SARANATHAN COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi and affiliated to Anna University, Chennai)

Accredited by NBA & NAAC A+

Department of Mechanical Engineering

Venkateswara Nagar, Panjappur,

Tiruchirappalli - 620 012,

Tamil Nadu, India.

www.saranathan.ac.in

3.3.3 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during year 2023-2024 (10)

SARANATHAN COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai-25)

Venkateswara Nagar, Panjappur, Tiruchirappalli - 620 012, Tamil Nadu.

INDEX

CRITERION: 3.3.3

Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during year

2023-2024

Department of Civil Engineering

Chapter

Data-driven optimization on the workability and strength properties of M-30 grade concrete using MOORA

By A. Anandraj, S. Vijayabaskaran, P.V. Rajesh

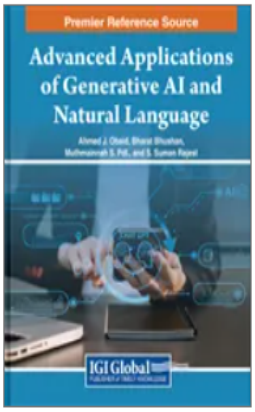
Book Computational Intelligence based Optimization of Manufacturing Process for Sustainable Materials

Edition	1st Edition
First Published	2023
Imprint	CRC Press
Pages	20
eBook ISBN	9781003257714

ABSTRACT

Construction in India and other developing countries is increasing at an alarming rate, as is the consumption of energy and resources. As a result of these developments, most developing countries have condensed the usage of virgin materials as fine and coarse aggregates in construction. As a result, they are concerned about the environment, natural resources, and garbage recycling. Many industries produce huge amounts of waste that ends up in landfills. These materials can be used as a substitute to traditional building materials in the construction industry. This method conserves natural resources and decreases landfill site requirements. The primary goal of this present work is to discover the concrete's potential by utilizing Bentonite, Recycled Glass Aggregate (RGA) and Recycled Concrete Aggregate (RCA). The study's hypothesis is that using bentonite (0%, 5%, 10%, and 15%) as a replacement for cement in concrete, along with recycled glass aggregate (0%, 10%, 15% and 20%) as fine aggregate, and recycled concrete aggregate (0%, 10%, 15% and 20%) as a replacement for coarse aggregate in concrete, results in improvements in the overall quality of concrete. This research study deals with the examination of compressive strength, workability and split tensile strength for 7days as well as 28days and comparison of their strength with conventional concrete. Based on the test results, the maximum compressive strength, workability and split tensile strength for the optimal percentage of mix was found out using a Multi-Criteria Decision Making (MCDM) technique known as Multi-Objective Optimization based on Ratio Analysis (MOORA).

Department of Computer Science and Business Systems Engineering



DDoS Attack Detection in WSN Using Modified BGRU With MFO Model

S. Venkatasubramanian, R. Mohankumar

Source Title: Advanced Applications of Generative AI and Natural Language Processing Models
Copyright: © 2024 | Pages: 20
DOI: 10.4018/979-8-3693-0502-7.ch014

Abstract

Significant challenges in the areas of energy and security persist for wireless sensor networks (WSNs). Avoiding denial-of-service assaults is a priority for safeguarding WSN networks. As open field encryption becomes the norm, conventional packet deep scan systems can no longer use open field review in layer security packets. To the existing literature evaluating the effect of deep learning algorithms on WSN lifespan, this study contributes the auto-encoder (AE) and then the bidirectional gated recurrent unit (BGRU). The learning rate of the BGRU is also chosen using the moth flame optimization technique. Learning is just one of the approaches that have emerged in response to the pressing need to distinguish between legitimate and criminal users. This chapter also demonstrated that for numerical statistical data, the sweet spot is reached when the number of records in the dataset is between three thousand and six thousand and when the percentage of overlap across categories is not less than fifty percent.

Department of Computer Science and Engineering

AUTHORS PROFILE

Dr. S. Mohana is an Associate Professor in the Computer Science and Engineering Department at Saranathan College of Engineering, located in Trichy, Tamil Nadu, India. She has a strong educational background, having completed her B.E. degree in Computer Science and Engineering from Madras University, SRM Easwari Engineering College-Chennai in 2001. she also obtained her M.E. degree in Computer Science and Engineering from Anna University, Pavendar Barathidasan College of Engineering - Trichy in 2008. In pursuit of further education, she obtained Ph.D. degree in Information and Communication Engineering from Anna University, Chennai, in 2017.

With a career spanning 17 years in the teaching field, Dr.S.Mohana has accumulated a wealth of academic experience. She has contributed to the field through her research, with approximately 50 research papers published in prestigious journals indexed in SCI, Scopus, Web of Science, and UGC Care and in many international conferences. Additionally, she holds 3 patent related to her research work..Dr. S.Mohana is an active lifetime member of the Indian Society for Technical Education (ISTE & IAENG),. Her research interests lie in the areas of Data Mining, Machine Learning, Bio-inspired Computing, and Software Engineering. Apart from her research and teaching responsibilities, Dr. S. Mohana has also delivered numerous guest lectures to students from various engineering colleges. she holds the position of Associate Professor at Saranathan College of Engineering in Trichy, Tamil Nadu.

Dr. C. Shyamala, designated as Associate Professor, Computer Science and Engineering department, K.Ramakrishnan College of Technology. Dr.C.Shyamala has completed her Ph.D. in Computer Science, special focus on"Defect Prediction Using Data Mining Techniques". She acquired a master's degree in Computer Science from Anna University, Chennai. She has completed her bachelor's degree inComputer Science from Bharathidasan University, Trichy.

Her area of research is dedicated to Data Mining, Software Engineering. Currently, she has more than 10research papers indexed in SCOPUS, Web of Science, ASP& UGC Care Approved Journals. As per her Professional Affiliation is concerned, she is a Member of CSI, ISTE.

CHARULATHA PUBLICATIONS
38/7, Rukmani Street, West Mambalam, Chennai - 600 033.
Phone : 98404 28577
Email : charulathapublication@yahoo.com
FOR ONLINE PURCHASE
web : www.charulathapublication.com

ISBN-13: 978-93-5577-593-1

Beyond the Wires: The Evolution and Feature of Computer Networks

Dr. S. Mohana, Dr. C. Shyamala

Beyond the Wires:
The Evolution and Feature of
Computer Networks

Dr. S. Mohana
Dr. C. Shyamala

CHARULATHA PUBLICATIONS

Journal of Innovative Image Processing (ISSN: 2582-4252)
www.irojournals.com/iroiip/

Deep Learning Algorithms for Skin Disease Classification

Pradeepa R[1], Punitha V[2], Senthamil Selvi R[3]

[1]M.E., Department of Computer Science and Engineering,

[2]Professor & Head, Department of Computer Science and Engineering,

[3]Professor, Department of Computer Science and Engineering,

Saranathan College of Engineering, Panjappur, Trichy, Tamil Nadu, India -620012.

E-mail: [1]pradeeravi96@gmail.com, [2]punitha-cse@saranathan.ac.in, [3]senthamilselvi-cse@saranathan.ac.in

Abstract

Skin diseases are a serious concern of public health worldwide, and successful treatment needs a correct and timely diagnosis. Traditional diagnostic methods mostly depend on dermatologist's visual observation and this leads to subjective interpretations coupled with time-consuming processes. Deep learning algorithms have lately been known as powerful means for automated medical image analysis that present more accurate and quicker results at the same time. This study analyses the usage of state-of-the-art deep learning algorithms like YOLOv8, Deep CNN, and ResNet50 used for classification of skin diseases using dermatological images. Classifying the skin conditions relies heavily on the ability to identify and extract essential features. Different skin conditions were covered under large dataset thus providing a comprehensive foundation for training and validation aimed at ensuring that the models could generalize well across different diseases. Each algorithm also employs transfer learning techniques by utilizing pre-trained models based on large image datasets in order to improve adaptability and generalization over new data types. The use of deep learning algorithms in classifying skin diseases represents a significant method to achieve efficient and accurate diagnosis with benefits to both patients and healthcare professionals as is the trend in medical image analysis. The advanced deep learning models introduced in this paper excel at classifying complex skin diseases, outperforming the machine learning approaches in performance.

Extended version of article received from 4th INTERNATIONAL CONFERENCE on Artificial Intelligence,5G Communication and Network Technologies
DOI: https://doi.org/10.36548/jiip.2024.2.001
Received: 13.03.2024, received in revised form: 16.04.2024, accepted: 02.05.2024, published: 11.05.2024

VELAMMAL
INSTITUTE OF TECHNOLOGY
Approved by AICTE New Delhi & Anna University Chennai
Velammal Knowledge Park, Chennai - Kolkatta Highway, Ponneri 601204

ICA5NT 2024

Best Paper Award

is hereby granted to

Dr. SENTHAMIL SELVI R

SARANATHAN COLLEGE OF ENGINEERING

for **participation and presentation** of paper entitled

DEEP LEARNING ALGORITHMS FOR SKIN DISEASE CLASSIFICATION

has presented at **4th International Conference on Artificial Intelligence, 5G Communications and Network Technologies (ICA5NT 2024)** organized by the **Department of Electronics and Communication Engineering & Department of Information Technology**, Velammal Institute of Technology, Chennai held on **21 & 22, March 2024.**

Coordinator
Dr.R.Jothi Chitra
Professor-ECE

Coordinator
Dr.M.Sivarathinabala
Associate Professor-ECE

Coordinator
Mr.V.Vinoth kumar
Assistant Professor-IT

Convener
Dr.P.Deivendran
Associate Professor & Head-IT

Convener
Dr.B.Sridevi
Professor & Head-ECE

Principal
Dr.N.Balaji

Global Conference Hub

CERTIFICATE

OF PARTICIPATION

PROUDLY PRESENTED TO

Dr. R. Senthamil Selvi

Associate Professor, Department of CSE, Saranathan College of Engineering, Trichy, Tamil Nadu, India

for Attending & Giving an oral Presentation for the Paper Entitled

NeuroIntel : A Cognitive Neural Disorder Prediction System Using Machine Learning Algorithms And Sequential CNN

in International Conference on Advancements in Science, Technology and Management (ICASTM) 2024 - Jointly Organized by Department of Computer Science, St. Xavier's College of Management & Technology, Patna, Bihar, India & Global Conference Hub, Coimbatore, Tamilnadu, India on 25/04/2024 & 26/04/2024.

Dr. Rakesh Kumar Pathak
Conference Convener - ICASTM 2024,
Department of Computer Science, St. Xavier's College of Management & Technology, Patna, Bihar, India.

Fr. Dr. Martin Poras SJ
Principal, St. Xavier's College of Management & Technology,
Patna, Bihar, India.

RSP CONFERENCE HUB

CERTIFICATE

OF APPRECIATION

PROUDLY PRESENTED TO

Dr. R. Senthamil Selvi

Associate professor, Saranathan College of Engineering, Trichy, Tamilnadu

for attending & giving an Oral Presentation for the paper entitled

Prediction of State of Charge Consumption in electric vehicles using XGBoost regression

in International Conference on Advancement in Science, Engineering and Technology (ICASET) 2023

organized by Vidya Vihar Institute of Technology, Purnea, Bihar, India and RSP Conference Hub, Coimbatore, Tamilnadu, India

Date of the Conference : 29th & 30th September 2023

ER. OM PRAKASH SINGH
Conference Convener
ICASET- 2023

DR. ASHESHWAR YADAV
Director,
Vidya Vihar Institute of Technology

EASWARI ENGINEERING COLLEGE

An Autonomous Institution

(A Unit of SRM Group of Educational Institutions)

[Approved by AICTE | Affiliated to Anna University, Chennai | NAAC - Accredited 'A' Grade 2(f) & 12(B) Status (UGC) | ISO 9001:2015 Certified | NBA Accredited programmes | FIST Funded (DST) | SIRO (DSIR)]

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

International Conference on Multidisciplinary Innovations in Computing and Communication

ICMICC'24

CERTIFICATE OF PARTICIPATION

This is to certify that Dr./ Prof./ Mr./ Ms. Dr. R. Senthamil Selvi of SARANATHAN COLLEGE OF ENGINEERING has presented the paper entitled SMART MINDS:E-LEARNING PLATFORM WITH LEARNER STYLE PREDICTION AND OPTIMISATION USING FELDER SILVERMAN ALGORITHM IN DEEP LEARNING in the International Conference on Multidisciplinary Innovations in Computing and Communication (ICMICC'24) on 9th May, 2024.

Co-Convenor Convenor Principal

SRM TRP ENGINEERING COLLEGE
Affiliated to ANNA UNIVERSITY
TIRUCHIRAPPALLI

The SDG Accord

Sl. No TRP24CSECON188

Certificate of Participation

This is to certify that Dr. /Prof. /Mr. /Ms. ..... **Dr. S. Mohana**

of ..... **SARANATHAN COLLEGE OF ENGINEERING** ..... has presented a paper titled

Predictive Modeling Strategies for Sustainable Development

in the 3rd National Conference on **"Innovations and Cutting-Edge Advancement in Computer Science for Advancing Sustainable Development Goals" (ICEACS-24)** organized by the **Department of Computer Science and Engineering & Artificial Intelligence and Data Science, SRM TRP Engineering College, Tiruchirappalli, Tamil Nadu, India,** during 28.06.2024.

Convener **Principal**

IEEE CARE COLLEGE OF ENGINEERING STUDENT BRANCH

CARE COLLEGE OF ENGINEERING
An Autonomous Institution
Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai,
Accredited by NAAC with 'A' Grade
No.27 Thayanur, Trichy 620 009

CERTIFICATE OF PARTICIPATION

This is to certify that

Dr. S. MOHANA, ASSOCIATE PROFESSOR of

SARANATHAN COLLEGE OF ENGINEERING

has Presented Paper Entitled as

ENHANCING ACCESSIBILITY: VOICE-BASED EMAIL SYSTEM FOR THE VISUALLY IMPAIRED WITH AI INTEGRATION

in the "International New Frontier Challenges in Communication, Artificial Intelligence, Security and Technology (ICCAST'24) (Online)" - organized by Department of Electronics and Communication Engineering at CARE College of Engineering, Tiruchirappalli during 26th & 27th April , 2024.

Mrs. R. Vanitha
Organising Chair
CARE College of Engineering

Dr. J. Jeyarani
HOD/ECE
CARE College of Engineering

Dr. S. Shanthi
Principal
CARE College of Engineering

IEEE

SRM TRP ENGINEERING COLLEGE
Affiliated to ANNA UNIVERSITY
TIRUCHIRAPPALLI

NBA NATIONAL BOARD OF ACCREDITATION

INSTITUTION'S INNOVATION COUNCIL

The SDG Accord

Sl. No.: TRP24CSECON045

Certificate of Participation

This is to certify that Dr. /Prof. /Mr. /Ms. **Dr.Mohana.S**

of **Saranathan College of Engineering** has presented a paper titled

Manathiran Kalvi – An Educational App For Differently Abled Students

in the 3rd National Conference on **"Innovations and Cutting-Edge Advancement in Computer Science for Advancing Sustainable Development Goals" (ICEACS-24)** organized by the **Department of Computer Science and Engineering & Artificial Intelligence and Data Science, SRM TRP Engineering College, Tiruchirappalli, Tamil Nadu, India,** during 28.06.2024.

Convener **Principal**

ANNA UNIVERSITY
Chennai - 600 025
CENTRE FOR RESEARCH

Certificate of Appreciation

This certificate is awarded to

Ms. Shapna Rani. E

for presenting the paper titled

Automatic Detection of Welding Defects Using Yolov5

during the International Conference on

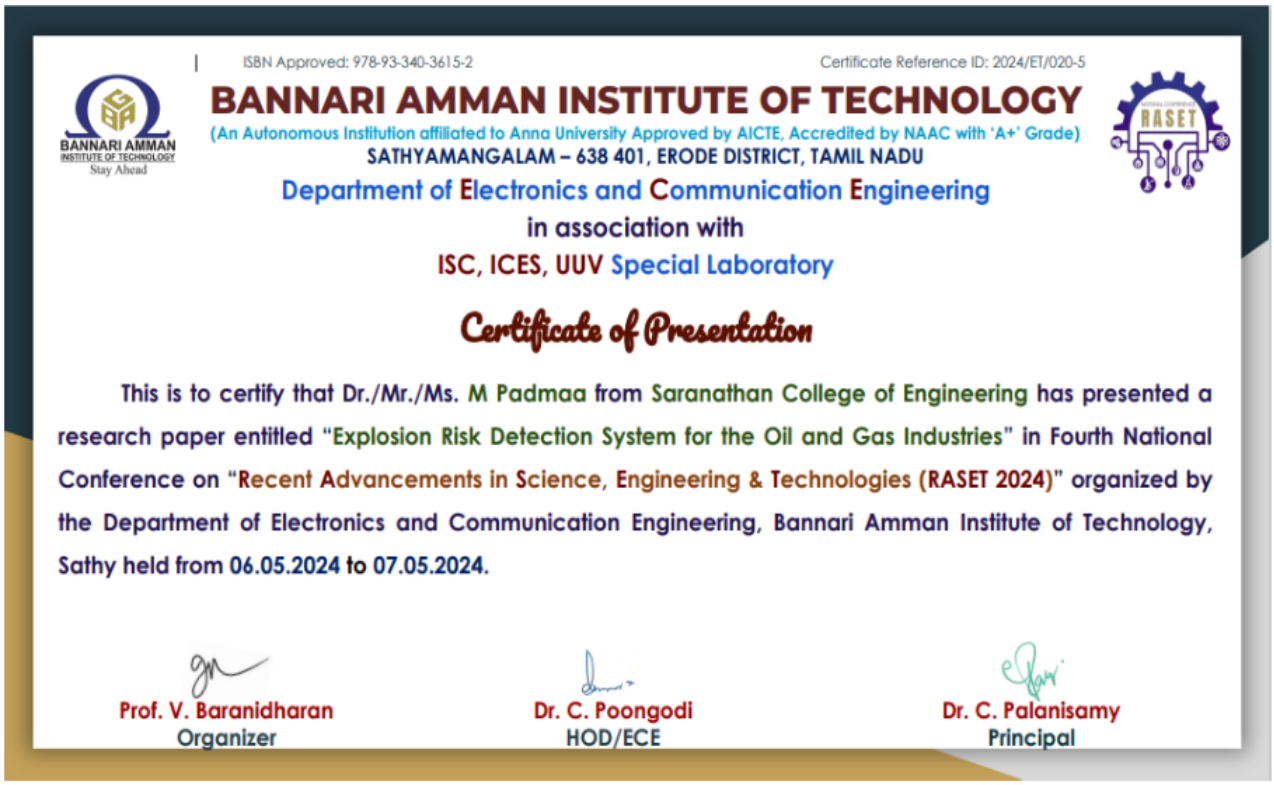
"Research Trends in AI & IoT for Infrastructure and Industry (AIIII 2024)"

organized by the Centre for Research, Anna University from 6th to 8th March 2024.

Organizing Secretary
AIIII 2024

Registrar
Anna University

Department of Electronics and Communication Engineering



ISBN Approved: 978-93-340-3615-2 Certificate Reference ID: 2024/ET/020-5

BANNARI AMMAN INSTITUTE OF TECHNOLOGY

(An Autonomous Institution affiliated to Anna University Approved by AICTE, Accredited by NAAC with 'A+' Grade)

SATHYAMANGALAM – 638 401, ERODE DISTRICT, TAMIL NADU

Department of Electronics and Communication Engineering

in association with

ISC, ICES, UUV Special Laboratory

Certificate of Presentation

This is to certify that Dr./Mr./Ms. M Padmaa from Saranathan College of Engineering has presented a research paper entitled "Explosion Risk Detection System for the Oil and Gas Industries" in Fourth National Conference on "Recent Advancements in Science, Engineering & Technologies (RASET 2024)" organized by the Department of Electronics and Communication Engineering, Bannari Amman Institute of Technology, Sathy held from 06.05.2024 to 07.05.2024.

Prof. V. Baranidharan
Organizer

Dr. C. Poongodi
HOD/ECE

Dr. C. Palanisamy
Principal

KCG
COLLEGE OF TECHNOLOGY
Affiliated to Anna University
AUTONOMOUS

2nd INTERNATIONAL CONFERENCE ON
Integration of Advanced Technologies for Industry 4.0

CERTIFICATE
OF PRESENTATION

This is to certify that **Dr. V. Mohan** of Saranathan College of Engineering, Tiruchirapalli has presented the paper titled **Multispectral Image Dehazing Using Convolutional Neural Network (CNN)** in the **2nd International Conference on Integration of Advanced Technologies for Industry 4.0 (ICIATI)** held on 23 & 24 June 2023 at KCG College of Technology, Chennai, India

General Chair

Dr. P. Deiva Sundari
Convener

KCG
COLLEGE OF TECHNOLOGY
Affiliated to Anna University
AUTONOMOUS

2nd INTERNATIONAL CONFERENCE ON
Integration of Advanced Technologies for Industry 4.0

CERTIFICATE
OF PRESENTATION

This is to certify that **Dr. P. Shanmugapriya** of Saranathan College of Engineering, Tiruchirapalli has presented the paper titled **Multispectral Image Dehazing Using Convolutional Neural Network (CNN)** in the **2nd International Conference on Integration of Advanced Technologies for Industry 4.0 (ICIATI)** held on 23 & 24 June 2023 at KCG College of Technology, Chennai, India

General Chair

Dr. P. Deiva Sundari
Convener

CERTIFICATE

2023 International Conference On Smart Technologies For Smart Nations (SmartTechCon)

AMITY GLOBAL INSTITUTE

18–19 August 2023, Amity Global Institute, Singapore

SmartTechCon

This is to certify that **Dr K MALAISAMY**

from SARANATHAN COLLEGE OF ENGINEERING, INDIA *has participated and presented a paper titled* **Array Antenna Structure for Space Applications**

in International Conference on Smart Technologies for Smart Nation (SmartTechCon 2023) held at Amity Global Institute, Singapore during 18 – 19 August 2023.

Prof. Dr Teoh Teik Toe
Technical Program Chair

Dr. S. K. Niranjan
General Chair

Dr Easwaramoorthy Rangaswamy
Conference Chair

Prof Choong Kit Leon
Patron

AMITY SINGAPORE · IEEE SINGAPORE SECTION · IEEE

VELAMMAL
INSTITUTE OF TECHNOLOGY
Approved by AICTE New Delhi & Anna University Chennai
Velammal Knowledge Park, Chennai - Kolkatta Highway, Ponneri 601204

ICA5NT 2024

Certificate of Appreciation

is hereby granted to

EINDHUMATHY J

Saranathan College Of Engineering

for **participation and presentation** of paper entitled

Optimizing Neuronal Behavior via Dynamic Activation Function Adaptation

has presented at **4th International Conference on Artificial Intelligence, 5G Communications and Network Technologies (ICA5NT 2024)** organized by the **Department of Electronics and Communication Engineering & Department of Information Technology**, Velammal Institute of Technology, Chennai held on **21 & 22, March 2024.**

Coordinator
Dr.R.Jothi Chitra
Professor-ECE

Coordinator
Dr.M.Sivarathinabala
Associate Professor-ECE

Coordinator
Mr.V.Vinothkumar
Assistant Professor-IT

Convener
Dr.P.Deivendran
Associate Professor & Head-IT

Convener
Dr.B.Sridevi
Professor & Head-ECE

Principal
Dr.N.Balaji

IEEE
XPLORE COMPLIANT ISBN
979-8-3503-2579-9

ICAISS

CARE
COLLEGE OF ENGINEERING

Certificate of Presentation

This is to certify that

J Eindhumathy

have successfully presented the paper entitled

Optimal crop prediction and Disease Management using Light GBM Algorithm

at

2nd International Conference on Augmented Intelligence and Sustainable Systems
(ICAISS-2023) Organized by CARE College of Engineering, Trichy, India
on 23-25, August 2023

Session Chair

Dr. A. Pasumpon Pandian
Conference Chair

Dr. S. Shanthi
Principal


SRM TRP
ENGINEERING COLLEGE
TIRUCHIRAPPALLI
INSTITUTION'S
INNOVATION
COUNCIL
Certificate of Participation
This is to certify that
Dr. /Mr. /Prof. /Ms. EINDHUMATHY J / RESEARCH SCHOLAR
of SARANATHAN COLLEGE OF ENGINEERING, TRICHY has presented a paper titled
ENHANCING NEURON THROUGH PARTIALLY RECONFIGURING ACTIVATION FUNCTIONS
in the 3rd National Conference on "Recent Advances in Communicative Electronics (NCRACE 2024)" organized by the Department of Electronics and Communication Engineering, SRM TRP Engineering College, Tiruchirappalli, during March 14-15, 2024.
Convenor
Principal


SRM TRP
ENGINEERING COLLEGE
TIRUCHIRAPPALLI
INSTITUTION'S
INNOVATION
COUNCIL
Certificate of Participation
This is to certify that
Dr. /Mr. /Prof. /Ms. C. VENNILA / PROFESSOR
of SARANATHAN COLLEGE OF ENGINEERING, TRICHY has presented a paper titled
ENHANCING NEURON THROUGH PARTIALLY RECONFIGURING ACTIVATION FUNCTIONS
in the 3rd National Conference on "Recent Advances in Communicative Electronics (NCRACE 2024)" organized by the Department of Electronics and Communication Engineering, SRM TRP Engineering College, Tiruchirappalli, during March 14-15, 2024.
Convenor
Principal

CERTIFICATE

of participant

This is to certify that

S.A.Arunmozhi

In oral and technical presentation, recognition and appreciation of research

"1. BİLSEL INTERNATIONAL GORDİON SCIENCE RESEARCHES CONGRESS"
29-30 SEPTEMBER 2023, ANKARA/TÜRKİYE

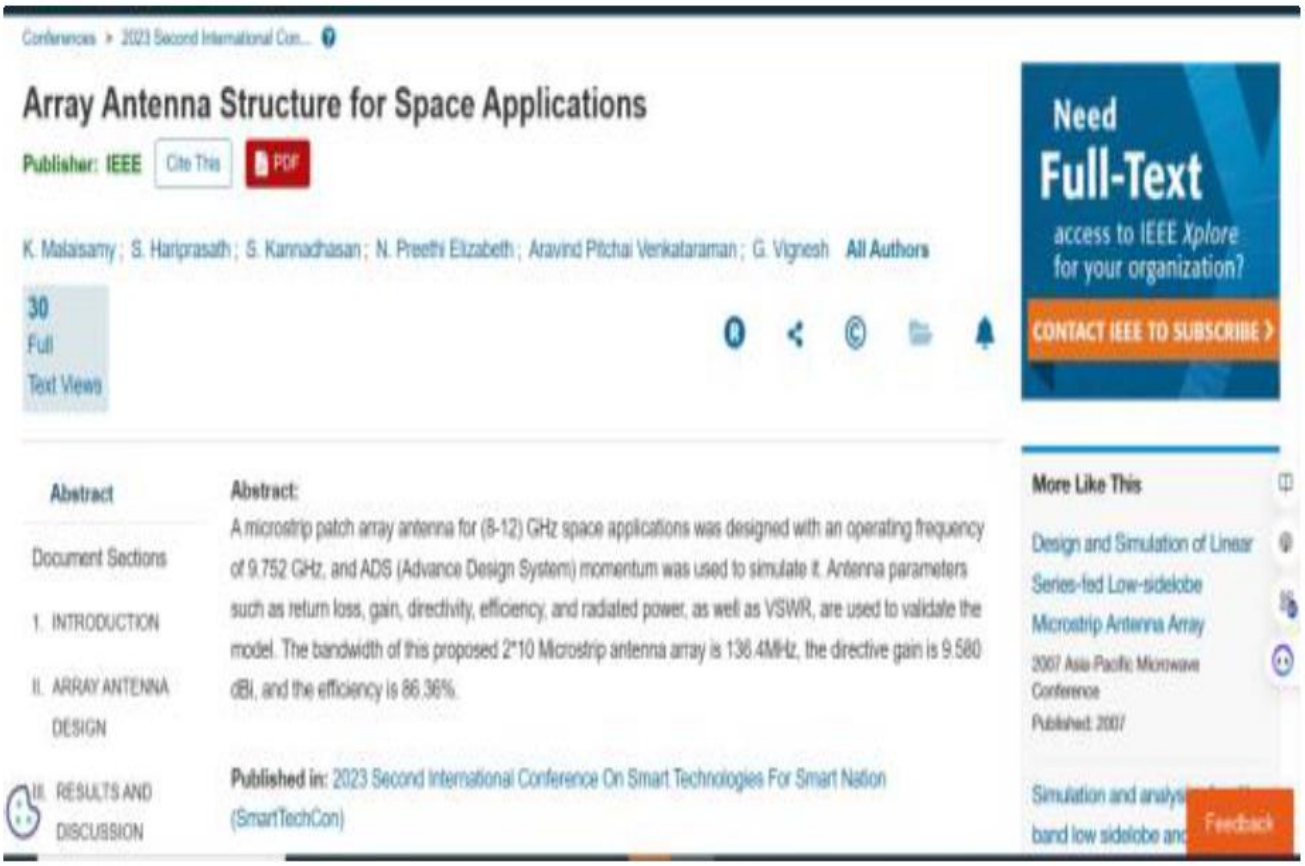
with the paper entitled

"Trust based Security Scheme for Wireless Sensor Networks"

Assoc.Prof.Dr.Necati SÜMER
Head of Organization Committee

BİLSEL CONGRESS

Assist. Prof. Dr. İlyas ERPAY
Head of BiLSEL Congress



Conferences > 2023 Second International Con...

Array Antenna Structure for Space Applications

Publisher: IEEE | Cite This | PDF

K. Malaisamy ; S. Hariprasath ; S. Kannadhasan ; N. Preethi Elizabeth ; Aravind Pitchai Venkataraman ; G. Vignesh All Authors

30
Full
Text Views

Abstract

Document Sections

1. INTRODUCTION

II. ARRAY ANTENNA DESIGN

III. RESULTS AND DISCUSSION

Abstract:
A microstrip patch array antenna for (8-12) GHz space applications was designed with an operating frequency of 9.752 GHz, and ADS (Advance Design System) momentum was used to simulate it. Antenna parameters such as return loss, gain, directivity, efficiency, and radiated power, as well as VSWR, are used to validate the model. The bandwidth of this proposed 2*10 Microstrip antenna array is 136.4MHz, the directive gain is 9.580 dBi, and the efficiency is 86.36%.

Published in: 2023 Second International Conference On Smart Technologies For Smart Nation (SmartTechCon)

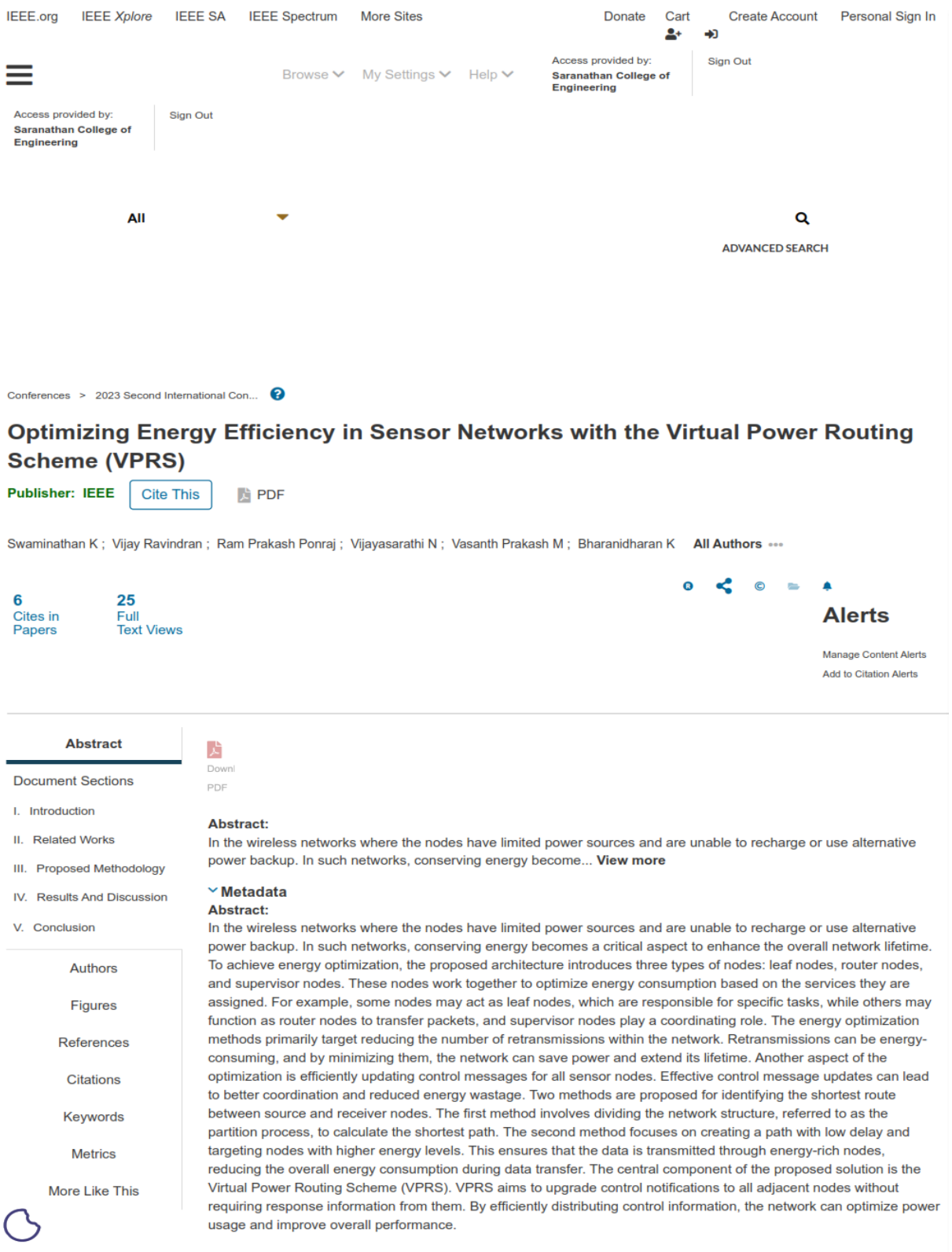
Need
Full-Text
access to IEEE *Xplore* for your organization?
CONTACT IEEE TO SUBSCRIBE >

More Like This

Design and Simulation of Linear Series-fed Low-sidelobe Microstrip Antenna Array
2007 Asia-Pacific Microwave Conference
Published: 2007

Simulation and analys... band low sidelobe an...

Feedback


IEEE.org
IEEE Xplore
IEEE SA
IEEE Spectrum
More Sites
Donate
Cart
Create Account
Personal Sign In
Browse
My Settings
Help
Access provided by:
Saranathan College of Engineering
Sign Out
Access provided by:
Saranathan College of Engineering
Sign Out
All
ADVANCED SEARCH
Conferences > 2023 Second International Con...
Optimizing Energy Efficiency in Sensor Networks with the Virtual Power Routing Scheme (VPRS)
Publisher: IEEE
Cite This
PDF
Swaminathan K ; Vijay Ravindran ; Ram Prakash Ponraj ; Vijayasarathi N ; Vasanth Prakash M ; Bharanidharan K
All Authors
6
Cites in Papers
25
Full Text Views
Alerts
Manage Content Alerts
Add to Citation Alerts
Abstract
Document Sections
I. Introduction
II. Related Works
III. Proposed Methodology
IV. Results And Discussion
V. Conclusion
Authors
Figures
References
Citations
Keywords
Metrics
More Like This
Downl
PDF
Abstract:
In the wireless networks where the nodes have limited power sources and are unable to recharge or use alternative power backup. In such networks, conserving energy become... View more
Metadata
Abstract:
In the wireless networks where the nodes have limited power sources and are unable to recharge or use alternative power backup. In such networks, conserving energy becomes a critical aspect to enhance the overall network lifetime. To achieve energy optimization, the proposed architecture introduces three types of nodes: leaf nodes, router nodes, and supervisor nodes. These nodes work together to optimize energy consumption based on the services they are assigned. For example, some nodes may act as leaf nodes, which are responsible for specific tasks, while others may function as router nodes to transfer packets, and supervisor nodes play a coordinating role. The energy optimization methods primarily target reducing the number of retransmissions within the network. Retransmissions can be energy-consuming, and by minimizing them, the network can save power and extend its lifetime. Another aspect of the optimization is efficiently updating control messages for all sensor nodes. Effective control message updates can lead to better coordination and reduced energy wastage. Two methods are proposed for identifying the shortest route between source and receiver nodes. The first method involves dividing the network structure, referred to as the partition process, to calculate the shortest path. The second method focuses on creating a path with low delay and targeting nodes with higher energy levels. This ensures that the data is transmitted through energy-rich nodes, reducing the overall energy consumption during data transfer. The central component of the proposed solution is the Virtual Power Routing Scheme (VPRS). VPRS aims to upgrade control notifications to all adjacent nodes without requiring response information from them. By efficiently distributing control information, the network can optimize power usage and improve overall performance.

Published in: 2023 Second International Conference on Augmented Intelligence and Sustainable Systems (ICAISS)

Date of Conference: 23-25 August 2023

DOI: 10.1109/ICAISS58487.2023.10250536

Date Added to IEEE *Xplore*: 22 September 2023

Publisher: IEEE

ISBN Information:

Conference Location: Trichy, India

Contents

In a Wireless Sensor Network (WSN), the total number of nodes is predetermined to meet the specific coverage requirements and application needs of the network. Accurate location data for each node is essential for successful packet transmission and efficient network operation. This location data is used to calculate important metrics for node deployment, such as sensing capacity, coverage area, power unit, and geographical location module. Based on the predetermined location data, the nodes are strategically deployed throughout the environment. The deployment can be uniform, where all nodes have fixed locations, or dynamic, where nodes may have varying positions within the deployment area. The precise locations are crucial for ensuring effective network coverage and efficient data collection from the sensing area.

Machine Learning based Solar PV Power Prediction

Publisher: IEEE Cite This PDF

Ram Prakash Ponraj ; Vijay Ravindran ; Krishnakumar Chittibabu ; Akash T ; Chandru A ; Emmanuel Louis **All Authors**

Abstract:
Solar Energy is abundant in nature, the power can be extracted in many forms from the Sun. Electrical Power Generation is one of the useful contribution of solar energy, ... **View more**

Metadata

Abstract:
Solar Energy is abundant in nature, the power can be extracted in many forms from the Sun. Electrical Power Generation is one of the useful contribution of solar energy, which can be generated using Solar Photovoltaic Cells. The basic parameters of the solar energy like irradiance, temperature, etc., are variables in nature. Solar PV power prediction is a critical aspect of solar PV system management and useful for load synchronization. The development of more accurate and reliable solar PV power prediction methods is essential for the continued growth and success of the renewable energy sector. Various machine learning algorithms can be used to develop a model that can accurately predict the output of a PV system. In this article, a simple random forest machine learning approach was used to predict the potential power generated by a PV system. The model is trained using historical data of the PV system output, such as the amount of energy produced, temperature, irradiance, and other factors. Results of the algorithm is presented, compared with Decision Tree algorithm and the output parameters are discussed.

Published in: 2023 Second International Conference on Augmented Intelligence and Sustainable Systems (ICAISS)

Date of Conference: 23-25 August 2023

DOI: 10.1109/ICAISS58487.2023.10250567

Date Added to IEEE *Xplore*: 22 September 2023

Publisher: IEEE

ISBN Information:

Conference Location: Trichy, India

Contents

High Voltage Gain Multilevel Cascaded Boost Converter for PV Application

M. Marimuthu ; S. Vijayalakshmi ; S. Kamalakannan ; B. Kaleeswaran ; M. Annamalai ; M. Sindhuja **All Authors**

Abstract:
Low voltage will be the extent of the yield from unconventional sources like PV modules and isolated components. This needs to be expanded primarily for proper utilizatio... **View more**

Metadata

Abstract:
Low voltage will be the extent of the yield from unconventional sources like PV modules and isolated components. This needs to be expanded primarily for proper utilization or matrix significance, and these pressing tasks compel scientists to focus on sustainable power sources to generate electricity. Converters are now being developed at the initial stage to improve power change proficiency. This paper falls on execution appraisal of non-isolated converters. The execution was evaluated and used to forecast the converters with the suitable evaluation of power for high pick up PV Application in light of the yield result from the MATLAB - SIMULINK MODEL.

Published in: 2023 International Conference on Circuit Power and Computing Technologies (ICCPCT)

Date of Conference: 10-11 August 2023

DOI: 10.1109/ICCPCT58313.2023.10245378

Date Added to IEEE *Xplore*: 22 September 2023

Publisher: IEEE

ISBN Information:

Conference Location: Kollam, India

Authors

Keywords

Metrics

More Like This

Mathematical Model of Electric Arc in Low-voltage DC Contactors
2023 5th International Youth Conference on Radio Electronics, Electrical and Power Engineering (REEPE)
Published: 2023

Nano-technological Synthesis of Wollastonite for High-Efficiency Dry Pressing of Innovative Insulating Bodies for Low Voltage Apparatus
2024 23rd International Symposium on Electrical Apparatus and Technologies (SIELA)
Published: 2024

Show More

A novel Double Frequency Cascaded Boost Converter

S. Vijayalakshmi ; M. Marimuthu ; S. Kamalakannan ; J. Haritha ; L. Aarthi ; S. Harishini **All Authors**

Abstract:
This study focuses on enhancing the functionality, effectiveness, and voltage gain of a converter in a single circuit. A cascaded boost converter is used to increase a co... **View more**

Metadata

Abstract:
This study focuses on enhancing the functionality, effectiveness, and voltage gain of a converter in a single circuit. A cascaded boost converter is used to increase a converter's voltage gain whereas a double frequency boost converter is used to increase a converter's performance and efficiency. No circuit has been created that will simultaneously improve all three of them. The concept of a double frequency cascaded boost converter has therefore been discussed. A double frequency boost converter is a type of converter that combines the functions of a cascaded boost converter with a double frequency boost converter. The simulation results of the double frequency cascaded boost converter implies that all the three that is efficiency, performance and voltage gain is highly improved. A double frequency cascaded boost converter consists of a high frequency switch and a low frequency switch. A high frequency switch is connected to a high frequency capacitor and the low frequency switch is connected to the low frequency capacitor. A filter capacitor in added in order to remove the harmonics.

Published in: 2023 International Conference on Circuit Power and Computing Technologies (ICCPCT)

Date of Conference: 10-11 August 2023

DOI: 10.1109/ICCPCT58313.2023.10245214

Date Added to IEEE *Xplore*: 22 September 2023

Publisher: IEEE

ISBN Information:

Conference Location: Kollam, India

Contents

Smart Solar Energy Monitor Using ESP 32 Controller

P. Ramesh Babu ; P. Sridevi ; R. Shamitha ; A. Snehaa ; J S Shrina Maggi ; D. Abirami **All Authors**

Abstract:
The purpose of the Internet of Things is to bring everyday objects into an internet-connected ecosystem. The Internet of Things (IoT) allows physical reality to be linked... **View more**

Metadata

Abstract:
The purpose of the Internet of Things is to bring everyday objects into an internet-connected ecosystem. The Internet of Things (IoT) allows physical reality to be linked to computer systems, reducing the need for human intervention while improving endowment, precision, productivity, and performance. The suggested system cites an online show of the current, voltage, temperature, energy savings, and power consumption of solar energy as evidence that it is a renewable energy source, since this is a moment when renewable energy growth has been quicker than at any previous time in history. The Blynk IoT Platform is powered by an ESP32 microcontroller with an integrated WI -Fi module to perform smart monitoring and display the daily utilization of renewable energy. This helps the user analyse energy use.

Published in: 2023 7th International Conference on Electronics, Communication and Aerospace Technology (ICECA)

Date of Conference: 22-24 November 2023

DOI: 10.1109/ICECA58529.2023.10395644

Date Added to IEEE *Xplore*: 09 February 2024

Publisher: IEEE

ISBN Information:

Conference Location: Coimbatore, India

No metrics found for this document.

Contents

I. Introduction

One of the most significant technical advancements in modern life is the Internet of Things (IoT). IoT, a physical device, allows machines to connect to the cloud [1]. This establishes a link between the connected devices, allowing them to interact and share data. The user may connect with the devices and obtain information over the internet. Physical devices are no longer cut off from the virtual world and may now be handled remotely through Internet services [2]. The main elements of a smart world are smart phones, smart gadgets, smart cars, smart homes, and smart cities. Since integrated communication and information technology has the potential to alter several industries, the IoT's goal strongly relies on "smart" devices. Networks for information and communication will eventually be present everywhere given the growth of Wi-Fi and 4G-LTE wireless Internet access [3]. The International Energy Agency (IEA) predicts that renewable energy from sources like wind and solar energy, which is both technologically mature and commercially viable, will expand at the quickest rate. But the world's demand for energy keeps growing. The utilization of technology for renewable energy is one of the most cutting edge ways to decrease the impact on the environment [4].

Authors

Figures

References

Citations

Keywords

Metrics

Usage

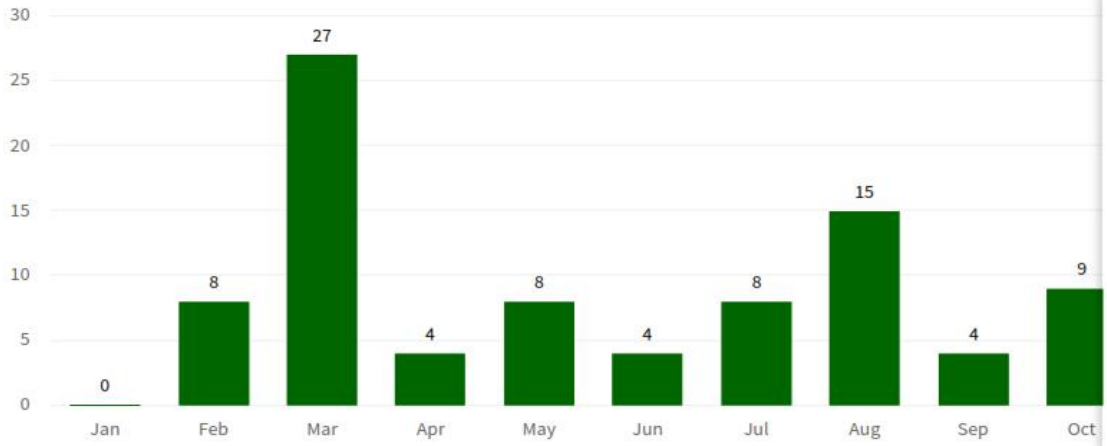
Select a Year

2024

View as

Graph | Table

Total usage since Feb 2024: **102**



Year Total: 102

Data is updated monthly. Usage includes PDF downloads and HTML views.

Citations

Web Server Based Soft Starter for DC Shunt Motor

Publisher: IEEE

P. Ramesh Babu ; C. Krishnakumar ; S. Ramprasath ; Muthu Karuppan A ; Renganathan R ; Surendran P **All Authors**

Abstract:
Automation has become a significant topic in the 21st century, thanks to the advancements in robotics, artificial intelligence, and machine learning. It offers the potent... **View more**

Metadata

Abstract:
Automation has become a significant topic in the 21st century, thanks to the advancements in robotics, artificial intelligence, and machine learning. It offers the potential to reduce human effort and time, resulting in improved productivity and efficiency. In this paper, we present an innovative idea for creating a web server-based speed control system for DC shunt motors using the ESP32 microcontroller. The system enables users to regulate the speed of a DC shunt motor from any location. in the world using a web browser or a mobile app. By integrating a web server with an ESP32 microcontroller, the system provides a flexible and versatile solution for industrial automation, home automation, and DIY projects. To use the ESP32 to develop web server-based speed control of a DC shunt motor, a web page will be created and hosted on the microcontroller. Users will be able to create a changeable duty cycle pulse-width modulation signal for the DC motor using an HTML slider on the website. The SEMIKRON kit module will be used to interface with the motor and convert the PWM signal to a variable voltage that controls the motor speed. This setup provides an intuitive and user-friendly interface for remotely controlling the motor speed. The duty cycle value is set by adjusting the slider. The PWM signal produced by the ESP32 will be set based on the position of this slider. In essence, this variable duty cycle PWM will regulate the DC motor's speed. The webpage in the mobile or laptop and the Esp32 controller should be connected in the same Wi-Fi. Within the Wi-Fi range the motor speed was controlled. This method of web server-based speed control offers several advantages over traditional methods. It reduces the complexity of the system by eliminating the need for extensive wiring and hardware. The use of the ESP32 microcontroller and SEMIKRON kit module provides a portable and scalable solution that can be easily adapted to various industrial automation systems. The system a...

(Show More)

Published in: 2023 International Conference on Circuit Power and Computing Technologies (ICCPCT)

Date of Conference: 10-11 August 2023

DOI: 10.1109/ICCPCT58313.2023.10245416

Date Added to IEEE *Xplore*: 22 September 2023

Publisher: IEEE

ISBN Information:

Conference Location: Kollam, India

Contents

I. Introduction

The conventional method of starting and controlling the motor speed in laboratory based testing, is accomplished through the armature voltage control and field weakening method using rheostat. The rheostat being a resistive element produces power loss in the form of heat leading in energy in efficiency. When subjected to speed control, the rheostats have to be adjusted accordingly. This process requires the manual operation and negligence may lead to false operation. Apart from these there is a chance for mechanical failure will occur while manually operate the starter handle because the handle works under the spring force. This project proposal imposes the above said drawbacks can be eliminated by low cost digital starter with web server based dc shunt motor speed control by ESP32 [7] along with buck converters.

Department of Instrumentation and Control Engineering

Networked MEMS pressure sensor design to detect pore water pressure for landslide monitoring

Publisher: IEEE Cite This PDF

M. Shanmugavalli ; R. Rekha ; M V Suganyadevi ; B. Monika ; S. Priyadharsini **All Authors**

Abstract:
The networking of MEMS sensors is addressed here, In order to detect pore water pressure during landslides. Micro piezoresistive pressure sensors that are appropriate for detecting landslides by monitoring pore pressure have been designed, modeled, and simulated. MATLAB is used for analytical simulation of the sensor, while INTELLISUITE, a FEA CAD program, is used for numerical simulation. Square diaphragms with varying side and thickness dimensions are optimized. The length, breadth, depth, and positions of the piezoresistor are all optimized. The pressure range that the sensor is intended to detect is (0 - 350) kPa. The large and expensive piezometer will be replaced with the developed sensor.

Published in: 2024 IEEE International Conference for Women in Innovation, Technology & Entrepreneurship (ICWITE)

Date of Conference: 16-17 February 2024
DOI: 10.1109/ICWITE59797.2024.10502781
Date Added to IEEE *Xplore*: 23 April 2024
Publisher: IEEE
ISBN Information:
Conference Location: Bangalore, India

I. Introduction

Landslides are among the most frequent natural catastrophes in the world, with a high death toll and property destruction. The annual cost of property damage from landslides is estimated to be $4 billion USD and causes about 1000 lives worldwide [1] – [3]. Landslides are major natural disasters that cause significant loss of life and infrastructure. In order to facilitate future deployments, the Deep Earth Probe (DEP) created and executed a generalized plan for landslide-prone locations, as well as geophysical sensors placed on a vertical pipe and sensor installation processes. In order to monitor soil layer movement and identify landslides, a rainfall detection system employs the following sensors: geophones, which examine vibrations associated with landslides; tiltmeters, which identify sudden or incredibly slow soil movement; The quantity of rain falling is

XAI Based Intelligent Systems for Society 5.0
2024, Pages 61-101

Chapter 3 - Society 5.0 and explainable artificial intelligence—implications

Ram Prakash Ponraj [1], Vijay Ravindran [1], Satheesh Ragunathan [1], K. Swaminathan [2], Titus Sigamani [3]

https://doi.org/10.1016/B978-0-323-95315-3.00009-7

Abstract

The challenges presented by society vary throughout time, and it requires multidirectional solutions to address the primary issue, economic demands. Technological innovation simplifies the process of determining the optimal answer to

\

Department of Information Technology

Futuristic Trends in Information Technology
e-ISBN: 978-93-6252-846-9
IIP Series, Volume 3, Book 3, Part 7,Chapter 1
TINY REVIEW: AMBIENT INTELLIGENCE IN SMART APPLICATIONS

TINY REVIEW: AMBIENT INTELLIGENCE IN SMART APPLICATIONS

Abstract

Ambient intelligence (AmI) places a major focus on compelling computing to reach out to and assist people. This may appear to be an intuitive assumption from computer systems, but the fact is that people have had to devote effort to specialise themselves in order to reap the benefits of computing. Enforcing this need at the centre of the domain is projected to be a key driving factor and a turning moment in the history of computer science. The technological infrastructure appears to be constantly evolving in that direction, and there is an effective atmosphere on all sides concerned: normal users/consumers of technology, technology generators, suppliers of technology, and governmental institutions, that this paradigm change is needed and feasible. In this article, we give an overview of the technologies that form ambient intelligence as well as the applications that are significantly impacted by it. We are particularly interested in research that makes AmI technology "intelligent." We also outline ethical problems that AmI researchers will confront in several domains of applications in the next years.

Keywords: Ambient Intelligence, Artificial Intelligence, Smart environments,

Authors

Ms. J. Sangeethapriya
Assistant Professor
Department of information Technology
Saranathan College of Engineering
Trichirappalli

Ms. A. Sheelavathy
Assistant Professor
Department of information Technology
Saranathan College of Engineering
Trichirappalli

Ms. K. Muthukarupaee
Assistant Professor
Department of information Technology
Saranathan College of Engineering
Trichirappalli

Ms. G. Sathya
Assistant Professor
Department of information Technology
Saranathan College of Engineering
Trichirappalli

Ms. A. Thenmozhi
Assistant Professor
Department of information Technology
Saranathan College of Engineering
Trichirappalli

Facial Emotion Recognition System Using VGG Neural Network

Manoj Kumar Veerappan [1, a)], Aravind Prasad Baskaran[2, b)], Senthil Balaji Venkatachalam[3, c)], Rengaraj alias Muralidharan Ramanujam[3, d)], Lakshmi Kanthan Narayanan[4, e)]

[1]*E-con Systems pvt ltd, Chennai, Tamilnadu, India*
[2] *K.Ramakrishnan college of Technology, Trichy, Tamilnadu, India*
[3]*Saranathan College of Engineering, Trichy, Tamil Nādu, India*
[4]*Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences, SIMATS University, Chennai, Tamilnadu, India*

[a)] mano3422@gmail.com
[b)] aravind-cse@saranathan.ac.in
[c)]senthilbalaji-it@saranathan.ac.in
[d)]rengaraj-it@saranathan.ac.in
[e)] Corresponding Author: lakshmikanth.vlsi@gmail.com

Abstract. Since machines have high operational ability and analyze data much faster than humans, it is happened to keep trust on the machine than over the people. As per the quote "Face is the index of mind" the machine is needed to be taught with the phenomenon of Facial Emotion Recognition (FER) is significant for Human-Computer Interaction such as clinical practice and behavioral description. Accurate and robust FER by computer models remains challenging due to the heterogeneity of human faces and variations in images such as different facial pose and lighting. Among all techniques for FER, deep learning models, especially Convolutional Neural Networks (CNNs) have shown great potential due to their powerful automatic feature extraction and computational efficiency. In this work, the highest single- network classification accuracy has been achieved on the FER2013 dataset. The VGGNet architecture has been adopted, which fine-tune its hyperparameters rigorously, and experiment with various optimization methods. To our best knowledge, our model achieves state-of-the- art single-network accuracy of 73.28% on FER2013 without using external training data.
Keywords: Convolution Neural Network, Facial Emotional Recognition, VGGNet Architecture, RELu, Cosine Annealing

INTRODUCTION

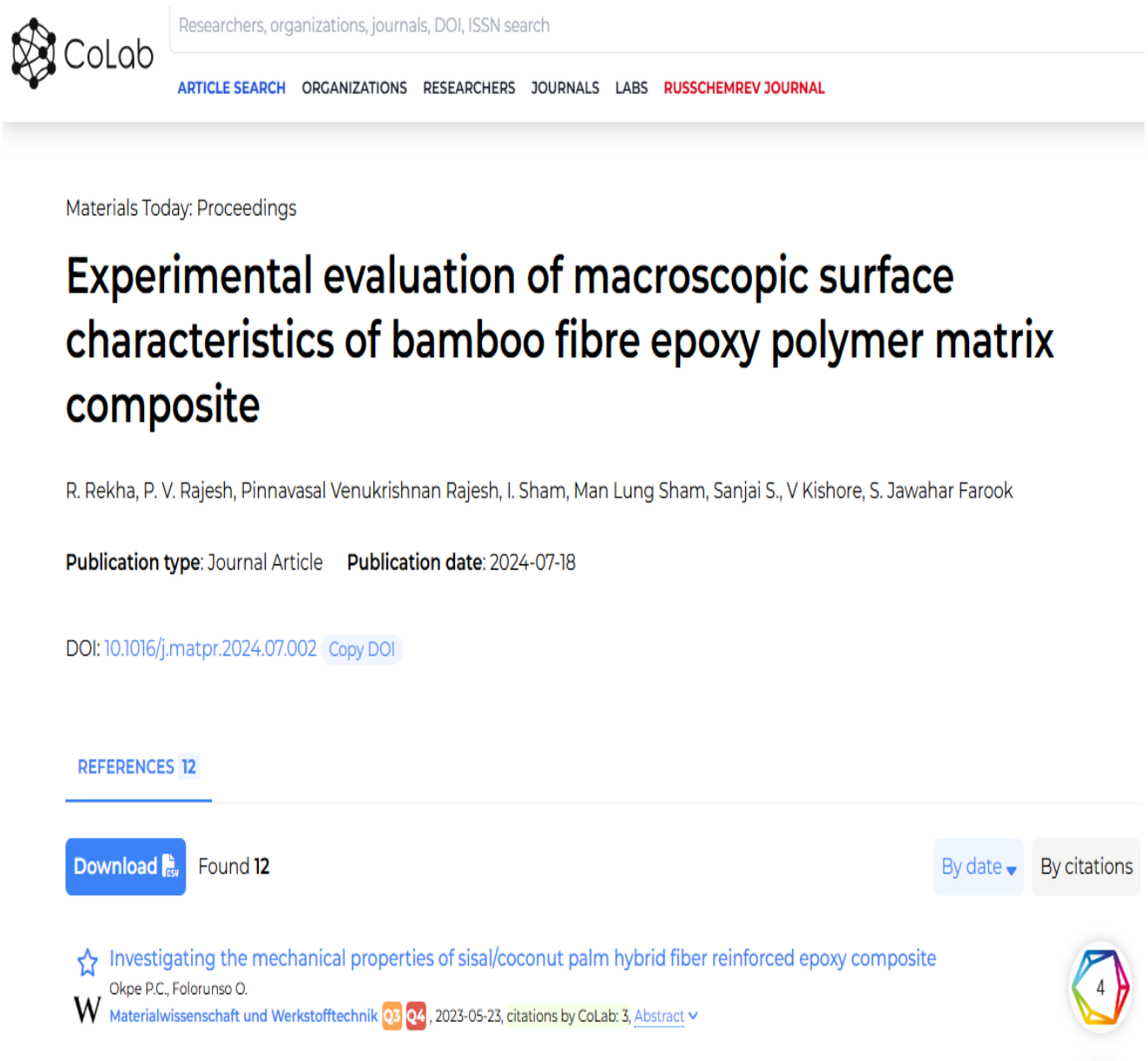
Facial Emotion Recognition refers to identifying expressions that convey basic emotions such as fear, happiness, and disgust, etc. It plays an important role in Human-Computer Interactions and can be applied to digital advertisement, online gaming, customer feedback assessment, and healthcare [1]. With advancements in computer vision, high emotion recognition accuracy has been achieved in images captured under controlled conditions and consistent envi- ronments, rendering this a solved problem. Challenges persist in emotion recognition under naturalistic conditions due to high intra-class variation and low inter-class variation, e.g. changes in facial pose and subtle differences between expressions.

Developments in computer vision continuously aim to improve classification accuracy on such problems [2]. In image classification, Convolution Neural Networks (CNNs) have shown great potential due to their computational efficiency and feature extraction capability [3]. They are the most widely used deep models for FER [9]. One specific emotion recognition dataset that encompasses the difficult naturalistic conditions and challenges is FER2013. It was introduced at the International Conference on Machine Learning (ICML) in 2013 and became a benchmark in com- paring model performance in emotion recognition. Human performance on this dataset is estimated to be 65.5 % [6]. In comparing different methods and benchmarking our results, we are strictly concerned with previous work trained and evaluated on this dataset.

In this work, it is aimed to improve prediction accuracy on FER2013 using CNNs. The VGG network has been adopted and constructs various experiments to explore different optimization algorithms and learning rate

International Virtual Conference on Machine Learning Applications in Applied Sciences and Mathematics
AIP Conf. Proc. 2802, 120024-1–120024-9; https://doi.org/10.1063/5.0181752
Published by AIP Publishing. 978-0-7354-4798-1/$30.00

Department of Mechanical Engineering



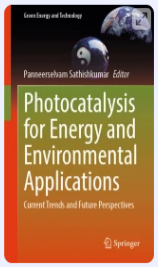
Department of Science and Humanities

SPRINGER NATURE Link

Log in

Find a journal | Publish with us | Track your research | Search | Cart

Home › Book



Photocatalysis for Energy and Environmental Applications

Current Trends and Future Perspectives

Book | © 2024

Overview

Editors: Panneerselvam Sathishkumar

- Presents recent advances, future perspectives, and applications of photocatalysis toward energy and environment
- Discusses the renewable and commercial aspects of translucent polymer-linked heterojunction nanocomposites

Access this book

Log in via an institution →

eBook EUR 128.39

Price includes VAT (India)

ICMMSND279

Class of Times to Recruitment in A Manpower System with Loss in Manpower as a Geometric Process Due to Two Types of Decisions and Thresholds Each Having Two SCBZ Components

G. Ravichandran[1]

[1] Department of Mathematics, Saranathan College of Engineering, Trichy-12.

E-mail: mathgravi@gmail.com.

Consider a manpower system which has loss in manpower due to policy decisions and breaks (serving personnel availing different kinds of leave are referred as break here). Loss in manpower due to exits and breaks form two independent Geometric processes with different rates. The system has two random thresholds and each of them has two components. One component is for the cumulative loss in manpower due to exits and the other for the corresponding loss due to breaks. The distribution of these components has the SCBZ property. A class of times to recruitment is defined and performance measures for this class are obtained. Impact of nodal parameters on the performance measures is studied with a numerical illustration by assuming special distribution.

STATISTICS & NUMERICAL METHODS

S.KARUNALAKSHMI

DR.S.SIVAMANI

Volume 2853, Issue 1
7 May 2024

INTERNATIONAL CONFERENCE ON ADVANCEMENT IN DESIGN, DEVELOPMENT, ENGINEERING, PROCESSING, AND CHARACTERIZATION: ADDEPC 2021
2 December 2021
ual Conference

RESEARCH ARTICLE | MAY 07 2024

A review of covid 19 in Tamilnadu with regression and correlation co-efficient

S. Arunkumar ✉; G. Sriram; C. Gnanadesikan

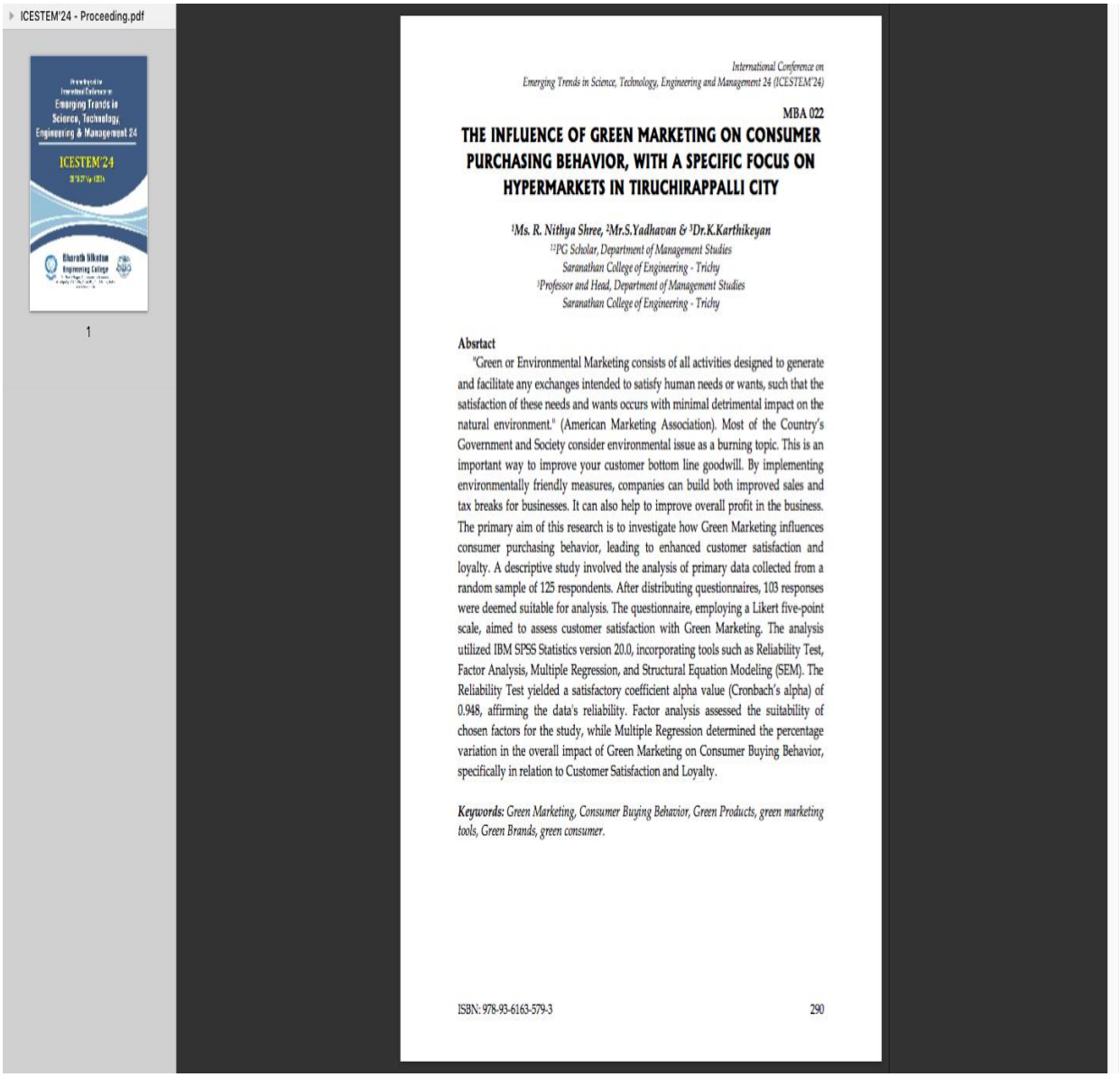
— Author & Article Information

a) Corresponding author: mathematicsarun@gmail.com

AIP Conf. Proc. 2853, 020254 (2024)
https://doi.org/10.1063/5.0198428

The present study is about the detailed analysis of the pandemic Corona Virus 2019 which has rocked the entire world with a maximum impact with its structure, its appearance and nomenclature, Clinical presentation and transmission, diagnostic technique. It's a respiratory illness caused by the virus SARS-CoV2 (Severe Acute Respiratory Syndrome). It's a syndrome is different from other virus syndromes as this might act as Symptomatic also as Asymptomatic. The common symptoms would be cold, fever, cough, sneezing, running nose, breathing issues, Fatigue, etc. The paper may be a vivid picture on the COVID 19 cases in Tamilnadu which is within the Southern part of India and therefore the treatments like Ventilator, Plasma, etc and therefore the remedy offered to the patients like Naturopathy, Ayurvedic, Siddha, Unani, Homeopathy, etc, for better recovery and immunity to fight against the virus. It analyses the detailed reports and statistics during a regression form with reference to daily new death rate and total death rate with the assistance of statistical tools of the

Department of Master of Business Administration



MBA 022

THE INFLUENCE OF GREEN MARKETING ON CONSUMER PURCHASING BEHAVIOR, WITH A SPECIFIC FOCUS ON HYPERMARKETS IN TIRUCHIRAPPALLI CITY

[1]Ms. R. Nithya Shree, [2]Mr.S.Yadhavan & [3]Dr.K.Karthikeyan
[1][2]PG Scholar, Department of Management Studies
Saranathan College of Engineering - Trichy
[3]Professor and Head, Department of Management Studies
Saranathan College of Engineering - Trichy

Absrtact

"Green or Environmental Marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs with minimal detrimental impact on the natural environment." (American Marketing Association). Most of the Country's Government and Society consider environmental issue as a burning topic. This is an important way to improve your customer bottom line goodwill. By implementing environmentally friendly measures, companies can build both improved sales and tax breaks for businesses. It can also help to improve overall profit in the business. The primary aim of this research is to investigate how Green Marketing influences consumer purchasing behavior, leading to enhanced customer satisfaction and loyalty. A descriptive study involved the analysis of primary data collected from a random sample of 125 respondents. After distributing questionnaires, 103 responses were deemed suitable for analysis. The questionnaire, employing a Likert five-point scale, aimed to assess customer satisfaction with Green Marketing. The analysis utilized IBM SPSS Statistics version 20.0, incorporating tools such as Reliability Test, Factor Analysis, Multiple Regression, and Structural Equation Modeling (SEM). The Reliability Test yielded a satisfactory coefficient alpha value (Cronbach's alpha) of 0.948, affirming the data's reliability. Factor analysis assessed the suitability of chosen factors for the study, while Multiple Regression determined the percentage variation in the overall impact of Green Marketing on Consumer Buying Behavior, specifically in relation to Customer Satisfaction and Loyalty.

Keywords: *Green Marketing, Consumer Buying Behavior, Green Products, green marketing tools, Green Brands, green consumer.*

ISBN: 978-93-6163-579-3

A STUDY ON ASSESSMENT OF SERVICE QUALITY AT PUBLIC SECTOR BANKS WITH SPECIAL REFERENCE TO TIRUCHIRAPPALLI CITY

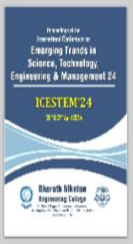
[1]V Mahalakshmi, [2]M Manickavasagam

[1,2] Assistant Professor,
Department of Management Studies,
Saranathan College of Engineering, Trichy, India
mba257519@saranathan.ac.in

ABSTRACT

Historically, scholars have treated service quality as very difficult to define and measure, due to the inherent intangible nature of services, which are often experienced subjectively. One of the earliest attempts to grapple with the service quality concept came from the so-called Nordic School. The technical quality is relatively objective and therefore easy to measure. However, difficulties arise when trying to evaluate functional quality. Khurana, S. (2013). All banks in India offer similar services but are different in terms of service quality. This paper analyzes the literature regarding service quality and customer satisfaction in the retail banking industry, and explains the relationship between service quality and customer satisfaction and their effect. The findings suggest that improved service quality should be adopted to give maximum satisfaction to the customer. The paper also contributes knowledge and background for banks to apply these findings to better shape and focus their position in the market and also to provide maximum satisfaction to the customer. To determine the factors that influences the service quality towards the Selection of public sector banks. To suggest suitable strategies to improve the level of service quality towards the Selection of public sector banks. 58% of the respondents are satisfied with physical facility are matching with the products/ services offered by the banks. 47% of the respondents are satisfied with the convenience of our operating hours helps us to transaction leisurely. Try to maintain error free customer records. Deposit interest rate may be increased and interest rate on loans be reduced to a maximum extent. Banks employees are to be trained to solve customers problems voluntarily. Suitable training programmes are to be offered to keep bank employees updated so that they are in a position to answer queries raised by the customers. The main aim of the study was to assess the service quality of public banks and its impact on customer satisfaction. This indicates that improvements of service quality should be conducted on all the five service quality dimensions, especially the dimensions of responsiveness and empathy.

ICESTEM'24 - Proceeding.pdf



1

MBA 023

EXPLORING CONSUMER AWARENESS AND SATISFACTION WITH UPI PAYMENTS AND APPS IN TRICHY CITY: A STUDY ON THE IMPACT OF ONLINE PAYMENT APPLICATIONS IN INDIA

[1]C .Lakshmi Kirupa, [2]A.Metilda Joy & [3]Dr.V.Mahalakshmi,
[1][2]*PG Scholar, Department of Management Studies*
Saranathan College of Engineering – Trichy
[3]*Assistant Professor, Department of Management Studies*
Saranathan College of Engineering – Trichy

Abstract

This research paper delves into the realm of online payment applications in India, focusing on their impact and significance for consumers. It discusses the advantages and disadvantages associated with online payments, highlighting the steps taken by the RBI and the Government to promote a cashless society, including the introduction of BHIM and UPI. The study, conducted in the Trichy region, gathered data from 100 respondents through a structured questionnaire. Tools used for the analysis are Factor Analysis, Regression and Correlation. The analysis explores how cashless transactions, facilitated by e-wallets, contribute to reducing black money, crime rates, and terrorism, as well as fostering economic growth and attracting foreign investment. However, the paper also addresses concerns about transaction security and the services provided by online payment applications. The research aims to assess consumer satisfaction and awareness regarding online payment applications, shedding light on their experiences and perceptions in the digital payment landscape.

Keywords: *Online payments, Cashless transactions, Reducing black money, Crime rates, and Terrorism.*

ISBN: 978-93-6163-579-3

ICESTEM'24 - Proceeding.pdf

1

MBA 024

TALENT MANAGEMENT PRACTICES AT SELECTED HIGHER EDUCATION INSTITUTIONS – A STUDY WITH SPECIAL REFERENCE TO TRICHY DISTRICT

[1]Ms.R.Sana, [2]Ms.C.Shobana & [3]Mr.S.Syed Muthaliff
[1,2]PG Scholar, Department of Management Studies
Saranathan College of Engineering - Trichy
[3]Assistant Professor, Department of Management Studies
Saranathan College of Engineering - Trichy

Abstract

Talent Management is the art of managing the ability, competency and power of employees within an organization. The term talent management is not only restricted to recruiting the right candidate at the right time, but the term is also extended in exploring the hidden and unusual qualities of your employees and developing and nurturing them to get the desired results. The main objective of this paper is to study the recent changes and innovations in Talent Management practices among higher education institutions. A descriptive study was done on primary data collected from 150 respondents on basis of Convenience sampling. 150 respondents were given questionnaire and 134 were found to be fully usable for analysis. Questionnaire was used to collect primary data. Likert five point scaling was given to customers for evaluating their Satisfaction towards Talent Management Practices adopted in the institution. IBM SPSS Statistic version 20.0 was used for this analysis and the following tools were administered 1) Reliability Test 2) Factor Analysis and 3) Multiple Regression. Reliability test was made and the obtained coefficient alpha value (Cronbach's alpha) was 0. 0.951, and hence the data had satisfactory reliability. Factor analysis was used to test whether all the factors we have choose for the analysis is appropriate for the study and Multiple Regression was used to find the percentage variation in overall level of satisfaction with the Talent Management Practices adopted in my institution.

Keywords: *Talent Management Practices, Talent Management, Higher Education Institutions.*

ISBN: 978-93-6163-579-3