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**ICMDRSE  
2019**

*I N T E R N A T I O N A L   C O N F E R E N C E   O N*  
**MULTI-DISCIPLINARY  
RESEARCH STUDIES  
AND EDUCATION**

**29<sup>TH</sup> - 30<sup>TH</sup> MARCH 2019 | CHENNAI**

Organized By

Institute For Engineering Research and Publication

(IFERP)



International Conference on Multi-Disciplinary Research  
Studies and Education  
(ICMDRSE -19)

Chennai, Tamil Nadu  
29<sup>th</sup> - 30<sup>th</sup> March' 19

Organized by  
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IFERP-Explore

## PREFACE

We cordially invite you to attend the ***International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE-19)*** which will be held at ***Abu Sarovar Portico, Chennai*** on ***March 29<sup>th</sup> - 30<sup>th</sup>, 2019***. The main objective of ***ICMDRSE-19*** is to provide a platform for researchers, engineers, academicians as well as industrial professionals from all over the world to present their research results and development activities in relevant fields of Engineering, Technology and management. This conference will provide opportunities for the delegates to exchange new ideas and experience face to face, to establish business or research relationship and to find global partners for future collaboration.

These proceedings collect the up-to-date, comprehensive and worldwide state-of-art knowledge on cutting edge development of academia as well as industries. All accepted papers were subjected to strict peer-reviewing by a panel of expert referees. The papers have been selected for these proceedings because of their quality and the relevance to the conference. We hope these proceedings will not only provide the readers a broad overview of the latest research results but also will provide the readers a valuable summary and reference in these fields.

The conference is supported by many universities, research institutes and colleges. Many professors played an important role in the successful holding of the conference, so we would like to take this opportunity to express our sincere gratitude and highest respects to them. They have worked very hard in reviewing papers and making valuable suggestions for the authors to improve their work. We also would like to express our gratitude to the external reviewers, for providing extra help in the review process, and to the authors for contributing their research result to the conference.

Since January 2019, the Organizing Committees have received more than 112 manuscript papers, and the papers cover all the aspects in Engineering, Technology and management. Finally, after review, about 55 papers were included to the proceedings of ***ICMDRSE-19***

We would like to extend our appreciation to all participants in the conference for their great contribution to the success of ***ICMDRSE-19*** We would like to thank the keynote and individual speakers and all participating authors for their hard work and time. We also sincerely appreciate the work by the technical program committee and all reviewers, whose contributions made this conference possible. We would like to extend our thanks to all the referees for their constructive comments on all papers; especially, we would like to thank to organizing committee for their hard work.



## Acknowledgement

IFERP is hosting the ***International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)*** this year in month of March. The main objective of ICMDRSE is to grant the amazing opportunity to learn about groundbreaking 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 travel such a long distance to attain this conference.



**Ankit Rath**  
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# **Keynote Speakers**

# Keynote Speaker's



## **Dr.K.MARAN**

Prof & Director

Sairam Institute of Management Studies

Sai Ram Engineering College, Chennai, India

Today's world focuses on different disciplines such as technology, sociology, cultural values and economy. Education is the process that helps to facilitate learning, acquire skills, habits and values, gains knowledge. Hence education plays a key role in empowering our economy, society, technology, cultural values.

Technology is another dimension in multidisciplinary research that makes a human to solve the problem by applying their scientific knowledge in the practical life. Further it helps to develop a sense of self confidence, acting individually and collectively in society. Through this framework a better society can be achieved by realizing their aims and objectives in a clear way. Economy will be stabled only if when growth across different sectors improves. Good governance is a key to economy growth and thereby we can build better socially responsible citizens.

The conference theme multidisciplinary research studies and education aims to bring out the research of various techniques and tools explored by researchers to promote the advancement of individual disciplines or a combination of several disciplines and methods. Economy can be promoted through education but interdisciplinary helps to achieve social empowerment. My best wishes to the conference organizers for framing a contemporary conference team sharing their research experience & expertise in various disciplines.

I wish the conference all success.





## **Dr.K.Sathiyasekar**

Professor, Department of EEE

S.A. Engineering College, Chennai

I am delighted to be a part of “International Conference on Multi-Disciplinary Research Studies and Education(ICMDRSE-19)” and to interact with enthusiastic scientists and technologists gathering at Chennai, India from march 29th – 30th 2019`. The present day world is the result of pursuits for novel scientific and technical innovations by the intellectual scientific societies. Burgeoning research has resulted in remarkably enhanced and comfortable human life. However, the urbanization, industrial developments and other anthropogenic activities have resulted in the environmental catastrophe. In spite of breakthrough inventions in engineering and technology, we are facing numerous challenges like climate change, global warming, carbon emission, rising sea level and the environmental deterioration.

New scientific ideas and innovative technology can only help us to cope up with such challenges. The need of hour is that, the contemporary scientist and technologists should find solutions to these problems by continuous progressive efforts, dedication and determination. The interdisciplinary approach combining engineering sciences, basic sciences and social sciences seems to be much effective to address these problems by integrating different novel ideas and technologies.

Further, for the success of new findings and novel technologies, the concerted efforts and trials are needed at global level. This conference is an appropriate platform that can provide an arena to achieve such feats by giving the chance to scientist and technologists to interact, plan and to move together even working at different places. I hope researchers from different fields will learn from each other and discuss their issues well. I express heartily thanks to organizing committee and wish for the great successful, fruitful and joyous ICMDRSE-19.



## **Mr.Murali Sundaram**

Technology Consultant-Global Technology  
Cognizant Technology Solutions[CTS]

It is my pleasure to be the part of International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE-19) to be held on 29th - 30th March, 2019, being organized by IFERP at Abu Sarovar Portico, Chennai. It is a well thought conference topic and hope to provide an opportunity to all research community and students to interact and share their experience and knowledge in their effort to convert scientific invention to technology.

The conference aims to facilitate the exchange of new ideas in the fields of Management, Engineering & Technology and to create a dialogue between developer and educators to present and discuss the most recent innovations, trends, and concerns, practical challenges and the problem solution adopted in the field of Engineering, Science and Technologies.

# ICMDRSE -19

## *International Conference on Multi-Disciplinary Research Studies and Education*

*Chennai, Tamil Nadu, March 29<sup>th</sup> - 30<sup>th</sup>, 2019*

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**ICMDRSE-19**

# **International Conference on Multi-Disciplinary Research Studies and Education**

**Chennai, Tamil Nadu  
29<sup>th</sup> – 30<sup>th</sup> March, 2019**

# **ABSTRACTS**

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**ICMDRSE-19**

**Organized by**

**Institute For Engineering Research and Publication (IFERP)**



# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Signature Verification System Using Different Algorithms

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### Abstract

In our paper, we proposed a system for signature verification based on pixels and strokes. Nowadays signature is a basic and important verification system for every individual. Everyone has a unique signature and every individual can differ from others. In many areas, this verification system is offline and not so accurate. Online verification is very efficient than the offline one. We use pixel-based method, Harris algorithm and surf to verify whether the signature belongs to the particular person or not. Our proposed system is presented to check signature using pixels, strokes etc. It is efficient enough to compare signatures easily. There is a system using only a single signature they say that it is efficient but everyone may not keep the perfect signature for the first time they may be in a hurry or in a bad mood while signing. So there may be some difference.

The main need of this system is if we use human analysis for signature verification then the humans cannot differentiate between the original and fake one and this system can differ them because it takes so many things into consideration like index points, corners point signature thickness at different points so someone cannot fool this system so easily.

### Keywords:

Index points, Corner points, Harris algorithm pixel-based method, surf algorithm, strokes.

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Fault diagnosis of transmission line using Feed Forward Neural Network

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### Abstract

The implementation of neural network for the fault diagnosis is to improve the dependability of the proposed scheme by providing a more accurate, faster diagnosis relaying scheme as compared with the conventional relaying schemes. It is important to improve the relaying schemes regarding the shortcoming of the system and increase the dependability of the system by using the proposed relaying scheme. It also provide more accurate, faster relaying scheme. It also gives selective schemes as compared to conventional system. The techniques for survey employed some methods for the collection of data which involved a literature review of journals, from review on books, newspaper, magazines as well as field work, additional data was collected from researchers who are working in this field. To achieve optimum result we have to improve following things: (i) Training time, (ii) Selection of training vector, (iii) Upgrading of trained neural nets and integration of technologies. AI with its promise of adaptive training and generalization deserves scope. As a result we obtain a system which is more reliable, more accurate, and faster, has more dependability as well as it will selective according to the proposed relaying scheme as compare to the conventional relaying scheme. This system helps us to reduce the shortcoming like major faults which we faced in the complex system of transmission lines which will helps in reducing human effort, saves cost for maintaining the transmission system.

### Index Terms

Transmission Line, Faults, Artificial Intelligence, Multilayer Feed Forward Neural Network, Backpropagation, Genetic Algorithm

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Experimental Study on Pervious Concrete Slabs

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### Dr. S. Senthil Selvan

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### Abstract

Pervious concrete is an environmental friendly composite material which consists of cement, coarse aggregate and water. In pervious concrete, voids ratio is more compare to the conventional concrete which will helps to percolates the water through pores present in it. It is otherwise called as no fine open evaluated solid which energies ground water and further more diminish the surface water spillover. In this paper experimental investigation carried out to find out the ultimate load carrying capacity, deflection and stiffness of pervious concrete slabs. The coefficient of permeability was determined by utilizing the falling head strategy. The pervious blend is comprised of coarse aggregate size 20 mm. The axial test on slab 590 X 590 X 150 mm is used to find the load carrying capacity of slab, deflection and stiffness. The results indicate that the ultimate load carrying capacity of conventional concrete is 112 kN and the pervious concrete with 5% of M-Sand is 84 kN, where as the ultimate load carrying capacity of pervious concrete is 5% of river sand is 72kN only. This indicates that the strength of pervious concrete slab with 5% M-Sand is more with compared to River sand.

### Keywords

permeability, load, deflection and stiffness.



# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Comparative Study of the Seismic Performance of RCC Building with Ribbed Slab and Grid Slab

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### Abstract

Conventional types of slabs are not generally preferred for long span structures, but whereas grid slab and ribbed slab are most suitable for long spans and also economical. However recently these two slabs are developing in India extensively, generally both of grid slab and ribbed slab consisting of ribs which makes them comparable. A complete assessment was done for the two slab systems in order to evaluate the seismic response to each slab system. The considered models in this study are OMRF frame with shear walls in addition to adopting 4,6,8 numbers of the storey by using ETABS software for analyzing and design, the followed analysis methods are Equivalent static method, response spectrum, and time history. The criteria for assessment are storey drift, base shear, time period and axial force in columns.

### Keywords

Grid slab, Ribbed slab, Storey drift, Base shear, ETABS, Storey shear

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Intelligent Machine Vision System to estimate ASTA values of Dry Red Chillies

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### Abstract

Dry Red Chilli (*Capsicum Annuum* L.) is a spice crop that is a part of the majority of the cuisines across the globe. Oleoresin extracted from Chilli finds its application both in Pharma and Culinary Industry because of its pungency and colouring properties. ASTA Colour Value is used to express the Colour values of Chilli. This paper presents the application of Artificial Neural Network(ANN) to estimate ASTA value. ANN is trained using the R Component of the Images of Chilli along with the results of Chemical Analysis. Computer Vision gives the intelligence to a Machine Vision System by using algorithms and processing the data captured in the form of an image to obtain meaningful information for decision making. The ANN developed as a part of this work will help Computer Vision to estimate the ASTA colour value of the Chilli. This work can be further extended to sort the Chillies based on ASTA colour values.

### Keywords

Dry Chilli, *Capsicum Annuum*, ASTA, colour estimation, Artificial Neural Network

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Study On the Durability Properties of Coconut Shell Concrete with Granite Powder

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### **Abstract**

An experimental investigation was done to study the durability properties of granite powder (GP) as a partial replacement for ordinary Portland cement (OPC) in conventional concrete (CC) and coconut shell concrete (CSC). Optimized percentage of GP is done to derive the maximum benefits out of it. For the optimized percentage of partial replacement of granite powder for OPC, its durability properties are water absorption, sorptivity, rapid chloride penetration test (RCPT) and volume of permeable voids (VPV) tests were conducted after curing for 3, 7, 28 days. The experimental results outcomes demonstrated that the durability properties of granite powder dust used as cement replacement in concrete, performed like traditional one and coconut shell concrete are comparable to that of other conventional lightweight concretes. It was found that 10% of granite powder can be replaced for OPC as an optimum of producing better concrete properties both in CC and CSC.

### **Index Terms**

Granite powder; replacement; coconut shell; durability properties.

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Impact Of Hydrocarbon Extraction In Neduvasal : A Psycho- Social Assessment

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**Mr. D. Renganathanand**

AsstistantCoodinator, Hope of the Hopeless, Trichy

### **Abstract**

**H**ydrocarbon extraction clean extraction method that leaves little or no hydrocarbon residue when properly utilized. At the end of the hydrocarbon extraction process, the resulting extract is clean and contains very high levels of cannabinoids and terpenes. Before production wells are dug, developers sink a large number of appraisal wells to physically assess the extent and characteristics of the reservoir. If the Neduvasal project takes off, these wells will be located within the 10-sq.-km lease area. The entire lease area will not be acquired; only areas around the proposed drill locations will be leased or acquired. Roughly five acres will be required for each drill site. Neither the locations nor the number of such wells are known at this point. Some wells may subsequently be abandoned or converted to other uses. The present study dealt with the critical analysis of the Environment Impact Assessment as if the report has given the explanation on the diverse effects of environment and precise mitigation process of the project in Neduvasal. Secondly the study dealt with the socio demography profile of the people in Neduvasl and its village system. The study is thirdly also dealing with the psycho socio impacts of the village people in Neduvasal as how far they have understood the project. The study has also analyzed the causes of the protest executed by the people movement. The study is also trying to suggest by intervention strategy that the hydrocarbon extraction project must find some other alternate ways of doing it and also it is people's responsibility of reducing oil usage in whatever the way it is possible for example, trying to use mostly the public vehicles.

### **Index Terms**

Hydrocarben, Environment, extraction

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Port Integration – A strategy for enhancing competitive advantage

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### **Abstract**

With its long coastline and strategic location, India is supposed to be in a dominant position in maritime transportation. But due to poor infrastructure and policy framework, the country extensively depends on other maritime nations such as Singapore and Colombo for transshipment. This increases the cost of exports and imports thereby placing India at a disadvantage in the global market. In response to this alarming situation, the government has taken a major initiative to promote three transshipment ports with world class facilities in the southern part of India. It is expected that these ports would compete with other transshipment ports, particularly with Colombo, and bring the transshipped cargo back to India. This paper makes an attempt to assess the competitive environment that is likely to emerge when all the three ports become operational and suggest a suitable strategy for them to enhance their competitiveness in the new environment.

### **Keywords:-**

Spammer, clustering, Classification

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Measuring Size of an Object Using Computer Vision

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### Abstract

In this research paper the real size of the object from an image is calculated. The selected algorithms used in the area of computer vision is carried out, this includes basics of the software tools efficient enough to calculate the size of the object. In this project, we proposed the measuring of size of objects in an image and computing the distances between them. Computing the size of the objects in an image is similar to computing the distance from our camera to an object — in both cases, we need to define a ratio that calculates the number of pixels per a given metric. To find this ratio, we require a reference object with two important properties. One is The reference object should have known dimensions (such as width or height) in terms of a measurable unit (inches, millimeters, etc.) and the other is The reference object should be located easily.

### Keywords

camera; image; computer vision; object size; size estimation.

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Graphical Password by Image Segmentation

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### Abstract

In this paper we proposed a new method of a password by DES Algorithm, to arrange a picture in the desired manner. This is based on a technique in which coordinates of the segmented image allows the system to fragment the image and store it in different parts. The segments of the image are converted into a grid and stores each part accordingly in order. The idea of the paper is to give access only if the image is arranged correctly.

### Keywords

Graphical password, Image Segmentation

**Performance and Comparative Analysis with  
Incremental Neurons of ANN Hidden Layer Model on Cancer  
Data Set**

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**Abstract**

Now a days, the convention of (DM) data mining techniques in specifically for aging diseases like cancer, has been latterly escalating. Care ought to be taken to predict the disease and recommend the approved medicine for the pertained disease. In this research work, we focused on predict and prevent the cancer disease from Andhra Pradesh, India. The whole cancer data is collected from Andhra Pradesh (A.P.) with good questionnaire from 2016 to 2018. As per statistical analysis results, we found the cause of cancers and nature of the cancers. In this process, we conduct the performance analysis of the cancer data set and predicting the cancer disease with supervised machine learning algorithms. We applied so many Machine Learning (ML) algorithms. We are also applied ANN (Artificial Neural Networks) algorithm, it is worked effectively for using cancer dataset. In this study, we observe the results of ANN algorithm performance with 5 to 10 hidden neurons (incremental neurons in Hidden layer (HL) of ANN model). As well, we studied the performances of ML algorithms like C4.5, ADT (Alternative Decision Trees), Naïve Bayes and Bayes Net algorithms. In comparative study, all of ML algorithms show above 96% accuracy of the cancer data set. Bayes net performed 99.6% accuracy and C4.5 performed 99.3%. Both the algorithms take 0.05 seconds time for model construction. The ANN model with 10 hidden neurons shows the peak performance compare to all supervised machine learning algorithms. It takes 0.04 seconds for the process and gives the 100% accuracy.

**Keywords:**

Cancer, Machine Learning, ANN, Data Mining, Hidden Layer (HL)



**Statistical and Supervised Machine Learning Analysis on  
Clinical Uddanam Nephrology Dataset**

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**Abstract**

**W**ith massive growth in medical and health communities, precise study of therapeutic information benefits early detection of disease, tolerant consideration and community Services. However, the analysis of accuracy is diminished when the quality of medical data is imperfect. Besides different areas display elite features of certain regional disease, this may debilitate the expectation of disease epidemics. In this paper we streamline machine learning communities. We will experiment on a regional (Uddanam area Srikakulam Dist., A.P.) kidney disease. We propose convolution machine learning based multimodal disease threat prediction algorithms using structured and unstructured data from hospitals. The clinical Uddanam nephrology data set collected from different areas of north costal of srikakulam district from year of 2016 to 2019. The most recent advances in Machine learning (ML) innovations give new viable ideal models to get start to finish taking in models from complex data. In this task, we apply algorithms and models of ML advances like Naïve Bayes, SVM and ADT are utilized to advance the human care domain and got accuracy up to 98.3%, 97.8%, 100%.

**Keywords:**

Nephrology, Machine Learning, CKD, Uddanam

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Data Encryption Standard algorithm using Java Remote Method Invocation & OpenMP

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SCOPE, VIT, Vellore

**Keshika Tank**

SCOPE, VIT, Vellore

**Santhi V**

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### **Abstract**

Cryptography is a field of study of mathematical algorithms which are related to specific aspects of information security such as confidentiality, integrity of content, authentication (entity wise), and data origin authentication. Not only is encryption important but the speed at which the encryption occurs is also a matter of major concern. Java RMI is used for the purpose of parallel encryption of text. The same can also be implemented using OpenMP.

### **Keywords:**

DES, OpenMP, RMI, Parallel, Speed

**A Comparative Study on Seismic Analysis and Design of  
Structural Light Weight and Normal Weight Concrete High  
Rise Building**

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**Abstract**

**S**eismic forces acting on the structure mainly depends onto the weight of structure, the primary theme of this work is to reduce the self-weight of the concrete structures, which can be done by using the structural lightweight concrete, it will help in minimizing the lateral seismic forces on the structure and also helps in reducing the size of the structural members and area of reinforcement required while designing. This paper consists of a comparative study on seismic behaviour of G+15 high rise building made with structural lightweight concrete (SLWC) and normal weight concrete (NWC) for different soil conditions and different zones, by using SLWC at critical conditions results shown that maximum bending moment and shear force got reduced by 40% and 34% respectively and maximum member sizes and steel reinforcement got reduced by 31% and 38% respectively, it has also been found that seismic forces on the structure got reduced considerably.

**Keywords**

Seismic weight, Storey drift, Base shear, SLWC, Natural frequency and Time period.

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Wireless Train Tracking System Using GPS with In-Vehicle Warning System for Railway Level Crossing

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### **Abstract**

Most unequipped crossings are located on tracks where train traffic is infrequent and irregular. Most of the accidents occur to people who make crossings on a regular basis and whose alertness may therefore be reduced. To improve safety, a possible solution would be to remove level crossings altogether. Removing all the crossings would be very expensive. Another possibility would be to equip crossings with warning lights and gates. This again is costly, because most crossings are located in remote areas with no electricity supply. In this paper, the aim is to develop a cost-effective solution to this problem. This proposes a system based on wireless communication network, client-server architecture, and continuous tracking of trains.

### **Keywords**

Railroad safety; Level crossing; positioning; in-vehicle warning

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Drone Control Using EEG Signal

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### Abstract

The paper presents a way to control drones using an electroencephalography (EEG) signal. Brain-Computer Interface (BCI) systems capture the brain activity of a user and allow the user to control an object. Developed initially for Military purposes BCI systems have quickly spread to other fields such as medicine, entertainment, and security. Drones, on the other hand, are quickly spreading in their functionality and uses ranging from kids toys to military surveillance, photography etc. A system was developed which controls a parrot mambo drone based on the user input taken using a Neurosky Mindwave mobile headset. The system eliminates the need for a separate handheld controller or a voice-based controller thus can be used for various purposes like military surveillance, medical assistance or recreational activities.

### Keywords

BCI, Drone, EEG signals

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Experimental study on use of cold formed steel sections as truss members

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### Abstract

This paper describes the experimental behaviour of a flat pratt truss which is entirely fabricated using cold-formed steel (CFS) angle sections. Three modeled specimens of cold-formed flat pratt truss of each 1m span were fabricated with back-to-back angle sections of 50X50X3.0mm. Five joints were made at the junction of top chord members and the vertical members, Similarly five joints were also made at bottom chord members. The intersection of chord members and vertical members were connected by bolts to the gusset plates at the junction. Experimental tests were performed by applying five concentrated loads at each junction until the failure of the member was taking place. Numerical analysis was also carried out for the truss using the finite element software and the obtained results were compared with the arrived experimental results. Both the experimental and analytical results reveals that the predominant failure of the truss occurs at the top corner junction which is nothing but a shear failure and at the mid junction of the bottom chord member which is a sagging or bending failure. Based on the experimental results it was observed that the ultimate load of the truss was increased by 33% due to the presence of gusset plates and the shear strength of the bolts in the truss. The displacements corresponding to the ultimate loads were also been noted at the junction and their behaviour were analyzed in detail as a comparative study of both experimental and analytical results..

### Keywords

Angle sections, flat pratt truss, gusset plate, truss joints.

## **A Modified Incremental Conductance Algorithm for Partially Shaded PV Array**

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### **Abstract**

**F**or a partially shaded PV array there will be several peaks in the Maximum Power Point (MPP) characteristics. The conventional Incremental Conductance (INC) algorithm cannot extract global maximum power point during shading. Therefore the INC algorithm is slightly modified to extract global maximum point during worst atmospheric conditions. Hybrid Cuk converter performance is better compared to Cuk and boost converters. The algorithm is experiment on Hybrid Cuk converter. This paper presents the performance of Cuk converter by applying modified INC algorithm to generate the switching pulses to extract maximum power when the panel is partially shaded. The results of the modified algorithm are compared with basic incremental conductance algorithm.

### **Keywords**

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

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

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## Experimental Investigation on Corrosion Damaged Concrete Column Added With Nano Silica

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### Abstract

This study examines behaviour of reinforced concrete subjected to corrosion. Concrete is the most extensively used building material in the world without a close alternative, due to this there have been major advancements in concrete technology and the need to reinforcing has been made indispensable. Traditionally the reinforcement has been carried out by steel, but the integrity of steel is greatly deteriorated by corrosion. This dictates the life of concrete in real condition. It has been observed that cement-based materials, on the addition of nanoparticles, develop distinctive properties at the molecular and nano level. In this paper, an experimental study on M30 grade conventional concrete columns and M30 grade concrete columns with 2% by weight of its cementitious materials replaced with nano-silica, subjected to varying degrees and different levels of corrosion are taken. The load is applied axially and the strength of the columns are compared. Concrete columns containing nano-silica shown an increase in strength by 20% compared to conventional concrete columns.

### Keywords

reinforcement, corrosion, nano-silica.



## **Adversarial attack on machine learning models**

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### **Abstract**

**M**achine Learning (ML) models are applied in a variety of tasks such as network intrusion detection or malware classification. Yet, these models are vulnerable to a class of malicious inputs known as adversarial examples. These are slightly perturbed inputs that are classified incorrectly by the ML model. The mitigation of these adversarial inputs remains an open problem. As a step towards understanding adversarial examples, we show that they are not drawn from the same distribution than the original data, and can thus be detected using statistical tests. Using this knowledge, we introduce a complimentary approach to identify specific inputs that are adversarial. Specifically, we augment our ML model with an additional output, in which the model is trained to classify all adversarial inputs.

### **Keywords**

Adversarial attacks, Generative Adversarial Network, Robust Classification.

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Content Based Video Retrieval: The advancement Of Content Based Image Retrieval

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### Abstract

Traditional methods of image retrieval require that meta-data is associated with the image, commonly known as keywords. These methods power many World Wide Web search engines and accomplish reasonable amounts of search accuracy. Though some content based image retrieval (CBIR) systems use both semantic and primitive attributes to match search criteria, history has proven that it is difficult to extract linguistic information from a 2D image. In this research, a novel attempt of searching the video database is proposed. Searching video based on content is practically a heavy resource consuming task since there may of 1000's of image frames inside the video will be present, searching each and every frame for exact matching is an practical impossible task, to address this issue this work proposes a motion estimated video frame extraction mechanism to detect the change in the scenes and storing a sample frame for that scene, thus reducing the total number of searchable frames..

### Keywords:

Video Database, Video Frame Extraction, 2D Image, Front End GUI, Meta Data.

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Safety measures against women violence in India using Sentimental Analysis

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### Abstract

Women status in the society gone through many changes from the Ancient days to modern society and they are promoted to equal status with man in many aspects by the reformers. Women in India facing many problems by the modern day society. Sharing 33% of equal responsibility in the social contribution, they are still living in the restless life. Increasing number of Violence and Crime rate against woman in India will set many unanswered questions to government and the society regarding women safety. The proposed work designed to analyze the various forms of violence and threats against the woman by making use of most popular and powerful social media data. The number of likes, tweets, comments, blogs and post on the particular incident against woman can be used for this analysis. These Social networking sites collectively update the feedback about particular incident and it will be exhibit under the discussion of many people. This will give the global picture of various crimes against woman and showcase how the intention framed and motivation behind the scenario. This data would helpful to safeguard the woman from the unlikely violence against them in the society. The model uses Sentimental analysis with machine learning technique and K-means clustering algorithm to classify the datasets. This model would recommend various guidelines and precautionary efforts needs to establish by the government and public awareness to save the woman from the various violence in the form of sexual harassments. This model also takes advantage to alert the woman from the difficult situations.

### Keywords

Women Safety, Violence, Social Network Sites, Sentimental Analytics, Neural Tensor Networks etc.

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## **The Impact of training on the performance of employees with special reference to the port of Djibouti**

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### **Abstract**

Ports constitute an inter-modal interface between maritime, road, rail and general cargo transport. The role of the labour force in the port industry significantly changed over the years, in particular, they are expected to have suitable abilities to cope with contemporary port issues, leverage trade-offs, and control in port production and contribute to port planning. Moreover, in ports, the labour forces have developed flexibility in following supply processes and port production (Chlomoudis & Pallis, 1999). Therefore, a new model for port labor is being developed, triggered also by the technological explosion that lowers unskilled labor requirements, but increases demand for skilled/specialized labor is called a training model. Requirements for new investments in the port industry were also triggered by amendments in sea transport standards, influencing the skill set requirements pertaining to cargo handling technologies. As a result, re-training and re-educating of port employees is now a necessity.

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## A Comprehensive Review of Damping of Low Frequency Oscillations in Power Systems

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### **Abstract**

The low frequency electromechanical oscillations, with frequency ranging from 0.1-3Hz, are inherent to electric power systems. The low frequency oscillations are related to the small signal stability of the power system and are detrimental to the goals of maximum power transfer and power system stability. Problems due to inadequate damping of such oscillations have been encountered through the history of power systems. This paper presents a comprehensive overview of damping of low frequency oscillations in power systems.

### **Keywords**

Power system stabilizer, Robust, FACTS, optimization, ANN

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Experimental Investigation on the Flexural Behaviour of Cold Formed Corrugated Steel Channel Sections

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Professor, Department of Civil Engineering, SRM Institute of science and Technology, Tamil Nadu, India.

### Abstract

This paper describes the experimental investigation on flexural behavior of cold formed steel (CFS) lipped channel corrugated section. Cold-formed steel is getting popular over the years in construction industry. However, due to its thin-walled behaviour, cold-formed steel is prompt to have buckling failure, previous research were done to provide stiffener in order to overcome this problem. In this research paper three different sets of corrugated sections have been taken for testing flexural behaviour namely (i) horizontal corrugated back to back lipped channel sections without gap (ii) horizontal corrugated back to back lipped channel sections with gap and (iii) vertical corrugated lipped channel sections by providing corrugation angle in horizontal and vertical direction. Corrugated section of cold-formed steel behave differently in beam and column compared to straight section. Corrugated section has an advantage of exhibit distinct enhancement in ultimate strength and reduced deflection in flexural behaviour. Both the Experimental and Analytical study were carried out for the chosen specimens respectively. It was noticed from the Analytical results that there was an increase in Ultimate Load carrying capacity for the vertically corrugated section. For the selected corrugated sections, it was observed from the Experimental values that the ultimate load carrying capacity was increased by 9.7% in the vertically corrugated section. This would have been because of the provision of stiffeners at the edge and web of the section.

### Keywords:

cold-formed steel, corrugation angle, flexural behavior

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Comparison of seismic analysis of a residential composite and RCC structures

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### Abstract

In India, most of the structures being constructed are Reinforced Concrete structures or Steel structures. In high rise RCC structures, the size of structural members (column, beam, and slab) increases. Due to this, self-weight of the structure also increases. Steel structures on the other hand, are ductile in nature and parameters like deflections, drifts, displacements are more compared with RCC structures. To solve these problems, composite structures might be suitable. A geometrically irregular residential building (G+18 storeys) is designed and analysed for both cases of RCC and composite structures (considering earthquake zone III) using ETABS software. The structure is analysed using linear static, linear and non-linear dynamic methods, such as equivalent static method, response spectrum method and time history method. In this study, comparison of an RCC structure and a composite structure is obtained for parameters like time period, storey displacement and storey drift, base shear, bending moment and shear forces of the structure. From the observed results, it may be clearly inferred that a steel composite, performs well in-terms of structural integrity when compared with an RCC structure.

### Index Terms:

Composite structure, RCC structure, Time period, Storey displacement, Base shear, Storey drift

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## A Nonlinear Static Analysis on A G+5storey Existing RC Building under Seismic Loading

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### **Abstract**

A six-storey existing reinforced concrete structure is subjected to seismic hazard is analyzed in this paper. Plastic hinge is used to represent the failure mode within the beams and columns once the member yields. The pushover analysis is performed on the building using ETABS-2016 and equivalent static method according to IS 1893-2016. The principles of performance-based seismic engineering are used to govern the analysis, whereas inelastic structural analysis is combined with the seismic hazard to calculate the expected seismic performance of the structure. Base shear v/s roof displacement curve of the structure called the pushover curve is an essential outcome of pushover analysis. Nonlinear static analysis is carried out in both directions (X & Y). Default hinge properties, available in some programs based on the FEMA-440(Federal Emergency Management Agency) and ATC-40(Applied Technology Council) guidelines are used for every member.

### **Keywords :**

Plastic hinge, pushover analysis, ETABS, base shear, FEMA-356, FEMA-440, ATC-40.



# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Patient Monitoring and Control System

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### Abstract

The quality of air has degraded to hazardous level in Indian cities over many years. People in India are exposed to extreme air pollution without knowing that their health is affected and there is a high risk of causing more diseases. Patients monitoring is a challenging factor in the past years. Even in hospitals it is very difficult for doctors to attend the patients, because doctors cannot not be available all the time in the hospital because of their busy schedule. Hence there is a need for a solution to monitor the patients any time for the doctors from any place. With the development of IOT devices in the recent years a solution is proposed for this. An IoT device which can be used for real time application in homes, hospitals and other places were developed as a gadget. With this gadget, the human man power can be reduced using wifi system. The patient monitoring and control system checks the pulse rate, air quality, temperature of the patients especially in hospital's using the sensors attached for collecting the data and send it to the Arduino microcontroller for processing the data. This gadget can also be used by the every one even at home, hospitals or any other places.

### Keywords:

Arduino, Internet Of Things(IoT) , Cloud, Raspberry Pi, oxygen(O2)sensor, Health monitoring.

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Design and Analysis of Low power, High Speed PLL Frequency Synthesizer using Dynamic CMOS VLSI Technology

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### **Abstract**

Power and speed are the important parameters in various communication systems. Phase locked loop (PLL) is an efficient method used in frequency synthesis. A dynamic logic based CMOS is proposed to design phase detector, VCO and loop filter. The CMOS dynamic logic is the fastest logic in all the CMOS logic families. The DSCH3 tool is used in the design of logical circuits and microwind2 tool using 90nm CMOS technology is used to measure the parametric analysis. The speed of transition time between the synthesized frequencies gives the bandwidth of loop filter. In the dynamic CMOS logic PLL, the power is reduced to 0.196mW and speed is improved to be 5.31GHz.

### **Keywords:**

CMOS Dynamic logic, PLL, VCO, DSCH3, Microwind 2

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

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## Fire Alarm System Using IOT

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### Abstract

Detection of fire in homes is necessary to avoid destruction of property due to fire accidents both natural and induced. Detection of fire can prove to be very important as it could mean the difference between life and death. Fires can occur from anywhere and at any point of time, hence the presence of Fire Alarm System helps in keeping your family safe. Some people don't see the need to have a fire alarm system. They just assume that they could smell the fire and run out in time. The average time for a house to burn down nowadays is just 60 seconds. So, by the time you smell the fire and try to run away, the fire has probably engulfed the house. The Internet of Things (IoT) is a system of devices connected and accessible through the internet. The 'Thing' in IOT could refer to any physical device, varying from a toaster to an automobile. These devices can be connected through the internet and help us manipulate or collect data from them. In this paper, we will be using a wide variety of sensors to detect the presence of fire and alert its presence to the watchman and fire officials. It discusses in detail about the functions of each module and its implementation in an elaborate manner. It also discusses the application of Iot Technology in relation to fire detection technologies.

### Keywords:

Fire alarm system, raspberry PI, Internet of things

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## **Heterogeneous clastic beach sediments behaviour – A comparative study of Kaup and Malpe beach system - A marine environment of Udyavara River basin, West Coast of India**

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### **Abstract**

The impact of assorted sediment properties depends on coastal processes which is commonly underestimated due to the exertion in portraying and calculating these natures of deposits. On careful observation of preceding in the study area reveals not only is sediment heterogeneity substantiality but also in terms of its effect on coastal processes are pragmatic. In majority of the coasts of India and abroad the heterogeneous sedimentary environment can be appreciated. Using geologic and oceanographic parameter descriptions as a guide, the sediment heterogeneity can be defined which give a rapid changing sediment appearances which include mixed grain sizes or types, spatial diversity in sediment properties and bed forms. Foremost heterogeneous environments are - gravel-sand coasts, sorted bedform fields, sand-ridge fields, Chenier's, Mud transgressed coasts, mixed tidal flats, Graded foreshores and Surf Zones. Sediment heterogeneity in each category can also be tabulated into different statistical ranges. These categories illustrate the abundant expected shapes of sediment changeability, which recommend that environmental depictions that simplify complication such as median grain size, which are inadequate to define the influence of coastal sediments. Research carried out on Udyavara River Basin comprises of Kaup and malpe beach sediments show high and Low energy level. This has been discussed on the sediment textural characteristics of the both beaches. To characterise the energy level of beaches the Sediment plays a role of document landform formation. Statistical parameters such as Graphical Mean Grain Size ( $M_z$ ), Standard Deviation ( $\sigma_1$ ), Skewness ( $Sk$ ) and Kurtosis ( $kG$ ) are the tools to relinquish the aforementioned distress. The mean grain size ( $M_z$ ) is being used to find out the dominance grain size. Standard deviation ( $\sigma_1$ ) shows the sorting nature of soil or sediment. Skewness ( $Sk$ ) measures the costiveness of skewed and also kurtosis ( $kG$ ) quantifies the sediments nature are mesokurtic to very leptokurtic.

### **Keyword:**

Coastal Beach, Mean Grain Size, Standard Deviation, Skewness, Kurtosis, Linear Discriminant Analysis.

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Review and Evaluation of Heuristics for Scheduling In Flowshop

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### Abstract

Researchers and Engineers are engaged in finding the best permutation schedule for a flow shop with different objectives functions such as minimizing the makespan time or the completion time, minimizing the total flow time, average tardiness, number of tardy jobs. The permutation flowshop scheduling problem (PFSP) is a class of combinatorial optimization problem where a set of  $n$  jobs are to be processed on a set of  $m$  machines in the same order. A number of heuristics and algorithms have been proposed since decades for solving the PFSP. In this paper, we have discussed about the classical heuristic methods CDS, NEH, RC and Differential Evolution Algorithm with the objective of minimizing the makespan. Comparison is done with the results of these proposed techniques which improve the makespan and seen that DE gives a comparable results to that of NEH.

### Keywords:

Flow shop; Makespan; Heuristics; DE; NEH

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## An Approach to Symmetric-Key Cryptography

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### Abstract

This crypto system, is a type of symmetric key cryptography system, which is effectual, productive, well organized and more reliable. This system takes plain-text as input at sender's end. Encryption algorithm is implemented on the plain-text along with symmetric key which is of 128 bits. The encryption algorithm is implemented with the help of some logical operations like circular left shift, circular right shift and XOR. After the encryption algorithm is implemented it produces text which is unreadable called cipher-text . Similarly at receiver's end cipher-text is used in the decryption algorithm along with the same key, once the decryption algorithm is implemented the cipher-text is converted back to plain-text. The decryption algorithm is implemented with the help of the same logical operation like circular left shift and circular right shift but in reverse and XOR. For different plain-text we get different cipher-text. The size of the cipher-text will depend on the size of the plain-text.

### Keywords

Symmetric Key Cryptography, Cipher Text, Plain Text, Encryption, Decryption, Security

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Optimizing the Power Generation of Co-Located Wind Solar System with Fuzzy Controls

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### Abstract

The Fuzzy Logic Controllers are proposed for the Co-Located Wind Solar Hybrid system for optimizing the power and also support load during the low wind day. The 900V,100Ah battery bank supports during low wind day. The Fuzzy controllers and Battery bank with Co-Located Wind-Solar system is modeled in MATLAB/ Simulink software to derive increase in total output power efficiency of 33.3%.The increase in total power efficiency consists of 13.6% from Solar,11.2% from wind and Battery bank 8.5%.The battery get charged during high wind and high sunny time and supplies during low wind day and night time.

### Keywords

Co-Located Hybrid System, Fuzzy based boost converter,Solar System, Wind System, Fuzzy Logic Controller, MATLAB/Simulink

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Assistive Technology for the Deaf and Blind

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### Abstract

There are about 444,000 deaf-blind people in India alone who face great adversities in going about their everyday routine. The deaf-blind form a helpless minority among the handicapped population and hence, are deprived of even the minimal support services. This venture intends to empower them to become active members of the society by providing them with the right care and support.

Braille has been widely adopted universally to literate the visually impaired and has distinguished advantages over synthetic speech. The Braille being embossed on regular paper, mostly using electronic embossers or manual slates, is susceptible to damage, hence losing readability with time [1]. Braille books which are usually bulky and expensive, are hence rendered useless over time. An alternative to this approach was the advent of the electronic Braille displays [2], but commercially available Braille displays are outrageously expensive and hence are beyond the reach of commons in most of the developing nations. Auditory access devices also go in vain as the individual is hard of hearing. That being the case, free from the demerits of both auditory devices and paper-embossed Braille and at a reasonable price point of hepatic displays, this project aims to address this challenge by rendering an affordable and portable technology for refreshable Braille. Additional functionality includes the Smartphone interface with voice input, readable e-book file input equipped with a speed control unit, color recognition and obstacle avoidance

### Keywords

Assistive technology, Braille, deaf blind, tactile display, ALPHABETICAL



# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Portable Weather Station Using GUI

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### Abstract

This paper is an advanced solution for monitoring the weather conditions. In this project we are putting together a Weather Station using a variety of sensors[15]. The platform being used is an EduArm board using wfi module. This will provide communications to the sensor[10]. A hardware module based on wireless technology, which measures temperature, air, wind. The sensors chosen for this project are based on the interface method they use and the available inputs on the EduArm. The data from the sensors are collected and displayed on LCD of EduArm[14] which is LPC1768 based micro controller and also sends the sensor data into the PC by using Serial port. By sending data from device to server by defining protocol and send data over WIFI to server. This information is received by a specially designed application interface running on a PC connected through EduArm and wireless link. The idea behind to this work is to monitor the weather parameters, weather forecasting, and warn the people from disasters effect..

Finally, we analysed and experimentally evaluated the performance of the proposed methods. We compared our evidential fusion approaches against each other and against a state-of-the-art method using real data from different driving scenarios and focusing on the detection, classification and tracking of different moving objects: pedestrian, bike, car and truck. We obtained promising results from our proposed approaches and empirically showed how our composite representation can improve the final result when included at different stages of the perception task.

### Key Words:

WeatherStation, EduArm, Portable Station, Sensors.

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## Performance Improvement of DC Boost Converter with Fuzzy Controller

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### Abstract

This paper presents the improved performance of a fuzzy PD controller than a conventional PD controller to control DC-DC Converter. The experimentation in fuzzy domain using five and seven membership functions with the proposed input and output variables. A fuzzy controller can be implemented where linear control techniques fail. The experimental results of the proposed boost converter using fuzzy control are evaluated in comparison with PD controller. All the analysis and simulations were performed using MATLAB software. The comparison of both the results indicate that the fuzzy controller is able to obtain better dynamic response. The results confirm the capability of the control methods in the improvement of the above-mentioned converter functioning.

### Keywords

Boost converter, Fuzzy PD Controller, Membership Functions, Simulation.

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## A Study on Employee Involvement in Pharmaceutical Industry in India

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### **Abstract**

Any industrial growth depends upon the involvement of its employees. Every employee is the backbone of the organization. To find out clear information many researchers have found many ways in terms of issuing questionnaires and primary information, for this study the researcher has considered some 477 samples from them have got conclusion and stating that many have involved in the industry for this study the researcher has taken stratified sampling using different statistical tools. And there is a significant relationship with employee involvement.

### **Keywords**

Industry, Involvement, stratified sampling, relationships etc...

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## A Study on Future Aspirations of Adolescents

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### **Abstract**

Education is a process of preparation for future life (John Dewy). Hence, the investigator wants to find out the future aspiration for adolescents. Aspiration is man's inner cry for the highest. It is the mounting flame within us that climbs up high, higher, and highest. As such, factors that influence of high aspirations become important to identify.

### **Keywords**

Adolescents, aspirations female

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## **A Composite Construction Progress Variance Analysis- An Approach to Estimate and Report Schedule Delays and Progress Percentage Variance in a Single Dashboard**

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### **Abstract**

**B**ackground/Objectives: To develop a composite progress delay analysis for Construction projects with integration between schedule delays and Progress percentage variance and to present in single dashboard

Methods: Composite method of analysing delays from project schedule and variance of percent of Value of Work Done (VoWD) to total value from Progress Measurement System and indicating them in a single dashboard

Results/Findings: Can be implemented at construction industries especially for the process plant construction projects.

Conclusion/Application: Composite Construction Progress Delay Analysis in every month or week in part of construction progress calculation' can be implemented in construction industries which helps Client organization to implement corrective action on time

### **Keywords**

Value of Work Done (VoWD) - a quantitative project performance value which is calculated based on the Earned Value Method (EVM)

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## A Study on Different Modes of Logistics

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### **Abstract**

Indian logistics sector comprises the entire inbound and outbound segments of the manufacturing and service supply chains. Logistics infrastructure has received lot of attention both from business and industry as well as policy makers. However, the role of managing the infrastructure effectively has been slightly under-emphasized. Inadequate logistics infrastructure has an effect of creating bottlenecks in the growth of an economy; the logistics management has the capability of overcoming the disadvantages of the infrastructure in the short run while providing cutting edge competitiveness in the long term. It is here exist several challenges as well as opportunities for the Indian economy. There are several models that seem to be emerging based on the critical needs of the Indian economy that can stand as viable models for other global economies as well.

### **Key Words:**

Reverse Logistics, Green Logistics, Disposal Logistics and Global Logistics

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## **A study on job enrichment and redesigning of work In indian manufacturing companies**

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### **Abstract**

Job Enrichment is the most important aspect of any organisation especially with regard to manufacturing companies in India. To add up with that the redesigning of work done by the employees in the manufacturing companies will make the employees to work in an efficient manner. The employees will show higher productivity when they are motivated by the organisations. There are different ways of motivating employees in the organisations which include financial motivation and non-financial motivation. The belongingness of employees can be increased only when the employees are properly motivated. The self motivated employees will display higher productivity levels. The increase in productivity will lead to the increase in the performance of achieving their goals and objectives in the shortest period of time. The article tries to identify the importance of job enrichment and redesigning of work among employees who are working in the manufacturing companies in India.

### **Keywords:**

Job Enrichment, Job redesign, Motivation, Job Satisfaction, Productivity.

# International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE -19)

29<sup>th</sup> - 30<sup>th</sup> March 2019 at Chennai, Tamil Nadu



## **The Mediating effect of work quality on the relationship between shift work, customer satisfaction and profitability**

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### **Abstract**

The purpose of this paper is to study the effectiveness of work quality as a mediating variable to address the importance of shift work and customer satisfaction on profitability. The paper first aims to find whether shift work and customer satisfaction has a direct effect on profitability. Secondly, the paper aims to find whether work quality mediates the relationship between shift work and profitability. Thirdly, the paper aims to find whether work quality mediates the relationship between customer satisfaction and profitability. The author has used a sample size of 165 respondents from the logistics industry who works in shift work and convenient sampling (non-random sampling method) method was used for the study. Firstly the author used multiple regression to find the relationship between the independent variables (shift work and customer satisfaction) and the dependent variables (profitability). Secondly, the author used boot strapping technique in AMOS to find the mediating effect of work quality on the relationship between shift work and profitability as well as the relationship between customer satisfaction and profitability. The findings show that work quality completely mediates the relationship or path between shift work and profitability where as work quality partially mediates the relationship or path between customer satisfaction and profitability.

### **Index Terms:**

work quality, customer satisfaction, shift work, profitability, mediating effect, complete mediation, partial mediation



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## Factors Influencing Investment Decision of the Individual (A Study related to selected Individual Investors in Chennai City)

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### **Abstract**

The purpose of investment is to gain a profitable returns by investing money .A variety of investment avenues are available to individuals fixed deposit, insurance policies, government securities, corporate bonds, Shares and mutual fund, real estates, commodities, chit funds, post office schemes, investment in gold and silver. Various factors influences the investment decision of the individual. Demographic profile also plays a vital role in investment decision of the individual. Thus, this study aims to find out attitudedifferences in the perception of individual investors on factors influencing investment decision on the basis demographical profile of the individuals. The survey was collected from 374 individuals in Chennai, Tamil Nadu. Descriptive statistics (t-test and f-test) are used to find out the value of mean, standard deviation, standard error, mean of factors influencing individual investment decision. The results found that factors of selection of investment varies according to gender, age, occupation, usage of internet, level of computer knowledge, usage of online trading.

### **Index Terms:**

investment, investors, occupation, Chennai

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## A Study on Shipping Lines in Global Market

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### **Abstract**

The Shipping Lines, NVOCC, MTO's is a company that organizes shipments for individuals or other companies and may also act as a carrier. A forwarder is often not active as a carrier and acts only as an agent, in other words as a third-party (non-asset-based) logistics provider that dispatches shipments via asset-based carriers and that books or otherwise arranges space for these shipments. The research study is about the factors influencing customer's choice of Shipping Lines Middle East Sector. So the researcher here used different descriptive methods like interview method, survey method and observation method to know the various impacts and expectation of the customers towards the customer's choice towards the shipping lines to Middle East Countries from Chennai.

### **Index Terms:**

Freight forwarders, Shipping lines, Middle east& Ports

## **An Overview of Microbial Inactivation in Food Using Pulsed Electric Field**

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### **Abstract**

Nourishment treatment has been conveyed by thermal or non-thermal strategies. In late days, a conceivable strategy for microbial deactivation in nourishment is done by use of Pulsed Electric Fields (PEF). In the present work, pulse framing network (PFN) for creating high voltage rectangular pulses has been structured and created. Recreation has been done and the impact of keep going stage inductance on the overshoot of the yield waveform is examined. A sterilisable nourishment handling chamber was structured and manufactured. Estimation of electric field in the nourishment chamber has been completed utilizing programming.

### **Index Terms:**

Pulsed electric field, Food preservation, Chamber, Microbial count, Microbial deactivation.

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## Bayesian Classification Model for Predicting the Effort for Software Projects

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### Abstract

In recent times, the use of agile methods in software development is increasing, the problem of effort estimation remains quite a challenge, mostly due to the lack of many standard metrics to be used for effort prediction in plan-driven software development. The Bayesian network model presented in this paper is suitable for effort prediction in any agile method. This model can be commonly used model of software estimation influenced by four coefficients. The optimal coefficients will produce optimal model in estimating effort and time development. used as early as possible, during the planning stage. The structure of the proposed model is defined by the authors, while the parameter estimation is automatically learned from a dataset. The data are elicited from completed projects of a software company. This paper describes various statistics used to assess the precision of the model: mean magnitude of relative error, accuracy (the percentage of successfully predicted instances over the total number of instances), mean absolute error, root mean squared error, relative absolute error and root relative squared error.

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## Hybrid Optimization Algorithm for Association rules Hiding

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### Abstract

Optimization algorithms like a genetic algorithm, particle swarm and cuckoo optimization algorithms have a trade-off in the reduction of ghost rules and lost rules in association rule hiding. This paper proposes a novel Hybrid optimization algorithm that acquires the characteristics of the above said algorithms for association rule hiding and it has been shown that it produces better results in less time. Further, the newly introduced concepts on the lost rule generation and recovery are seen to produce almost 99% of lost rules with a reduction in side effect factors from 24% to 5%.

### Index Terms:

Association Rule hiding, Genetic Algorithm, Ghost rules, Lost rules

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## Marine Main Engine Remote Control System with Redundancy CAN Bus Based on Distributed Processing Technology

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### **Abstract**

For center speed and four-stroke marine diesel motor, another Main Engine Remote Control System in light of conveyed handling and double excess CAN arrange correspondence innovation was exhibited. It incorporates motor control unit, demonstrating board unit, motor wellbeing unit, primary motor interface, computerized representative unit and dispersed preparing unit. Framework information can be traded by double repetitive CAN organize. The appropriated handling unit is free in material science totally, so it has less effect on different units when a few units broke down. The correspondence of framework units is composed by open correspondence convention of CAN, it can individual test and investigate. The System has capacity of self-protection when misfortune influence, and can defer close down when loss of air. Its working mode and man-machine interface are advantageous and well disposed.

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## Survey on Regenerative and Dynamic Braking Performance in Motor Application

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### **Abstract**

This paper presents the analysis of the different braking system and fed into the motor application. Electric braking plays a major role in the working of electric vehicles the performance development, energy utilization. So the braking system is used to enhance the performance of the motor. Here the analysis of regenerative and dynamic braking performance in an induction motor. In energy generation context, regenerative braking is very proficient. On the other hand in dynamic braking, the energy will not fed back to the source, but the performance of regenerative braking is the generated power fed back to the source. Control techniques have used to utilize the energy efficiency of regenerative braking and analysis their performance in regenerative braking. In this study, comparison has been made between the utilization of regenerated power in dynamic braking and regenerative braking.

### **Keywords:**

Electrical braking, induction motor, regenerative braking, dynamic braking.

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## A Study on Logistics Business

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### **Abstract**

In the highly competitive global market, the burden on organizations to select a innovative ways to create a value to the customer and deliver it to them grows stronger and stronger. The increasing need for all the companies to compete with each other in respect of their products in a international market, with regard to their cost, quality and services offered, has increased the need to develop a effective logistic systems which is more efficient than others. Therefore, in the last two decades, logistics has taken a tremendous moved from an operational function to the corporate function level. There has been a growing recognition that effective logistics management throughout the firm and supply chain can greatly assist in the goal of cost reduction and service enhancement.

### **Key Words:**

Low cost, Government initiatives, Workforce & Research



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## Network Intrusion Detection System Using Raspberry Pi

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### Abstract

Nowadays, setting up a secure network environment is expensive and really difficult in private networks and we have a lot of sensitive data which attackers can access if there is no security devices installed in our private network. In this project, the iptables in the Linux operating system integrated into the Raspberry Pi is used to reinforce network security policies and hence helping to inspect the incoming packets based on application layer protocols. This in turn ensures that abnormal packets do not get into our network. To increase this system's functionality it will also be programmed to work as a Domain Name System server and DNS cache to speed up DNS requests and filter out bad DNS queries. It will also act as Dynamic Host Configuration Protocol server to distribute basic network parameters to devices joining the LAN (Local Area Network) . The primary goal of this network based Intrusion Detection System(IDS) is to detect malware or vulnerability exploits. If we run a packet capturing tool in this device then we can inspect each and every packet that is entering or leaving our network. Therefore this device acts as a central network monitoring node to watch and debug network traffic.

### Keywords

IP Tables, Domain Name System, Dynamic Host Configuration Protocol, Intrusion Detection System, Local Area Network, Raspberry Pi

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## A Novel Approach to Brain Tumour Detection

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### Abstract

The detection of brain tumour is one of the most challenging tasks in the field of medical image processing, since brain images are very complicated and tumours can be analyzed efficiently only by the expert radiologists. Therefore, there is a significant need to automate this process. Segmentation of human brain from MRI scan slices without human intervention has become one of the most active research areas in the field of medical image processing. Brain segmentation has various important applications in diagnosing a number of disorders. The main aim of this research work is to recognize a tumour and its quantifications from a specific MRI scan of a brain image thereby obtaining the quantitative analysis of MRI brain tumour which allows useful key indicators of disease progression. Thresholding approach segments scalar images by generating a binary partitioning of the image intensities. Otsu's technique is used to automatically carry out histogram shape-based image thresholding. Then, compute the area of the tumour by a fully automated process and its symmetry analysis. Segmentation is done on the basis of a threshold, due to which the whole image is converted into a binary image. Finally, SVM is used to carry out the actual classification.

### Keywords

Graphical User Interfacing (GUI), brain tumour, Magnetic resonance imaging, Otsu thresholding, Tumour segmentation, Magnetic resonance imaging, SVM Classifier, MATLAB.

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## Predictive Analysis for Environment Data

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### Abstract

The proposed system involves the predictive analysis of environment data. This project analyzes the forest cover in India as a whole and also in terms of states. This also analyses the species growth with respect to the forest cover and the survival of species based on their Kingdoms of Classification. This also finds the dependencies between the forest covers of India with the flora of India. With respect to fauna, this project analyzes the state population of India's national animal, Tiger. This project also tends to find the degree of deforestation over years and the fall in the tiger population across different states and union territories of India. This also analyses the wasteland cover and relates to find the areas of improvement for the better of Indian flora and vegetation. Thus, this project checks for relationships, dependencies and variations between flora and fauna to obtain patterns for the betterment of Indian Ecosystem.

Our project is majorly concerned about data analysis and predictions, where in, with the help of the various data estimates of forest covers and tiger estimates, we were able to visualize, the changes in depletion from year to year. Our target areas were 2016, 2018 and 2020. For which we used the data estimates of the year 2009, 2011 and 2013. We used the method called linear regression to analyze the data. The R tool helped us to proceed with the predictions and R language was helpful to code. Based on the predictions we were able to derive and predict the future estimates of the two factors – forest covers and tiger estimates. We plotted our predictions in Indian map, so as to find the regions which have to be concentrated to balance our eco system. Tableau software helped us to give individual and comparative result set and based on these predictions, comparative analysis and conclusions were drawn for the upcoming years

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## Monitoring the electrical properties and modified insulation of enhancing XLPE high voltage cables

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### **Abstract**

**E**lectrical treeing is the dominating failure phenomena in solid insulating material. Treeing occurs due to voids, dust and impurities present in the insulation material , change in the crystalline structure, stress occurring in the semi-crystalline structure and environmental factors. The growth characteristics of electrical tree is analyzed by injecting high voltage continuously using transformer in XLPE sample

### **Keywords**

XLPE, high voltage,treeing,nano particles



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