as a partial substitute for natural coarse aggregate in geopolymer concrete at 50, 80, and 100 percent by weight, and the results were compared to natural coarse aggregate with the same ratios. Class F fly ash is utilised as the source material for the Geopolymer, which is made using 14 M sodium hydroxide and Na2SiO3 alkali activators and brought in from local sources as the binder material. At 7 and 28 days, ordinary geopolymer concrete and reinforced glass fibre geopolymer concrete were tested for indirect tensile, flexural, and compressive strengths. The compressive, indirect tensile and flexure strengths of geopolymer concrete decrease when the recycled aggregate content excesses, according to the findings. Recycled aggregates show greater shrinkage compared to non-recycled aggregates. However, because the lower shrinkage of geopolymer concrete compensates for the higher shrinkage of recycled aggregates, it can not be considered an issue. This results in shrinkages that are substantially lower than those expected for Geopolymer concrete of equivalent strength.. Because of the chemical reaction between the alkali activated geopolymer paste and fly ash which forms a polymerization process, we can say that compressive strength after 24 hours of curing will not increase significantly with the increasing age of concrete. Ar glass fiber (alkali resistant) with a length of 36 mm was added as a supplement to the GPC with different ratios (0.5-3.5%) by weight of concrete. The results show that 0.5% glass fiber has no effect on the compressive strength, while 1%, 1,5%, 2%, and 2.5% of glass fiber have a very impressive impact on geopolymer. On the other hand, 2.5% and 3% glass fiber reinforced polymers have almost the same result, which means that the strength graph goes down by adding more fibers.

Keywords
Geopolymer concrete, ar glass fiber,recycled aggregates, compressive strength, fly ash, indirect tensile strength

Reverse Engineering of Hemorrhoidal Circular Stapler using the Principles of Frugal Innovation to make it Reusable

Siddhant Shrivastava, Design Programme, Indian Institute of Technology Kanpur
Abhishek Verma, Department of Mechanical Engineering, India Institute of Technology Kanpur
Dr. Janakarajan Ramkumar, Design Programme, Indian Institute of Technology Kanpur and Department of Mechanical Engineering, India Institute of Technology Kanpur
Pankaj Mittal, Bharati Vidyapeeth's (Deemed to be University)College of Engineering, Pune

Abstract
Hemorrhoids (generally referred as Piles) is a disease in which the veins in the anal canal and the lower rectum get inflated. This inflation in veins cause irritation, itching, pain and even cause bleeding inside and around the anal cavity. The growth of hemorrhoids can be internal or external depending upon whether the inflated vein is located inside the rectum or near the anal orifice. Stapled Hemorrhoidectomy is one of the most widely used surgical operation which uses Prolapse and Hemorrhoids (PPH) circular stapler for removing the internal hemorrhoids with the help of a circular blade and then it stapling the tissues around rectum area which stops bleeding. It helps in early recovery of the patient and the metallic staples comes out with sludge (human waste). The stapler currently used in the hemorrhoids surgery is needed to be disposed off after the operation. Patient has to bear the expenses of this single used surgical device. In this exploratory study, a reusable hemorrhoid circular stapler is realized by reverse engineering the current device and by using the concepts of frugal innovation to increase the usability of disposable staplers from single-use to at least 20 operations per cartridge. The reusability reduces the cost of operation exponentially. The new intervention produces satisfactory results on pre-clinical investigation studies.

Keywords
Hemorrhoidal Circular Stapler, Stapled hemorrhoidectomy , Reusable Cartridge

Environmental Analysis of the Sugar Industry Press Mud of North Karnataka, India

Gamal Juma Aboulgasem, Department of Chemistry faculty of Science El Alejelat, Zawia University Libya
Roopa Belurkar, Parvatibai Chowgule College of Arts & Science (Autonomous), Gogol, Margao, Goa
Mallikarjun S Yadawe, Karnataka State Akkamahadevi Womens University Vijayapur, India

Abstract
Press the mud product from the sugar industry. For every 100 tons of sugar cane is crushed about 3 tons of media mud cake left behind as a product. It is used as a soil restorative agent and soil conditioner. Crude publishing mud for the sugar industry was collected in ten sugar mills in Northern Karnataka India. The present study was performed to analyze physical and chemical properties such as pH, electrical conductivity, moisture content, total carbon content, nitrogen, phosphorus, potassium and moisture.

Keywords
Press mud, sugar industry, nitrogen, phosphorus, potassium etc.

A Study on the Effectiveness of Animation-based Lectures in Enhancing Students Learning Ability and Cognitive Load

Praveen C.K, School of Design at Vellore Institute of Technology (VIT), Vellore, India.
Kathiravan Srinivasan, School of Computer Science and Engineering at Vellore Institute of Technology (VIT), Vellore, India.

Abstract
The animation-based lectures have been employed in recent decades to enhance the learning ability and cognitive load of students across age groups from pre-school to university. This study aims to bring out the recent advances in this field and it also evaluates the influence of the parameters such as students' prerequisites, their learning processes, outcomes and environment on their learning ability and cognitive load. Further, this work also discusses and analyses the implementation of animation-based lectures, and the pedagogy used for communication. The review results showed the impact of animation-based lectures on improving the students' academic performance, subsequently enhancing the education standard, thereby enabling a consistent curriculum delivery. Finally, this investigation explores the limitations and open challenges in the implementation of animation-based lectures, in addition it also reports the future recommendations and potentials for instructional animation.

Keywords
Animation; Animation-based Lectures; Cognitive Load; Education; Instructional Animation; Pedagogy.

Prediction of Cardio-vascular disease risk using various vital Parameters through applied Machine Learning Model

Dr. A. Suresh Rao, Professor, Department of Computer Science and Engineering, TKR College of Engineering and Technology
Dr. B. Vishnu Vardhan, Professor, Department of Computer Science and Engineering, JNTU College of Engineering Jagityal

Abstract
Heart diseases are one of most common diseases seen among the people of all age groups. Most of the heart diseases are caused due to the subject's food and daily activities. Assessing the risk factor of a subject is based on various parameters. These parameters are taken into consideration by cardiologist in figuring out the risk factor of underlying cardio vascular disease. While this is a manual process and may lead to delay and negligence from a subject's side. Also, many times the underlying symptoms are overlooked. These underlying different symptoms and parameters might not look risky while analyzing the risk factor of the subject but on whole such individual parameters and vitals on analysis on the whole have a potential to predict the underlying cardio vascular disease. Here we apply machine learning techniques to predict the risk factor of the subject. The calculated risk factor is correlated with the outcome risk rating of diabetic retinopathy of the subject.

Keywords
Cardiovascular Diseases, Risk Factors, Healthcare, Diabetic Retinopathy

Investigation on the effect of yoga and meditation on physical and mental stress of IT professionals using classification techniques through Machine Learning Algorithms

S Ravikumar, Department of Computer Science and Engineering, Vel Tech Rangarajan Dr Sagunthala R&D Institute of Science and Technology, Chennai, Tamilnadu, India.

E Kannan , Department of Computer Science and Engineering, Vel Tech Rangarajan Dr Sagunthala R&D Institute of Science and Technology, Chennai, Tamilnadu, India.

Abstract

Stress is one of the key elements that influences the pleasant of our everyday life: from productivity and performance in production tactics to the ability of (civilian and army) individuals to make rational decisions. additionally, stress can prop-agate from one person to other operating in proximity or closer to a common goal, e.g., in an army operation or group of workers. actual-time evaluation of the pressure of people alone is, but, now not enough as know-how its source and direction wherein it propagates in a set of humans is equally if no longer greater crucial. Stress management in the place of job is a fact that maximum people should face for one reason or another and coping with its miles the important thing to long-term profession success. a few careers are more worrying than others. The principle reasons of workplace Stress appear like related to deficiencies within the management and corporation of work. Stress and culture aren't best predominantly visible in the industry however are visual, even within the service zone. typically, woman personnel will face Stress because of different factors which includes physical surroundings, organizational factors, private satisfaction and activity pride and many others. These studies have a look at explores the stressor and its control through employing a Structural Equation Modeling method. This look at is to discover the factors that motive stress for IT experts and to dis-cover a solution for it.

Keywords

About four key words or phrases in alphabetical order, separated by commas.

Reduce Energy Consumption in various areas: A Review

Kalpana D. Vidhate, Assistant Professor, Department of Electrical Engineering, Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar, Maharashtra, India
Dr. Pragya Nema, Professor, Department of Electrical Engineering, Oriental University Indore (M.P.), India.

Abstract
Energy management is the process of regulating and lowering your company's energy consumption. It allows you to: Cut costs – this is becoming increasingly crucial as energy prices continue to climb. Utilization of energy provided strong impetus for the construction of energy production and consumption patterns featuring diversified integration, interaction of supply-demand side. The future energy utilization system will move towards a user-centered integrated energy system (IES) the innovation of recent energy marketing prospectus. The future energy utilization system will also generate more new integrated energy service providers to better serve the individual demands of customer. It can be predicted the smart energy residential area for providers of integrated energy services to conduct user-side service management. Furthermore, the analysis and understanding of energy use behavior is an important way for integrated energy service providers to take on to the trend of increasing user energy demand and diversification of energy utilization, and also provide necessary means for users to make personalized energy use plans. These studies also provide methods and possibilities for user's energy consumption behavior analysis. However, only few literatures studied the user energy consumption behavior using ML Techniques, For energy service providers to maintain market competitiveness. Therefore, the user energy behavior cluster analysis based can help the energy that is incorporated service providers to grasp the user energy behavior rules from the data, and maximize their own interests while satisfying users' personalized needs. Multi-thread demand forecasting model can utilize for minimize energy consumption. Can helpful to improve Effective energy costing.

Keywords
energy consumption, energy management system, energy demand, review

Transient Stability Enhancement using Coordinated Control by PSS and TCSC

Niharika Agrawal, Research Scholar, Electrical and Electronics Engineering,SJB Institute of Technology,No.67, BGS Health & Education City, Dr. Vishnuvardhan Rd, Kengeri, Bengaluru, Karnataka VTU Belagavi.

Dr.Mamatha Mahesh Gowda, Professor, Electrical and Electronics Engineering,SJB Institute of Technology,No.67, BGS Health & Education City, Dr. Vishnuvardhan Rd, Kengeri, Bengaluru, Karnataka, VTU Belagavi.

Abstract
The demand of electricity is continuously increasing. Due to increase in power demand and interconnections the transmission system is highly stressed. The different ways to meet the rising demand are either to increase the power generation or to use the existing system in a better way. The first option is expensive and needs huge investment. Thus, the existing transmission lines should be utilized in a cost-effective manner. Stressed transmission system in turn may lead to unsecure and unsafe operation of the power system. PSS are used to damp low frequency oscillations. But for mitigating interarea oscillations and also to prevent transient instability TCSC which is a series FACTS device is a good alternative to consider here. TCSC is used along with PSS to improve the transient stability of the power system There are two different types of PSS considered in this paper. TCSC is used in coordination with both the types of PSS.

Keywords
Transmission line, disturbance, stability, power, faults, oscillations, performance

Semantic Word Disambiguation using Sense Embedding.

Prashant Y. Itankar, MPU Bhopal, Madhya Pradesh.
Dr. Nikhat Raza, MPU Bhopal, Madhya Pradesh.

Abstract
Word Sense Disambiguation (WSD) is an open issue in the space of Natural language preparing. Numerous WSD systems uses data based independent philosophy as it reveals us from using marked corpus. Yet, this strategy depends comprehensively upon data. Working on the data for vulnerability objective is one of the huge issues in WSD. Yet Multilingual lexical resource is an asset for data based systems (KBS), various KBS have not yield great results due to nonattendance of satisfactory information needed for disambiguation. Multilingual information can help with boosting the display of WSD in various dialects. Joining lexical semantic information from different vernaculars further creates WSD task. We utilize Babel Net, a gigantic multilingual resource provider to achieve the task and plan a semantic word cloud to give world class disambiguation by driving additional data.

Keywords
Word Sense Disambiguation, Knowledge based system, Natural language

Development of software system for data mining of students' surveys for assessment of courses teaching quality in Engineering college of Baghdad

Amenah Hasan Flaih Al - Obaidi, University of Thi-Qar, Iraq

Abstract

In this research, experimental methodology has been conducted to analyzing a large set of undergraduate course evaluations from an Engineering faculty. We have shown how useful the application of data mining techniques in course management systems, although we have shown these techniques separately, they can also be applied together in order to obtain interesting information in a more efficient and faster way. Approximately 19 semesters has been assessment at a rate of 400 students divided by the four grades taught by 26 instructors by answering the obligatory questions. The data has been collected from these responses and transformed it into appropriate forms for mining. After that, built classification model, extract association rules and clustering the courses and students by using knime program.

A Framework For Academic Information Services

Richki Hardi, Universiti Teknikal Malaysia Melaka and Universitas Mulia.
Ahmad Naim Che Pee, Universiti Teknikal Malaysia Melaka
Nanna Suryana, Universiti Teknikal Malaysia Melaka
Muhammad Haziq Lim Bin Abdullah, Universiti Teknikal Malaysia Melaka

Abstract

Academic information services are an essential factor that must be considered in a university. In terms of academic services, universities need to provide the best service so that the campus academic community and the community are satisfied with the services offered. All educational services, including academic information, aim to communicate between the campus and the academic community and the community outside the university. The presence of AI chatbots is an effort to help education services that every academic community can carry out in real-time. AI chatbots are developed on a mobile basis, used to answer questions and requests from students to the academic section. Chatbots can be used as campus and academic information service providers for the general public and the academic community. There needs to be a framework in dealing with academic service problems. On that basis, researchers will focus on A Framework For Academic Information Services.

Nottingham University Community Evaluation of Using Public Transportation in the City of Nottingham

Dr. Siham I. Salih, Mustansiriyah University ,College Engineering, Highway &Transportation Eng. Dep.,Baghdad , Iraq.
Aseel J . Rahma, Midle Technical University , Engineering Technical College , Baghdad , Iraq.
Waffa Kh.Luaibi, Mustansiriyah University ,College Engineering, Highway &Transportation Eng. Dep.,Baghdad , Iraq.

Abstract
Public transportation systems Performance assessment is critical for understanding the success of current plans as well as developing strategies for improvement. Most of the world's largest metropolitan centers have had tremendous expansion in industry, infrastructure, economic activity, and population over the last several decades, making them more appealing to job seekers and driving a significant increase in customized forms of transportation. Nottingham is one of largest City in United Kingdom. This research was conducted in the Nottingham University community, which included students, faculty, and the tutors. This study had 100 participants which was chosen to cover the majority of Nottingham's areas of the city. This study investigates Variations of personal transportation across all modes of transportation (walk, bicycle, motorbike, car driven alone, car driven in company, bus, subway, tram, train, etc.)in Nottingham city . In addition, investigate the qualities of buses that make them appealing to participants. The main finding of this study, despite the fact that the Nottingham University was well-informed about the buses that operate in the city, the community of Nottingham University was not well-informed about the buses that operate in Nottingham, they favoured walking over other modes of transportation. The primary reason for this is because the attendees, who are mostly international students, wanted to have a feel for the road. Furthermore, people may opt to walk due of their low financial resources

Upgrading the urban space according to the rehabilitation of green spaces

Tahri Djelloule, PhD student, fifth year of sciences, Institute of Urban Technology Management, University of Mohamed Boudiaf. M'sila .Algerian

Abstract
The nations of the ancient world paid special attention to the vegetation cover, and made it unitsof different dimensions and different arrangements, and various types of life sciences,engineering, and art were used for these units. Nature, fresh air and spacious spaces.
Algerian cities in general, and their residential neighborhoods in particular, know many aspects of deterioration, especially those associated with the preparation of external areas, foremost of which is the apparent lack of creation of green spaces within urban areas.
Al-Bayadh, like other Algerian cities, complains of most of its residential neighborhoods of a complete absence of prepared green spaces, while the remaining neighborhoods contain green spaces in a deteriorating condition.

Keywords
Urban Rehabilitation, Green Spaces, Urban Spaces, Urban Ecology.

Hybrid Algorithm Approach for Performance Improvement in Brain Tumour Segmentation and Classification

Kiran Venneti, Aditya College of Engineering
M. Kishore kumar, Aditya College of Engineering
P.Ramesh, Aditya College of Engineering
Murapaka Dhanalakshmi Bhavani, Aditya college of engineering and technology

Abstract

The brain is the most crucial organ in the human body. It controls all of the body's critical life functions and is responsible for the development of new cells. A brain tumor is a type of tumor that appears in the brain. It has been observed that it can migrate from one part of the brain to another. There is no known primary cause identified for the development of brain tumors. Malignant brain tumors are very uncommon, but they have a high mortality rate. This is because they are the most critical organs of the body. The goal of this study is to develop a computer-assisted radiology (CAR) system that will allow us to detect brain tumors at an early stage and manage them efficiently. We have developed a model that automatically classifies tumors using various algorithms. The model is mainly used for analyzing images with high accuracy. This study shows how we can classify tumors using various algorithms (Watershed and PSO algorithms). We have implemented a model that extracts features using various algorithms including DWT and PCA algorithms and automatically classifies images using SVM and CNN with a high degree of accuracy.

Medical Image processing using wavelet on cloud and big data processing based on Hadoop

Syed Tanzeem Ahmed, Research Scholar, Department of CSE, M.P.U Bhopal
Dr. Nikhat Raza, Research Guide, Department of CSE, M.P.U Bhopal

Abstract
The medical industry has generated huge amounts of data that can be in hard copy or soft copy form. The main focus is to store, manage and analyze massive amounts of data. The rate of the growing size of medical images is very high. The medical image datasets named Image CLEF contained approx. 66,000 images between 2005 and 2007 which had increased to approx. 300,000 images in 2013. The images are also in different varieties, modalities, dimensions, resolutions, and qualities. So the new challenges arise like proper data extraction, data integration, and data mining. More research needs to be done for multimodal image analysis. The unstructured medical images need to be structured for accurate data mining and proper analysis. The medical images data can be collected from different institutions or organizations. So to utilize such types of data some important analytic models need to be developed to evaluate and validate the medical image retrieval system. Several researchers have faced many challenges in combining different types of data, and also need to be developed such models for database and image repository (DIBR).
In this paper, various approaches for medical image retrieval, storing in cloud architecture and big data processing engine based on Hadoop are discussed.

Index Terms
DIBR, Image CLEF, medical images, multimodal image analysis.

The Review of Automotive Industry in Malaysia: Good Governance Perspective

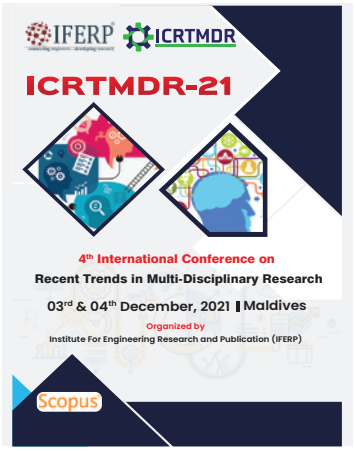
Malani Manimaharan, Student, Universiti Malaysia Pahang, Industrial Management, Malaysia
Suhaidah binti Hussain, Senior Lecturer, Universiti Malaysia Pahang, Industrial Management, Malaysia
Muhammad Ashraf Bin Fauzi, Senior Lecturer, Universiti Malaysia Pahang, Industrial Management, Malaysia

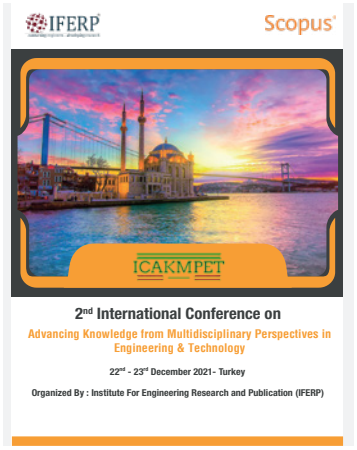
Abstract
The automotive sector has a key role in domestic growth and contributes to governance. The manufacturing sector contributes to the growth and prosperity of the country. Industry manufacturing creates well-paid jobs, encourages technological development and raises sales. Production is one of the world's most dynamic industries. In order to assure process continuity and repeatability, good governance is adopted in the manufacturing industry. The evaluation stated that effective management practises must be cascaded to the lowest level from the highest level in the business. Governance initiatives allow the organisation to perform more efficiently and efficiently. Good governance provides valuable goods, which produces wonderful market results. Good governance gives the organisation and a safe community a positive image.

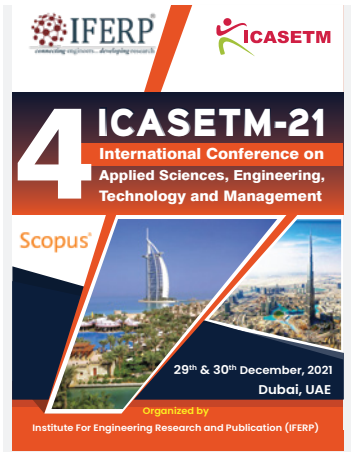
Keywords
Automotive Industry, after sales division, governance

IFERP International Conference
IFERP Explore
https://www.iciret.net/ | info@iciret.net

UPCOMING CONFERENCES







Technoarete® Group
Integrating Researchers to Incubate Innovation

SUPPORTED BY

ALL CONFERENCE ALERT
Academics conferences at a glance

ECA
Get World wide Engineering Conferences Update..

Conference Alerts
Global Academic Conferences

INTERNATIONAL CONFERENCE ALERTS

ISBN : 978-93-92105-07-4