SRI KRISHNA INSTITUTIONS COIMBATORE

SUSTAINABLE DEVELOPMENT GOALS

SKCT supports the Sustainable Development Goals

Sri Krishna College of Technology

An Autonomous Institution
Affiliated to Anna University and Approved by AICTE
Accredited by NAAC with 'A' Grade
KOVAIPUDUR CAMPUS, COIMBATORE - 641 042.

VOL 24 - ISSUE 19
21 OCT - 27 OCT 2024

SKCT DIGEST

THE PRIDE OF OUR REFLECTION

ISBN NUMBER
978-93-5895-815-7

"There's a way to do it better—find it"
– Thomas Edison

Contact Us
0422-2984567 - 68
Kovaipudur,
Coimbatore - 641 042.

ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

Placement

The Students of Final B.Tech. ADS received an offer from **Cognizant**.

Monisha K
(727821TUAD032)
Batch 2021 - 25

Dinesh R
(727821TUAD015)
Batch 2021 - 25

Darsani K
(727821TUAD011)
Batch 2021 - 25

Sneha R S
(727821TUAD048)
Batch 2021 - 25

Santhosh Babu S
(727821TUAD041)
Batch 2021 - 25

Vinothini R
(727821TUAD059)
Batch 2021 - 25

Lakshya R
(727821TUAD028)
Batch 2021 - 25

Shapthakirishwar P A
(727821TUAD044)
Batch 2021 - 25

cognizant

ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

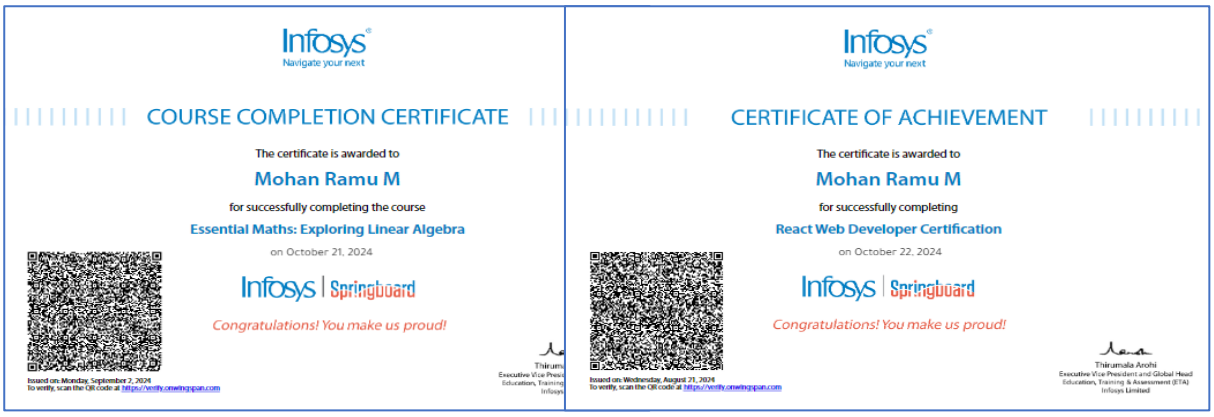
Students' Participation

Mr Karthik Raja A, Ms Yuvasheri G, Ms Nishalini Balaji and Mr Rishi Lingam M, Students of Second B.Tech. ADS, participated in a **"Artificial Intelligence Workshop"** organised by IIT Madras.

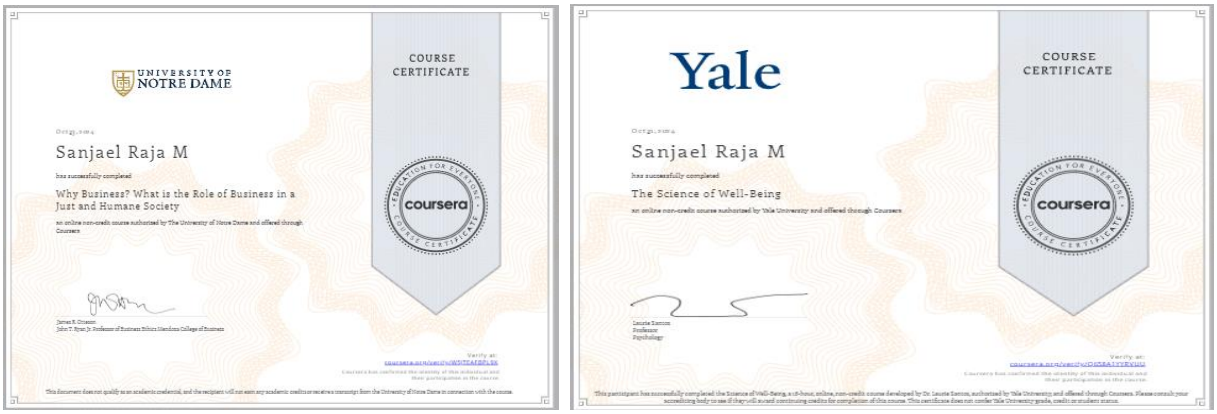
ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

Students' Participation

Mr Mohan Ramu M, Student of Second B.Tech. ADS, completed online certification course through Infosys Springboard.



Mr Sanjael Raja, Student of Second B.Tech. ADS, completed online certification course through Coursera.



ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

Students' Participation

Mr Adish A, Ms Deepika R and **Mr Vishal P,** Students of Third B.Tech. ADS, secured the **Third Place** in **HACK SPRINT 2024** organised by imneo during 18-20 October 2024.

CSE (CYBER SECURITY)

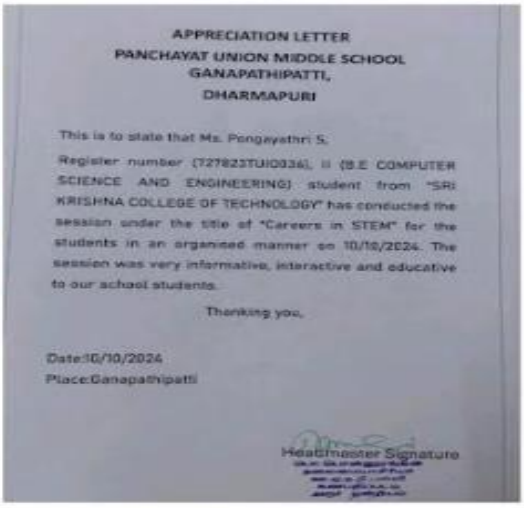
Students' Participation

Mr Nithin C, Ms Pavithradevi K and **Ms Radhika S,** Students of Third B.E. CSE (Cyber Security), secured the **Second Place** in **HACK SPRINT 2024** organised by imneo during 18-20 October 2024.

CSE (IoT)

Student Participation

Ms Pongayathri, Student of Third B.E. CSE (IoT), conducted an Awareness Program on **"Careers in STEM"** to the Students of Panchayat Union Middle School, Ganapathipatti, Dharmapuri.



APPRECIATION LETTER

PANCHAYAT UNION MIDDLE SCHOOL
GANAPATHIPATTI,
DHARMAPURI

This is to state that Ms. Pongayathri S,
Register number (727823TUIO034), II (B.E COMPUTER SCIENCE AND ENGINEERING) student from "SRI KRISHNA COLLEGE OF TECHNOLOGY" has conducted the session under the title of "Careers in STEM" for the students in an organised manner on 10/10/2024. The session was very informative, interactive and educative to our school students.

Thanking you,

Date:10/10/2024
Place:Ganapathipatti

Headmaster Signature

CSE (CYBER SECURITY)

Student Participation

Mr Manoj S, Student of Third B.E. CSE (CyS), participated in a workshop on "**COSMOS 2024"** organised by CIT on 18 October 2024.


COIMBATORE INSTITUTE OF TECHNOLOGY
(A Government Aided Autonomous Institution & Affiliated to Anna University)
DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

CERTIFICATE
OF PARTICIPATION

PALIES

is presented to

Manoj S

For actively participating in **COSMOS 2024** - A day to understand, celebrate and appreciate AI

Mrs.K.Sudha
FACULTY CO-ORDINATOR
DEPT OF AI & DS

Dr.A.Saran Kumar
FACULTY CO-ORDINATOR
DEPT OF AI & DS

Dr. Valliappan Raman
PROFESSOR & HEAD
DEPT OF AI & DS

CSE (IoT, CyS)

Students' Participation

Mr Aadarsh and **Mr Ashwin Raghavendran,** Students of First B.E. CSE (IoT), secured the **First place** in Code Quest organised by the Department of CSE (CyS) on 24 October 2024.

Mr Arthur Balaji R and **Mr Hariharan C,** Student of Second B.E. CSE, secured the **Second place** in Code Quest organised by the Department of CSE (CyS) on 24 October 2024.

CSE (IoT, CyS)

Students' Participation

Mr Aadarsh S, Ms Niranjani R and **Ms Manjari L,** Students of First B.E. CSE (IoT), secured the **First Place** in Secure Sphere organised by the Department of CSE (CyS) on 24 October 2024.

Mr Manasseh M, Mr Vishrudh N and **Mr Santhosh V,** Students of Second B.E. CSE (CyS), secured the **Second Place** in Secure Sphere organised by the Department of CSE (CyS) on 24 October 2024.

CSE (IoT)

Faculty Achievement

Mr Shanmuga Raju S, Asst. Professor, has been certified by Wipro as Wipro Certified Faculty for the course on Data Science with Python.

CIVIL ENGINEERING

Students' Participation

Students of Second B.E. Civil Engineering represented the Uyir Club and participated in **"Traffic Management"** at Gandhipuram, Coimbatore.

CIVIL ENGINEERING

Faculty Publication

Dr V Sathish Kumar, Assoc. Professor, published a research article on **"Integrated Strategies for Addressing Water Scarcity"** in a Scopus-indexed journal.

INTEGRATED STRATEGIES FOR ADDRESSING THE WATER SCARCITY

Journal: Journal of Environmental Protection and Ecology 25(6) (2024) Pages: 2075 - 2085

▼ Authors

GOWRI, V.; THENMOZHI, S.; PANNEERSELVAM, ARUL SIVANANTHAM; VADIVEL, M.; GUPTA, RUPESH; KUMAR, V. SATHISH

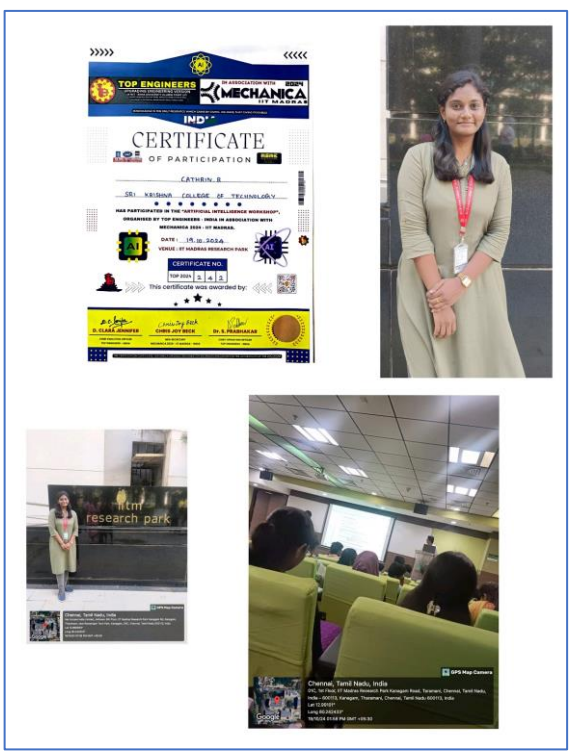
▼ Abstract

The water scarcity provides a very substantial and multifaceted challenge that necessitates an all-embracing strategy involving technological innovations, policy reforms, community involvement, and everyone's commitment. The research here is to study and analyse how the

COMPUTER SCIENCE AND ENGINEERING

Students' Participation

Ms Cathrin R and **Ms Dhaarani S,** Students of Second B.E. CSE, completed an AI Workshop on **"Cutting-edge Artificial Intelligence Technologies"** at IIT Madras Research Park.



COMPUTER SCIENCE AND ENGINEERING

Students' Participation

Ms Varsha S, Ms Suveetha B, Ms Divyadharshini S, Mr Dhiyanesh S, Mr Jairus Raj Singh S, Mr Durgesh S V, Ms Divya M and **Ms Bhavadharani A,** Students of Second B.E.CSE, participated in 40-hour Hackathon on **"Neo Hacksprint"** conducted by iamneo.

COMPUTER SCIENCE AND ENGINEERING

Students' Participation

Ms Udhaya Karthiga S, Student of Second B.E.CSE, secured the **First Place** in Snap to Solution (Paper Presentation) and **Third Place** in Quizzard (Quiz Competition) at Elevate'24 on 18 October 2024


SRI KRISHNA COLLEGE OF TECHNOLOGY

ELEVATE'24 IEEE DAY 2024 CELEBRATION

Merit Certificate

This is to recognise

for active participation in the event Snap to Solution and Secured Third Position during ELEVATE'24 - An IEEE Day Celebration by IEEE Student Branch of SKCT (SB13131) at Sri Krishna College of Technology on 18.10.2024. We highly appreciate the valuable participation and enthusiasm towards the success of this event.

Dr. J Jancy Joseph
IEEE SB Counselor

Dr. Lijo Jacob Varghese
Convenor

Ms T Shanmuhapriya, Student of Second B.E.CSE, completed an intensive **"5-day Android Development Internship"** at Emglitz Technologies.


EMGLITZ TECHNOLOGIES

CERTIFICATE of PROJECT COMPLETION

This is to certify that SHANMUHAPRIYA. T has successfully completed the Mini project in ANDROID APP DEVELOPMENT titled EVENT MANAGEMENT SYSTEM in our organization during the period of 03.10.2024 TO 07.10.2024.

TRAINER

PROJECT MANAGER

ELECTRONICS AND COMMUNICATION ENGINEERING

Students' Participation

Ms K Madhu Lekha, **Ms A B Logavi**, **Mr S Pavin Ashok**, **Mr T Mugunthan**, **Mr R Maniyarasan**, **Mr S Mohan Kumar**, **Mr V Sai Krishna**, **Mr J Vignesh** and **Ms J P Sai Varsan,** Students of Second B.E. ECE, participated in a workshop on **"Artificial Intelligence"** at IIT Madras on 19 October 2024.

ELECTRONICS AND COMMUNICATION ENGINEERING

Students' Participation

Ms S S Susmitha, **Mr R Vikram**, **Mr T Vishal**, **Ms K M Visalini**, **Ms N Sreya**, **Mr S Selva Guhan**, **Ms B Ritha Fathima**, **Ms P Pratheekha** and **Mr Nitin Prakash**, Students of Second B.E. ECE, participated in a workshop on **"Artificial Intelligence"** at IIT Madras on 19 October 2024.

ELECTRONICS AND COMMUNICATION ENGINEERING

Students' Participation

Ms K V Rithanikashri, **Ms R I Yazhini**, and **Ms M Samiksha**, Students of Second B.E. ECE, participated in a workshop on **"IoT Automation Using Rasperry PI and Node-RED"** at IIT Madras on 28 September 2024.

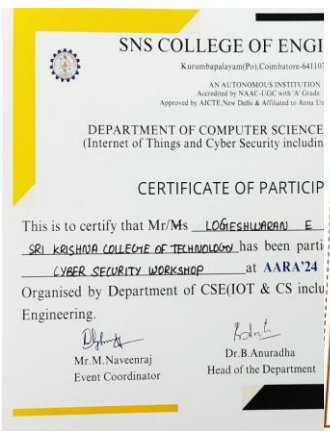
ELECTRONICS AND COMMUNICATION ENGINEERING

Students' Participation

Mr E Logeshwaran, Student of Second B.E. ECE, participated in a workshop on **"Cyber Security Workshop"** at SNS College of Engineering, Coimbatore on 18 October 2024.

Mr S Rakesh, Student of Second B.E. ECE, participated in a workshop on **"R Programming"** at Saveetha Engineering College, Chennai on 09 October 2024.

Mr S Nambi Avinash, Student of Second B.E. ECE, participated in a **"Malware Analysis Hackathon-2024"** at IIT Madras during 19-20 October 2024.


SNS COLLEGE OF ENGI
Kurumbapalayam(Po),Coimbatore-641107
AN AUTONOMOUS INSTITUTION
Accredited by NAAC-UGC with 'A' Grade
Approved by AICTE,New Delhi & Affiliated to Anna Un
DEPARTMENT OF COMPUTER SCIENCE
(Internet of Things and Cyber Security includin
CERTIFICATE OF PARTICIP
This is to certify that Mr/Ms LOGESHWARAN E
SRI KRISHNA COLLEGE OF TECHNOLOGY has been parti
CYBER SECURITY WORKSHOP at AARA'24
Organised by Department of CSE(IOT & CS inclu
Engineering.
Mr.M.Naveenraj
Event Coordinator
Dr.B.Anuradha
Head of the Department


SIMATS ENGINEERIN
Approved By AICTE | IET-UK Accreditation
CERTIFICATE OF PA
This certificate is prese
Mr / Ms. S. RAKESH
for actively participated in (Technical: Paper Presentation, V
Sudoku, Human Calculator) (Non-technical: Dance, Treasure
The Dialogue, Connexions, Short Film, Find The Bgm) (Gamin
Symposium, SYMMETRON-I 2024 on 09-10-2024,Organize
SIMATS Engineering, Saveetha Institute of Medical and Techni
POORVIKA


MALWARE ANALYSIS HACKATHON 2024
IDBI BANK
CERTIFICATE
OF PARTICIPATION
NAMBI AVINASH S
from Sri Krishna College of Technology, Kovaipudur has successfully competed in the Malware Analysis
Hackathon 2024, held at Indian Institute of Technology Madras on 19 & 20 October 2024.
Chester Rebeiro
Associate Professor,
CSE, IITM
Rammohan Srinivasan
CEO,
CyStar, IITM

ELECTRONICS AND COMMUNICATION ENGINEERING

Students' Participation

Mr M Nithishkumar, **Mr V Naveen Kumar**, **Mr R Jaisuriya**, **Mr M Jeevanantham** and **Mr S Nithish Kumar**, Students of Second B.E. ECE, participated in a workshop on **"APP Development"** at IIT-Palakkad during 28-29 September 2024.

ELECTRONICS AND COMMUNICATION ENGINEERING

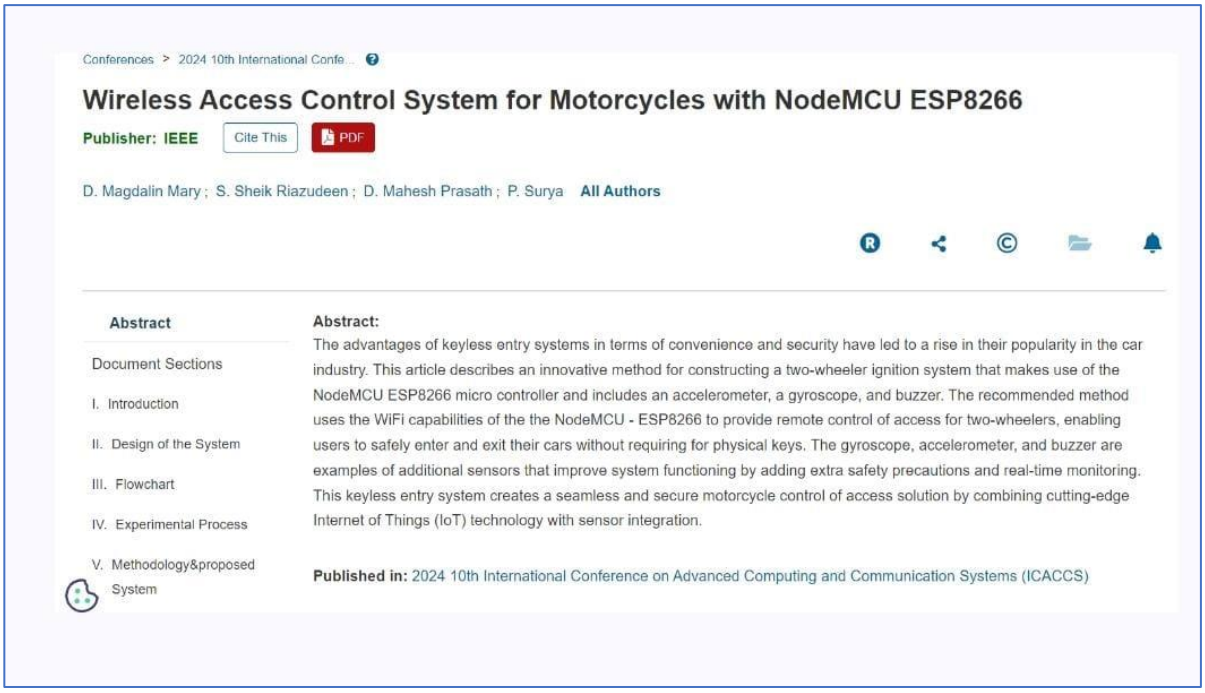
Student Participation

Mr M Sree Govind, Student of Third B.E. ECE, participated in **"48-hour Hack Sprint Hackathon"** organised by iamneo.

ELECTRICAL AND ELECTRONICS ENGINEERING

Faculty Publication

Dr Magdalin Mary D, Asst. Professor, published a research article on **"Wireless Access Control System for Motorcycles with NodeMCU ESP8266"** in the IEEE digital xplore on 24 October 2024.



Conferences > 2024 10th International Confe...

Wireless Access Control System for Motorcycles with NodeMCU ESP8266

Publisher: IEEE | Cite This | PDF

D. Magdalin Mary ; S. Sheik Riazudeen ; D. Mahesh Prasath ; P. Surya All Authors

Abstract

Document Sections

I. Introduction

II. Design of the System

III. Flowchart

IV. Experimental Process

V. Methodology&proposed System

Abstract:
The advantages of keyless entry systems in terms of convenience and security have led to a rise in their popularity in the car industry. This article describes an innovative method for constructing a two-wheeler ignition system that makes use of the NodeMCU ESP8266 micro controller and includes an accelerometer, a gyroscope, and buzzer. The recommended method uses the WiFi capabilities of the the NodeMCU - ESP8266 to provide remote control of access for two-wheelers, enabling users to safely enter and exit their cars without requiring for physical keys. The gyroscope, accelerometer, and buzzer are examples of additional sensors that improve system functioning by adding extra safety precautions and real-time monitoring. This keyless entry system creates a seamless and secure motorcycle control of access solution by combining cutting-edge Internet of Things (IoT) technology with sensor integration.

Published in: 2024 10th International Conference on Advanced Computing and Communication Systems (ICACCS)

ELECTRICAL AND ELECTRONICS ENGINEERING

Faculty Publication

Dr Magdalin Mary D, Asst. Professor, published a research article on **"Keyless Access and Supervisory System for Motorcycle"** in the International Journal of Science and Innovative Engineering & Technology, Volume no:1, Issue no:1, on 24 October 2024.

KEYLESS ACCESS AND SUPERVISORY SYSTEM FOR MOTORCYCLE

Dr. D. Magdalin Mary
Department Of Electrical And Electronics Engineering
Sri Krishna College Of Technology

Mr.S.Sheik Riazudeen, Mr.D.Mahesh Prasath, Mr.P.Surya
Department Of Electrical And Electronics Engineering
Sri Krishna College Of Technology

Keyless entry systems have grown increasingly popular in the automotive sector because of their security and convenience benefits. This article discusses a novel approach to building a two-wheeler keyless entry system with an accelerometer, gyroscope, and buzzer utilizing the NodeMCU ESP8266 microprocessor. The suggested approach makes use of the NodeMCU ESP8266's WiFi capabilities to offer remote access control for two-wheelers, allowing users to securely lock and unlock their vehicles without the need for actual keys. The addition of sensors such as the gyroscope, accelerometer, and buzzer increases the system's functionality by providing more security features and real-time monitoring.This keyless entry system integrates cutting-edge IoT technology with sensor integration to create a smooth and safe two-wheeler access control solution. The paper covers the system's conceptualization, execution, and examination, as well as the potential benefits to automobile security, ease of use, and general effectiveness.

ELECTRICAL AND ELECTRONICS ENGINEERING

Faculty Publication

Dr Lijo Jacob Varghese, Professor and Head, published a research article on **"A Multi Trajectory Smart wall Climbing Robot for Surveillance and Cleaning"** in the IEEE digital xplore on 24 October 2024.

A MultiTrajectory Smart Wall Climbing Robot for Surveillance and Cleaning

Publisher: IEEE Cite This PDF

Sripathy G ; Ravichandran M ; Subbiah V ; Kamalanathann M ; Lijo Jacob Varghese **All Authors**

Abstract:
In today's era of towering skyscrapers dominating city skylines, the maintenance of these structures, primarily built with glass facades, poses significant challenges. These buildings, predominantly housing IT towers and corporate offices, demand meticulous cleaning to maintain their enigmatic appearance. Traditional cleaning methods involving human resources not only incur substantial risks to human life but also consume extensive time, energy, and financial resources. Recognizing these challenges, this paper delves into a comprehensive survey of automated robots designed explicitly for cleaning purposes. The proposed model idea is WIFI controlled robot designed for efficient wall cleaning through the innovative utilization of suction force. The robot's groundbreaking design integrates advanced suction mechanisms, leveraging negative thrust-pressure generated by air blowers to create a powerful vacuum, enabling secure adherence to vertical surfaces. This novel approach minimizes human intervention, reducing risk factors while ensuring effective and precise cleaning of vertical structures. The combination of WIFI control and suction force technology marks a significant leap in automating maintenance tasks for tall infrastructures, promising enhanced efficiency and safety.

Published in: 2024 10th International Conference on Advanced Computing and Communication Systems (ICACCS)

Date of Conference: 14-15 March 2024
DOI: 10.1109/ICACCS60874.2024.10717198
Date Added to IEEE *Xplore*: 23 October 2024
Publisher: IEEE
ISBN Information:
Conference Location: Coimbatore, India
ISSN Information:

ELECTRICAL AND ELECTRONICS ENGINEERING

Faculty Publication

Dr Lijo Jacob Varghese, Professor and Head, published a research article on **"Fault Detection and Isolation in EV Battery using Machine Learning Approach"** in the IEEE digital xplore on 24 October 2024.

Conferences > 2024 10th International Confe...

Fault Detection and Isolation in EV Battery using Machine Learning Approach

Publisher: IEEE Cite This PDF

Lijo Jacob Varghese ; Suma Sira Jacob ; S. Jaisiva ; S. Dilip Kumar ; V. Subbiah ; G. Sripathy **All Authors**

Abstract

Document Sections

I. Introduction

II. Proposed System

III. Implementation

IV. Result and Discussion

V. Conclusion

Authors

Figures

References

Keywords

Abstract:
Lithium-Ion batteries (LIB) are being used more frequently for high-tech applications, and the battery management system's (BMS) troubleshooting and diagnostics skills have gained in necessity to promise the system's safe and reliable functioning. Machine learning (ML) has long been used in BMS LIB in order to truly, consistently, and precisely anticipate a number of important LIB states, including charge level, health status, and remaining lifespan. Data-based ML procedures have been the subject of study lately because they offer various promising benefits over conventional LIB fault detection/diagnostic techniques, including framework, expertise, and data analysis. This article presents a comprehensive summary of the trimming error detection/diagnostics approaches that rely on ML data, delivering the research community ready-to-use references and direction for creating a comprehensive, trustworthy, versatile, and user-friendly strategy. The implementation of the error diagnostic test for the LIB system, current issues associated with current tactics, and describes the challenges in detecting LIB flaws in the coming years are also examined from a research standpoint.

Published in: 2024 10th International Conference on Advanced Computing and Communication Systems (ICACCS)

Date of Conference: 14-15 March 2024

DOI: 10.1109/ICACCS60874.2024.10716975

Date Added to IEEE *Xplore*: 23 October 2024

Publisher: IEEE

ISBN Information:

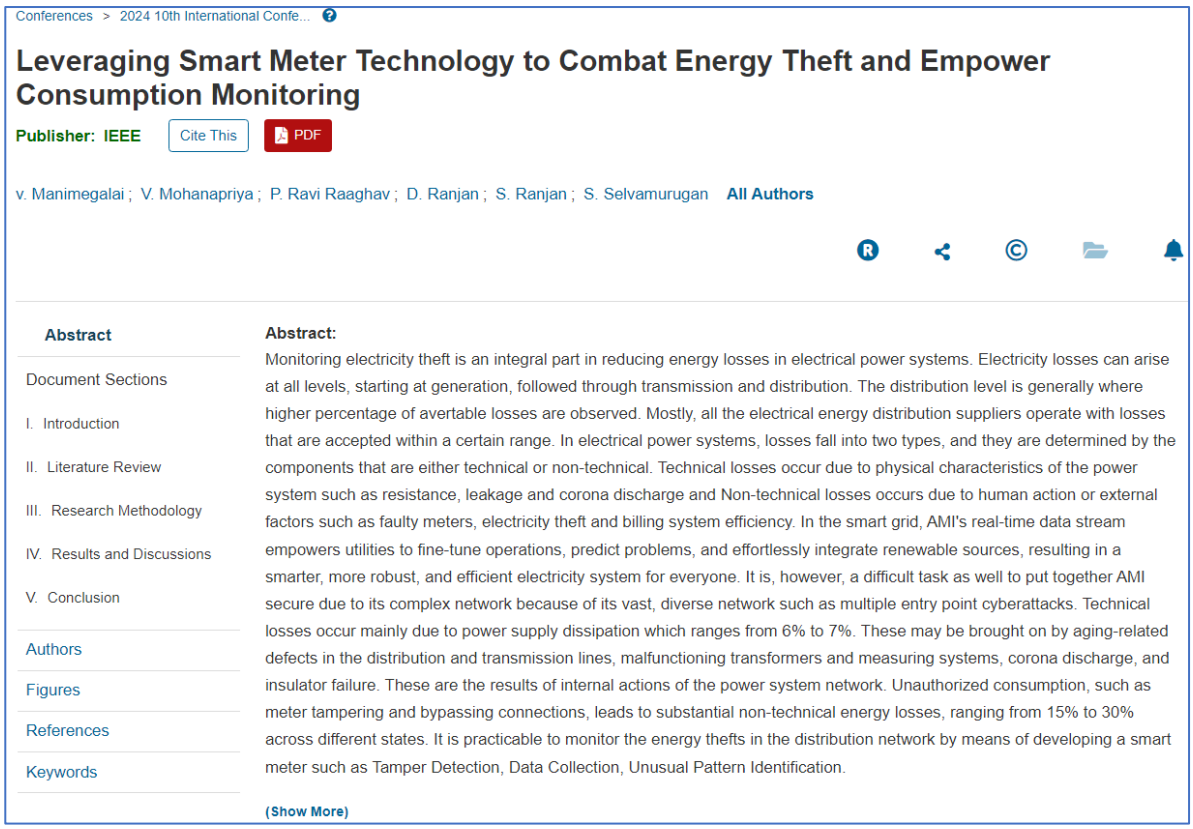
Conference Location: Coimbatore, India

ISSN Information:

ELECTRICAL AND ELECTRONICS ENGINEERING

Faculty Publication

Ms Manimegalai V, Asst. Professor, published a research article on **"Leveraging Smart Meter Technology to Combat Energy Theft and Empower Consumption Monitoring"** in the IEEE digital xplore on 24 October 2024.



Conferences > 2024 10th International Confe...

Leveraging Smart Meter Technology to Combat Energy Theft and Empower Consumption Monitoring

Publisher: IEEE | Cite This | PDF

v. Manimegalai ; V. Mohanapriya ; P. Ravi Raaghav ; D. Ranjan ; S. Ranjan ; S. Selvamurugan All Authors

Abstract

Document Sections

I. Introduction

II. Literature Review

III. Research Methodology

IV. Results and Discussions

V. Conclusion

Authors

Figures

References

Keywords

Abstract:

Monitoring electricity theft is an integral part in reducing energy losses in electrical power systems. Electricity losses can arise at all levels, starting at generation, followed through transmission and distribution. The distribution level is generally where higher percentage of avertable losses are observed. Mostly, all the electrical energy distribution suppliers operate with losses that are accepted within a certain range. In electrical power systems, losses fall into two types, and they are determined by the components that are either technical or non-technical. Technical losses occur due to physical characteristics of the power system such as resistance, leakage and corona discharge and Non-technical losses occurs due to human action or external factors such as faulty meters, electricity theft and billing system efficiency. In the smart grid, AMI's real-time data stream empowers utilities to fine-tune operations, predict problems, and effortlessly integrate renewable sources, resulting in a smarter, more robust, and efficient electricity system for everyone. It is, however, a difficult task as well to put together AMI secure due to its complex network because of its vast, diverse network such as multiple entry point cyberattacks. Technical losses occur mainly due to power supply dissipation which ranges from 6% to 7%. These may be brought on by aging-related defects in the distribution and transmission lines, malfunctioning transformers and measuring systems, corona discharge, and insulator failure. These are the results of internal actions of the power system network. Unauthorized consumption, such as meter tampering and bypassing connections, leads to substantial non-technical energy losses, ranging from 15% to 30% across different states. It is practicable to monitor the energy thefts in the distribution network by means of developing a smart meter such as Tamper Detection, Data Collection, Unusual Pattern Identification.

(Show More)

ELECTRICAL AND ELECTRONICS ENGINEERING

Faculty Publication

Ms Elakya A, Asst. Professor, published a research article on **"Energy Harvesting in Highways using Vertical Axis Wind Turbine"** in the IEEE digital xplore on 24 October 2024.

Conferences > 2024 10th International Confe...

Energy Harvesting in Highways using Vertical Axis Wind Turbine

Publisher: IEEE Cite This PDF

Elakya A ; Abiman Kumar S ; Ajaykumar P ; Dinesh Aravind M ; Lakshana S ; Manimegalai V **All Authors**

Abstract

Document Sections

I. Introduction

II. Problem Statement

III. Literature Survey

IV. Existing System

V. Methodology

Show Full Outline

Authors

Figures

References

Keywords

Abstract:
This abstract presents an innovative approach to promote sustainable energy production through the strategic installation of Vertical Axis Wind Turbines (VAWTs) along highways. The proposed system leverages the wind energy generated by passing vehicles and incorporates advanced monitoring and control mechanisms using Internet of Things (IoT) technology. Key components include VAWTs for power generation, battery storage, IoT-driven monitoring, and algorithms for data analysis. Real-time data, encompassing wind speed, electricity generation, and battery status, is gathered by IoT devices, transmitted to a central platform, and scrutinized with sophisticated algorithms to enhance overall system efficiency. The stored electricity contributes to a cleaner and more sustainable energy ecosystem, powering various applications. This groundbreaking system not only effectively harnesses renewable energy but also signifies a significant step toward establishing intelligent, environmentally conscious, and energy-sustainable highway infrastructure.

Published in: 2024 10th International Conference on Advanced Computing and Communication Systems (ICACCS)

Date of Conference: 14-15 March 2024

DOI: 10.1109/ICACCS60874.2024.10716980

Date Added to IEEE *Xplore*: 23 October 2024

Publisher: IEEE

ISBN Information:

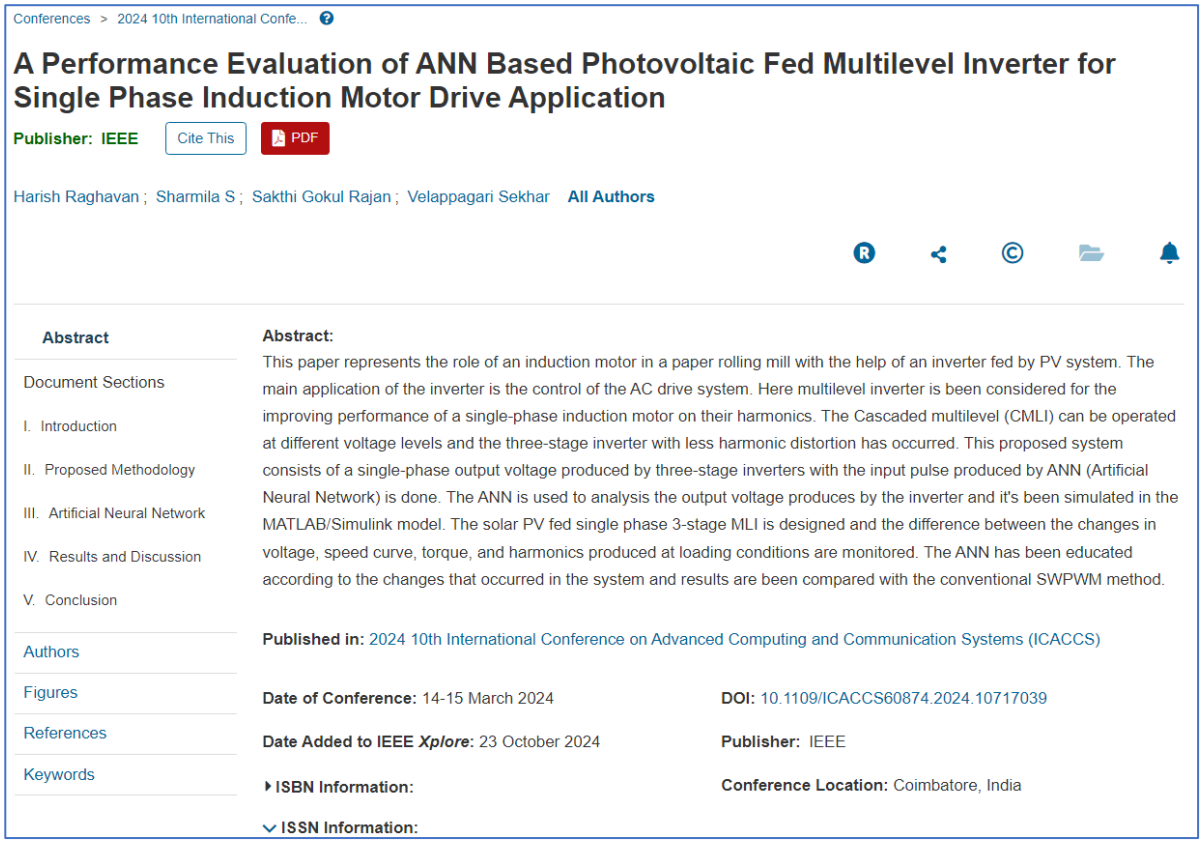
Conference Location: Coimbatore, India

ISSN Information:

ELECTRICAL AND ELECTRONICS ENGINEERING

Faculty Publication

Mr Harish R, Asst. Professor, published a research article on **"A Performance Evaluation of ANN based Photovoltaic Fed Multilevel Inverter for Single Phase Induction Motor Drive Application"** in the IEEE digital xplore on 24 October 2024.



Conferences > 2024 10th International Confe...

A Performance Evaluation of ANN Based Photovoltaic Fed Multilevel Inverter for Single Phase Induction Motor Drive Application

Publisher: IEEE | Cite This | PDF

Harish Raghavan ; Sharmila S ; Sakthi Gokul Rajan ; Velappagari Sekhar **All Authors**

Abstract

Document Sections

I. Introduction

II. Proposed Methodology

III. Artificial Neural Network

IV. Results and Discussion

V. Conclusion

Authors

Figures

References

Keywords

Abstract:
This paper represents the role of an induction motor in a paper rolling mill with the help of an inverter fed by PV system. The main application of the inverter is the control of the AC drive system. Here multilevel inverter is been considered for the improving performance of a single-phase induction motor on their harmonics. The Cascaded multilevel (CMLI) can be operated at different voltage levels and the three-stage inverter with less harmonic distortion has occurred. This proposed system consists of a single-phase output voltage produced by three-stage inverters with the input pulse produced by ANN (Artificial Neural Network) is done. The ANN is used to analysis the output voltage produces by the inverter and it's been simulated in the MATLAB/Simulink model. The solar PV fed single phase 3-stage MLI is designed and the difference between the changes in voltage, speed curve, torque, and harmonics produced at loading conditions are monitored. The ANN has been educated according to the changes that occurred in the system and results are been compared with the conventional SWPWM method.

Published in: 2024 10th International Conference on Advanced Computing and Communication Systems (ICACCS)

Date of Conference: 14-15 March 2024

DOI: 10.1109/ICACCS60874.2024.10717039

Date Added to IEEE *Xplore*: 23 October 2024

Publisher: IEEE

ISBN Information:

Conference Location: Coimbatore, India

ISSN Information:

ELECTRICAL AND ELECTRONICS ENGINEERING

Faculty Publication

Mr Bharaniprakash T, Asst. Professor, published a research article on **"Machine Learning based Grid and Solar PV-Connected Water Pumping using BLDC Motor"** in the IEEE digital xplore on 24 October 2024.

Conferences > 2024 Second International Con...

Machine Learning Based Grid and Solar PV-Connected Water Pumping Using BLDC Motor

Publisher: IEEE Cite This PDF

Bharani Prakash T ; Sakthivel S ; Sriram G ; Selva S ; Narendiran C **All Authors**

Abstract

Document Sections

I. Introduction

II. Background Study

III. Existing System

IV. Proposed System

V. System Methodology

Show Full Outline

Authors

Figures

References

Keywords

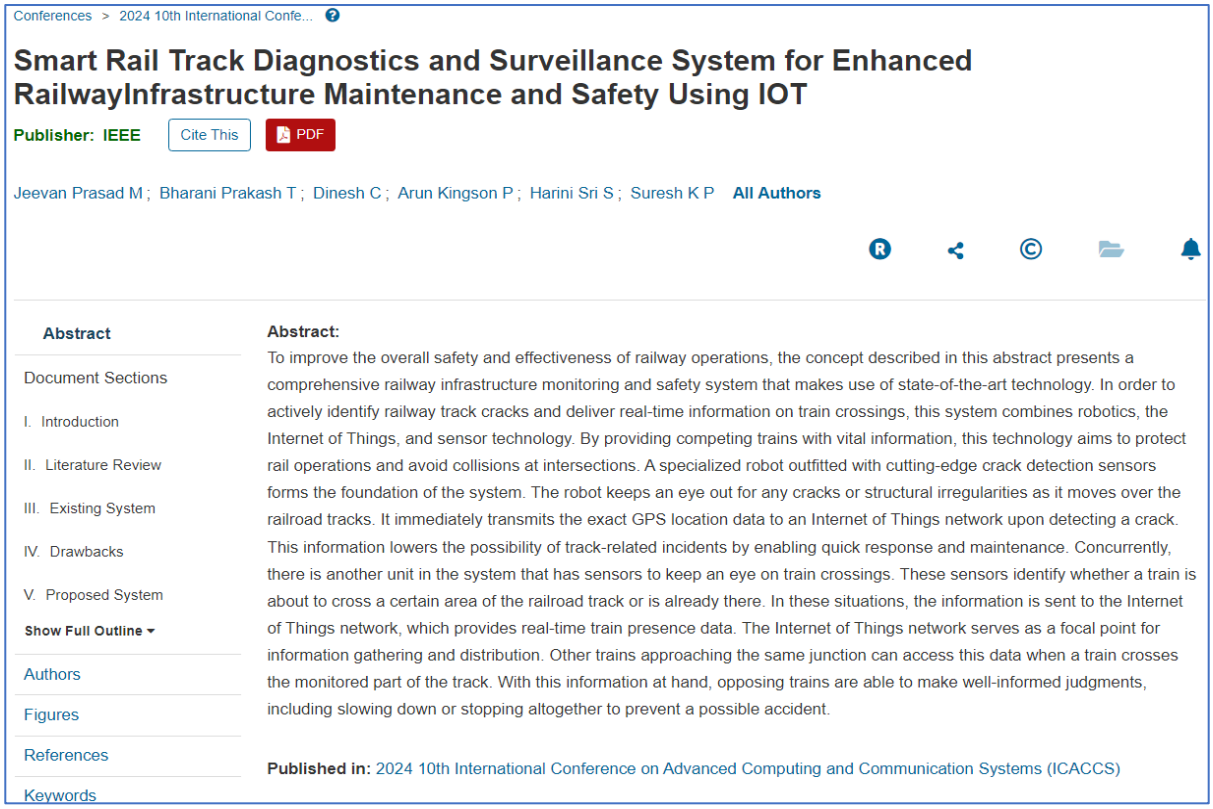
Abstract:
Photovoltaic (PV) The integration of grid and solar photovoltaic (PV) systems for water pumping applications using Brushless DC (BLDC) motors presents a sustainable solution to meet energy demands in rural areas. In this study, we propose a novel approach to enhance the efficiency and reliability of water pumping systems by predicting solar voltage and boosted voltage using the Naive Bayes algorithm. By leveraging both grid and solar power sources, our system ensures continuous operation of BLDC motor-driven water pumps, thereby mitigating dependence on conventional energy sources and reducing environmental impact. Our research focuses on optimizing energy utilization and system performance through accurate voltage prediction. The Naive Bayes algorithm, renowned for its simplicity and effectiveness in probabilistic classification, is employed to forecast solar voltage and boosted voltage based on historical data and relevant parameters. This predictive capability enables proactive management of energy resources, ensuring seamless transition between grid and solar power inputs to the BLDC motor, thereby maximizing operational efficiency and minimizing downtime. Experimental validation of our proposed methodology demonstrates its efficacy in real-world scenarios. By analyzing voltage trends and system dynamics, we optimize energy allocation strategies to achieve optimal performance under varying operating conditions. Comparative analysis with traditional water pumping systems highlights the superiority of our approach in terms of efficiency, reliability, and environmental sustainability.

Published in: 2024 Second International Conference on Advances in Information Technology (ICAIT)

ELECTRICAL AND ELECTRONICS ENGINEERING

Faculty Publication

Mr Bharaniprakash T and **Dr Suresh K P**, Asst. Professors, published a research article on **"Smart Rail Track Diagnostics and Surveillance System for Enhanced Railway Infrastructure Maintenance and Safety using IOT"** in the IEEE digital xplore on 24 October 2024.



Conferences > 2024 10th International Confe...

Smart Rail Track Diagnostics and Surveillance System for Enhanced RailwayInfrastructure Maintenance and Safety Using IOT

Publisher: IEEE | Cite This | PDF

Jeevan Prasad M ; Bharani Prakash T ; Dinesh C ; Arun Kingson P ; Harini Sri S ; Suresh K P **All Authors**

Abstract
Document Sections
I. Introduction
II. Literature Review
III. Existing System
IV. Drawbacks
V. Proposed System
Show Full Outline
Authors
Figures
References
Keywords

Abstract:
To improve the overall safety and effectiveness of railway operations, the concept described in this abstract presents a comprehensive railway infrastructure monitoring and safety system that makes use of state-of-the-art technology. In order to actively identify railway track cracks and deliver real-time information on train crossings, this system combines robotics, the Internet of Things, and sensor technology. By providing competing trains with vital information, this technology aims to protect rail operations and avoid collisions at intersections. A specialized robot outfitted with cutting-edge crack detection sensors forms the foundation of the system. The robot keeps an eye out for any cracks or structural irregularities as it moves over the railroad tracks. It immediately transmits the exact GPS location data to an Internet of Things network upon detecting a crack. This information lowers the possibility of track-related incidents by enabling quick response and maintenance. Concurrently, there is another unit in the system that has sensors to keep an eye on train crossings. These sensors identify whether a train is about to cross a certain area of the railroad track or is already there. In these situations, the information is sent to the Internet of Things network, which provides real-time train presence data. The Internet of Things network serves as a focal point for information gathering and distribution. Other trains approaching the same junction can access this data when a train crosses the monitored part of the track. With this information at hand, opposing trains are able to make well-informed judgments, including slowing down or stopping altogether to prevent a possible accident.

Published in: 2024 10th International Conference on Advanced Computing and Communication Systems (ICACCS)

ELECTRICAL AND ELECTRONICS ENGINEERING

Student Participation

Ms Harivarthini M Student of Second B.E. EEE, participated in **"Artificial Intelligence Workshop"** organised by Top Engineers – India in association with Mechanica 2024, IIT Madras on 19 October 2024.

ELECTRICAL AND ELECTRONICS ENGINEERING

Student Participation

Ms Kanya S, Student of First B.E. EEE, completed two online courses on **"Java Programming"** and **"Google Analytics"** through Great Learning Academy on 21 October 2024.


Great Learning

CERTIFICATE OF COMPLETION

Presented to

Kanya.S

For successfully completing a free online course

Java Programming

Provided by

Great Learning Academy

(On August 2024)


Great Learning

CERTIFICATE OF COMPLETION

Presented to

Kanya.S

For successfully completing a free online course

Google Analytics

Provided by

Great Learning Academy

(On August 2024)

ELECTRICAL AND ELECTRONICS ENGINEERING

Students' Participation

Ms R Madhu Mitha, Ms Meenapriya, Ms Dhivagini, Mr Mohamed Aslam, Mr Bharath Sai, Mr Karthikeyan and **Mr Dhilipkumar**, Students of Second B.E. EEE, participated in **"Circuit Debugging and Quiz"** of Barnstromz-2k'24 organised by Hindustan Institute of Technology, Coimbatore on 25 September 2024.


HINDUSTHAN INSTITUTE OF TECHNOLOGY
Coimbatore-32
(An Autonomous Institution)
(Approved by AICTE, New Delhi, Permanently Affiliated to Anna University, Chennai. Accredited with NBA & 'A' Grade by NAAC, An ISO 9001:2015 Certified Institution)
ELECTRONICS AND COMMUNICATION ENGINEERING
DEPARTMENT OF
BARNSTROMZ-2k'24
16th National Level Technical Symposium
CERTIFICATE OF PARTICIPATION
This is to certify that Mr/Ms MADHUMITHA R of II YEAR ELECTRICAL & ELECTRONICS ENGINEERING has participated in the event CIRCUIT DEBUGGING on the 16th National Level Technical Symposium Barnstromz 2k'24 held on 25th September 2024.
Coordinator
Convener
Principal

ELECTRICAL AND ELECTRONICS ENGINEERING

Placement

Mr Sabari K G

Ms Keerthana Devi S.K

Mr Kishore M

Mr Akash S

Ms Govardhana T

Students of Final B.E. ICE placed in

accenture

ELECTRICAL AND ELECTRONICS ENGINEERING

Placement

APARNA M K
727821TUEE004
Batch 2021-25/EEE

DHANASHREE R
727821TUEE014
Batch 2021-25/EEE

KALAIVANI P
727821TUEE036
Batch 2021-25/EEE

KRUSHANGINI S
727821TUEE042
Batch 2021-25/EEE

LAVANYA S
727821TUEE044
Batch 2021-25/EEE

PANDI PRIYA P
727821TUEE111
Batch 2021-25/EEE

PRADEEP G A
727821TUEE113
Batch 2021-25/EEE

PRAJUSHA P J
727821TUEE115
Batch 2021-25/EEE

PRASATH S R
727821TUEE118
Batch 2021-25/EEE

RAHUL M
727821TUEE120
Batch 2021-25/EEE

SHASHANG SUJAY S
727821TUEE136
Batch 2021-25/EEE

SREE VARSHAA V A
727821TUEE139
Batch 2021-25/EEE

SRINIDHI J
727821TUEE140
Batch 2021-25/EEE

SUSHMITHA SIVA S
727821TUEE148
Batch 2021-25/EEE

VIVITHA E
727821TUEE154
Batch 2021-25/EEE

SABIKA B
727821TUEE130
Batch 2021-25/EEE

SARUMATHI S
727821TUEE135
Batch 2021-25/EEE

LOGESHWARI C
727821TUEE045
Batch 2021-25/EEE

NITHYA P
727821TUEE109
Batch 2021-25/EEE

for successfully getting selected for placement offer with

accenture

INFORMATION TECHNOLOGY

Placement

Hemaharshini K J

Harshini S

Mahisa P

Jamuna A

Mahesh Boopathi A P

Gowtham S

Kabila B S

Thamarai.K

for successfully getting selected for placement offer with

accenture

INFORMATION TECHNOLOGY

Placement

Maadhesh Kumar S

Dhrisha Krishna R

Samyuktha A M

Mahisa P

Thejana A

Nirosh Gowda M

for successfully getting selected for placement offer with

accenture

INFORMATION TECHNOLOGY

Placement

Trishla B

Vimal Varshini R

Vigneshvara S

Sivasuriya M

Sabari Rupa M

Praveena S

for successfully getting selected for placement offer with

accenture

INFORMATION TECHNOLOGY

Students' Participation

Ms K S Varsha, Ms Shanju Shree J, Ms Shifana Sherin, Ms Shivani, Ms Vishnu Priya and **Mr D P Pranesh,** Students of Second B.Tech. IT, participated in a workshop on **"Recent Trends and Challenges in Robotics"** organised by Sri Krishna College of Engineering and Technology on 18 October 2024.

SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY
An Autonomous Institution | Approved by AICTE | Affiliated to Anna University | Accredited by NAAC with A++ grade
Kuniamuthur, Coimbatore - 641008

This is to certify that

Varsha K S

has attended the workshop on "Recent Trends and Challenges in Robotics" conducted in the National Level Technical Symposium KRIZEN '24 organized by the Department of Mechatronics Engineering on 18th October 2024.

Dr. L. Feroz Ali, Coordinator
Dr. M. Lydia, HOD/MCT
Dr. K. Porkumaran, Principal

INFORMATION TECHNOLOGY

Certification

Ms Srimahathi P, Student of Second B.Tech. IT, completed

- Java Foundation Certification.
- Java OOPs Concepts.
- Command Line Interface Operating System.
- Learning ReactJS, Figma Training 2022
- C++17 STL Solutions
- C++: Working with Associative Containers & Algorithms Commands through **Infosys Springboard.**


Infosys
Navigate your next

COURSE COMPLETION CERTIFICATE

The certificate is awarded to

SRIMAHATHI P

for successfully completing the course

Figma Training 2022

on August 16, 2024

Infosys | Springboard

Congratulations! You make us proud!

Issued on: Saturday, August 17, 2024
To verify, scan the QR code at https://verify.onwingspan.com

Thirumala Arohi
Executive Vice President and Global Head
Education, Training & Assessment (ETA)
Infosys Limited

INFORMATION TECHNOLOGY

Certification

Ms Sneha R, Ms Srimahathi P and **Ms Sainthavi Sri M K,** Students of Second B.Tech. IT, completed an online course on **"Linear Algebra: Matrix Algebra, Determinants, & Eigenvectors"** through Coursera.

MECHANICAL ENGINEERING

Faculty Participation

Mr Senthil Kumar K, Asst. Professor, participated in a One-week Faculty Development Programme (FDP) on **"Machine Drawing Through Auto CAD"** organised by CVR College of Engineering, Hyderabad.

CVR COLLEGE OF ENGINEERING
(An UGC Autonomous Institution, Accredited by NBA, NAAC 'A' Grade)
(Approved by AICTE & Government of Telangana and Affiliated to JNTUH)
Vastunagar, Mangapalli (V), Ibrahimpatnam (M), R.R Dist, Pin 501510

CERTIFICATE

This to certify that SENTHIL KUMAR K of SRI KRISHNA COLLEGE OF TECHNOLOGY has participated in the One Week Faculty Development Program on *"Machine Drawing Through Auto CAD"* organized by the Department of Mechanical Engineering, CVR College of Engineering, Hyderabad from 30th September to 05 th October, 2024.

MR. T. VENKATESH
CO ORDINATOR

DR. M VENKATA RAMANA
HEAD OF THE DEPARTMENT

DR. RAMAMOHAN REDDY KASA
PRINCIPAL

MECHANICAL ENGINEERING

Faculty Participation

Mr Senthil Kumar K, Asst. Professor, participated in a Six-day Online International Faculty Development Programme on "**Progress in Mechanical Engineering"**.organised by SRM Institute of Science and Technology, Ramapuram Campus, Chennai.

RAMAPURAM SRM

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY
RAMAPURAM CAMPUS
CHENNAI, TAMIL NADU, INDIA-600 089
Department of Mechanical Engineering

This is to certify that Senthil Kumar K, Assistant Professor, Mechanical Engineering, Sri Krishna College of Technology has actively participated in the Six Day Online International Faculty Development Program on Progress in Mechanical Engineering organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-89,during 14th to 19th October 2024.

Dr. A. Mathivanan
HoD/Mech

Dr. Sakthi Ganesh M
Dean (E&T)

MECHANICAL ENGINEERING

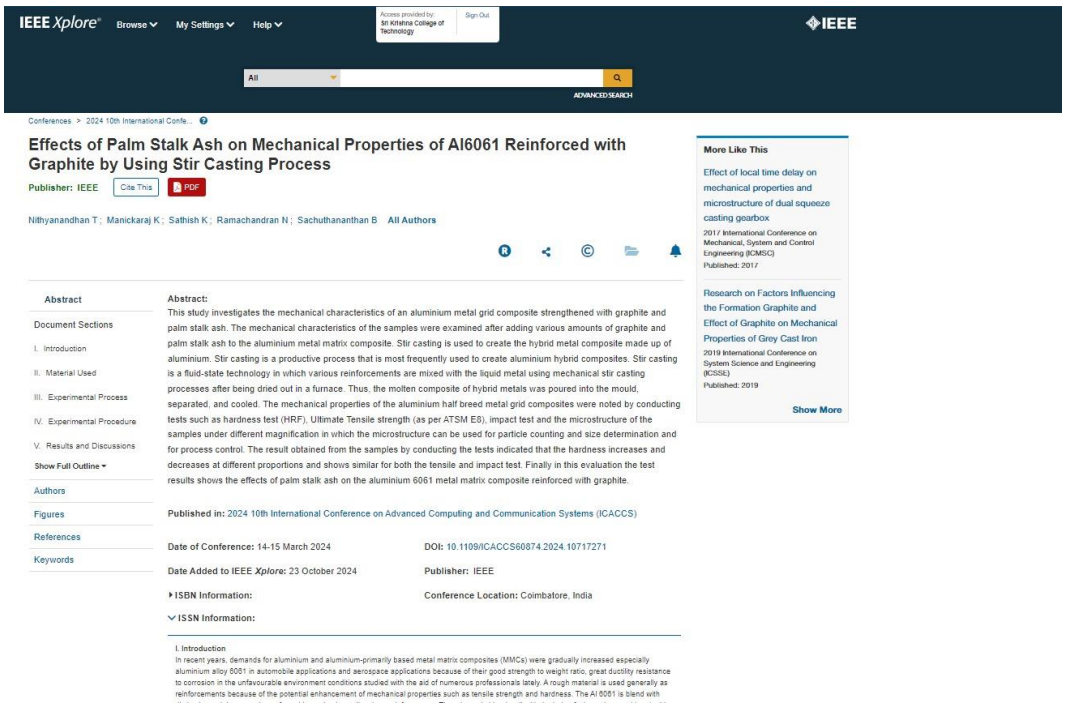
Faculty Participation

Dr Paul Gregory Felix, Asst. Professor, served as a peer-reviewer for the Journal of Building Engineering. He was awarded a **Certificate of Reviewing** in recognition of completing three reviews between May 2024 and October 2024. This certificate was issued by the editors of the **Journal of Building Engineering.**

MECHANICAL ENGINEERING

Publication

Dr T Nithyanandhan, Asst. Professor, published an article on **"Effect of Palm Stalk Ash on Mechanical Properties of Al6061 Reinforced with Graphite Using Stir Casting Process"** in the IEEE Xplore Conference Proceedings, a Scopus-indexed journal.



IEEE Xplore Browse My Settings Help — Access provided by: Sri Krishna College of Technology — Sign Out — IEEE

All — ADVANCED SEARCH

Conferences > 2024 10th International Confe...

Effects of Palm Stalk Ash on Mechanical Properties of Al6061 Reinforced with Graphite by Using Stir Casting Process

Publisher: IEEE | Cite This | PDF

Nithyanandhan T ; Manickaraj K ; Sathish K ; Ramachandran N ; Sachuthananthan B All Authors

Abstract
Document Sections
I. Introduction
II. Material Used
III. Experimental Process
IV. Experimental Procedure
V. Results and Discussions
Show Full Outline
Authors
Figures
References
Keywords

Abstract:
This study investigates the mechanical characteristics of an aluminium metal grid composite strengthened with graphite and palm stalk ash. The mechanical characteristics of the samples were examined after adding various amounts of graphite and palm stalk ash to the aluminium metal matrix composite. Stir casting is used to create the hybrid metal composite made up of aluminium. Stir casting is a productive process that is most frequently used to create aluminium hybrid composites. Stir casting is a fluid-state technology in which various reinforcements are mixed with the liquid metal using mechanical stir casting processes after being dried out in a furnace. Thus, the molten composite of hybrid metals was poured into the mould, separated, and cooled. The mechanical properties of the aluminium half breed metal grid composites were noted by conducting tests such as hardness test (HRF), Ultimate Tensile strength (as per ATSM E8), impact test and the microstructure of the samples under different magnification in which the microstructure can be used for particle counting and size determination and for process control. The result obtained from the samples by conducting the tests indicated that the hardness increases and decreases at different proportions and shows similar for both the tensile and impact test. Finally in this evaluation the test results shows the effects of palm stalk ash on the aluminium 6061 metal matrix composite reinforced with graphite.

Published in: 2024 10th International Conference on Advanced Computing and Communication Systems (ICACCS)

Date of Conference: 14-15 March 2024 — **DOI:** 10.1109/ICACCS60874.2024.10717271
Date Added to IEEE *Xplore*: 23 October 2024 — **Publisher:** IEEE
ISBN Information: — **Conference Location:** Coimbatore, India
ISSN Information:

I. Introduction
In recent years, demands for aluminium and aluminium-primarily based metal matrix composites (MMCs) were gradually increased especially aluminium alloy 6061 in automobile applications and aerospace applications because of their good strength to weight ratio, great ductility resistance to corrosion in the unfavourable environment conditions studied with the aid of numerous professionals lately. A rough material is used generally as reinforcements because of the potential enhancement of mechanical properties such as tensile strength and hardness. The Al 6061 is blend with

More Like This

Effect of local time delay on mechanical properties and microstructure of dual squeeze casting gearbox
2017 International Conference on Mechanical, System and Control Engineering (ICMSC)
Published: 2017

Research on Factors Influencing the Formation Graphite and Effect of Graphite on Mechanical Properties of Grey Cast Iron
2019 International Conference on System Science and Engineering (ICSSE)
Published: 2019

Show More

MECHANICAL ENGINEERING

Publication

Dr T Nithyanandhan, Asst. Professor, published an article on **"An Experimental Investigation of Volume Fraction of Natural Java Jute and Sponge Gourd Fiber Reinforced Polymer Matrix Composite"** in the IEEE Xplore Conference Proceedings, a Scopus-indexed journal.

IEEE Xplore Browse My Settings Help — Access provided by: Sri Krishna College of Technology — Sign Out — IEEE

All — ADVANCED SEARCH

Conferences > 2024 10th International Confe...

An Experimental Investigation of Volume Fraction of Natural Java Jute and Sponge Gourd Fiber Reinforced Polymer Matrix Composite

Publisher: IEEE | Cite This | PDF

Manickaraj K ; Nithyanandhan T ; Sathish K ; Karuppasamy R ; Sachuthananthan B All Authors

Abstract
Document Sections
I. Introduction
II. Materials and Methods
III. Fabrication
IV. Testing
V. Result and Discussion
Show Full Outline
Authors
Figures
References
Keywords

Abstract:
Composite materials can replace traditional materials due to their excellent features such as compression, tensile strength, high strength to weight ratio, and low cost. Among the composite materials, polymer-based composites are being pursued by researchers. This study focuses on natural fiber composites made from Java Jute and Sponge gourd fibers and vinyl ester resin. The composite is made by hand layup at varied volume percentages of fibers by the Java Jute andsponge gourd fibers at 10/20, 15/15, and 20/10 volume ratios and reinforced with vinyl ester resin. By performing mechanical tests such as tensile, impact, and flexural, Java Jute and sponge gourd natural fiber composite-based material enhanced its qualities and was utilized as an alternative source for glass fiber reinforced polymeric materials.

Published in: 2024 10th International Conference on Advanced Computing and Communication Systems (ICACCS)

Date of Conference: 14-15 March 2024 — DOI: 10.1109/ICACCS60874.2024.10717221
Date Added to IEEE Xplore: 23 October 2024 — Publisher: IEEE
ISBN Information: — Conference Location: Coimbatore, India
ISSN Information:

I. Introduction
There are two or more materials in a composite material. The properties of the composite material are superior to the properties of the component materials utilized to create it [1]. The best characteristics of composites made of biopolymers or synthetic polymers reinforced with plant fibers are light weight, biodegradability, and renewability [2] In the case of composite materials, there are two phases: reinforcement and matrix. Based on the matrix, ceramic matrix, metal matrix and polymer matrix composite material are the three forms of composite materials [3]–[4]. This paper is entirely based on polymer matrix composite materials [5]. Because of its outstanding properties such as low density, low cost, and high strength, the composite material created by natural fibers [6]. Homogeneous nano cellulose fibril produced from various lignocellulosefibers is an effective reinforcing element in polymer matrix composites [7]. Natural fibers have a significant impact on the tribological properties of these composites. Fiber treatment can increase tribological properties significantly by guaranteeing adequate interfacial adhesion between the fibers and the matrix [8]. If exposed to water, or stored in humid conditions, bamboo fibres absorb moisture. Composites made from these fibers, on the other hand, have greater thermal properties, making bamboo fiber superior to other natural plant fibers [9]. They have a better adhesion to the matrix than other fibers. The fundamental benefit of this natural fiber is that it is biodegradable, hence natural fibers are favoured in this paper. Java Jute andSponge

More Like This
Optical Coupling Methods for Cost-Effective Polymer Optical Fiber Communication
IEEE Transactions on Components and Packaging Technologies
Published: 2009
Mechanical characteristics of sandwich palm/glass based polymer composite
2017 IEEE International Conference on Circuits and Systems (ICCS)
Published: 2017
Show More

MECHANICAL ENGINEERING

Publication

Dr T Nithyanandhan, Asst. Professor, published an article on **"Material Characteristics and its Performance Measures in Turbine: A Review"** in the AIP Conference Proceedings, a Scopus-indexed journal.

AIP Publishing AIP Conference Proceedings

HOME BROWSE FOR AUTHORS FOR ORGANIZERS ABOUT

Volume 3221, Issue 1
11 October 2024

SUSTAINABLE MATERIALS AND TECHNOLOGIES
20–21 March 2024
Coimbatore, India

Previous Article Next Article

RESEARCH ARTICLE | OCTOBER 11 2024

Material characteristics and its performance measures in turbine: A review

K. Sathish; T. Nithyanandhan; P. Ravishankar; S. Rohith; L. Krishna Malathi

Author & Article Information

AIP Conf. Proc. 3221, 020020 (2024)

https://doi.org/10.1063/5.0235912

Share Tools

This paper analyzes the reaction turbines such as the Kaplan and Francis turbines. The metals present in it are the major elements of stainless steel which make the turbine corrosion resistant and the other elements are bronze alloys and a small amount of titanium. Francis turbines are widely used for hydropower plants, catering to both small and large-scale operations. However, they face erosion issues, especially in sediment-laden water, impacting performance and turbine breakdown. This study utilized the Grant model to predict sediment erosion in Francis turbine runners under various conditions. Erosion near the outlet side increased linearly with the sediment inflow rate, irrespective of operating conditions. An experimental examination was carried out in the recent revival of a Kaplan turbine utilizing structural steel St 3 (GOST standard). Both the base metal and the welded joints were subjected to mechanical property testing and non-destructive techniques (NDT). Ultrasonic testing (UT) identified problems such as lamellar ripping in the base metal and lack of penetration in the weld metal. Tensile tests revealed less base metal contraction, which is consistent with lamellar tearing. For St 3 steel, the fatigue crack threshold was lower than anticipated, and the rate of crack propagation was noticeably higher. Numerical examination of the turbine covers in several operating modes showed that structural integrity is maintained despite these difficulties. In our field investigation, ferritic stainless steels used in marine environments exhibited susceptibility to pitting corrosion. It is well known that alloying, especially with titanium, can improve resistance to pitting corrosion and change the passive film on the surface. There is disagreement though, over how titanium addition affects ferritic stainless steel's passive film and overall resistance to pitting corrosion. This study addressed these uncertainties through

MECHANICAL ENGINEERING

Publication

Dr T Nithyanandhan, Asst. Professor, published an article on **"An Overview of the Design and Characteristics of Kaplan Turbines"** in the AIP Conference Proceedings, a Scopus-indexed journal.

AIP Publishing AIP Conference Proceedings

HOME BROWSE FOR AUTHORS FOR ORGANIZERS ABOUT

Volume 3221, Issue 1
11 October 2024

SUSTAINABLE MATERIALS AND TECHNOLOGIES
20–21 March 2024
Coimbatore, India

Previous Article Next Article

RESEARCH ARTICLE | OCTOBER 11 2024

An overview of the design and characteristics of Kaplan turbines

K. Sathish; T. Nithyanandhan; C. Vanchimuthu; V. Thiyagarajan; C. Bavadharani

+ Author & Article Information

AIP Conf. Proc. 3221, 020035 (2024)

https://doi.org/10.1063/5.0235916

Share Tools

The article of review offers a synopsis of the design and performance of Kaplan turbines. The article begins with a brief introduction to the history of Kaplan turbines and how they are used. It then gives an overview of the design and components of Kaplan turbines, consisting the draft tube, guiding vanes, and runner. The article further outlines the various types of Kaplan turbines and their efficiency ratings. It also provides information on the operational characteristics of Kaplan turbines, including the cavitation, noise and vibration, and how they are affected by changes in the operating conditions. Finally, the article covers the different methods used to control Kaplan turbines and their performance. This includes the use of variable guide vanes, blade pitch control, and the use of turbines with adjustable runners. The review article concludes by summarizing the key points about the design and performance of Kaplan turbines, and the potential for improving efficiency and performance. The article provides a comprehensive overview of Kaplan turbines, making it an essential resource for anyone interested in understanding this technology.

MECHANICAL ENGINEERING

Event organised .

UYIR Club of Sri Krishna College of Technology conducted a Awareness Programme on **“No Helmet No Entry”** in the campus with the support of **UYIR Club Volunteers.**

MECHANICAL ENGINEERING

Faculty Participation

Mr K Mohan, Asst. Professor, attended the UYIR committee meeting at the Coimbatore Commissioner's office. The meeting focused on discussing community initiatives and collaborations.

MECHANICAL ENGINEERING

Event Organised

UYIR Club of Sri Krishna College of Technology conducted the Road Safety Awareness Camp in the SKCT Campus. The awareness was created among the violators. The number of violators identified is 45.

MECHANICAL ENGINEERING

Event Organised

Fifteen UYIR Club volunteers from Sri Krishna College of Technology, led by mentor **Mr K Mohan,** Asst. Professor**,** assisted in Diwali traffic regulation on Cross Cut Road, Coimbatore. They collaborated with the City Traffic Police Inspector, Thiru Murugesan, and his team to manage traffic and serve the public. The students actively participated and gave their full support..

MASTER OF BUSINESS ADMINISTRATION

Faculty Participation

Dr S Piradeep, Asst. Professor**,** participated in **Puthiya Payanam, Valarchiyai Noki** and completed the Financial & Business excellence programme organised by CII Centre of excellence & Livelihood during 18-19 October 2024.

Centre of Excellence on Employment & Livelihood
புதிய பயணம்
CII
Confederation of Indian Industry

CERTIFICATE OF PARTICIPATION

DR S PRADEEP

SRI KRISHNA COLLEGE OF TECHNOLOGY

Has participated in **Puthiya Payanam, Valarchiyai Noki** and successfully completed the **Financial & Business Excellence Program** organised by **CII Centre of Excellence on Employment & Livelihood** in October 2024.

R DINESH, Chairman, CII Centre of Excellence on Employment & Livelihood
R NANDINI, Chairperson, CII Southern Region
SRIVATS RAM, Chairman, CII Tamil Nadu
M KARUMU, Co-Chairperson, CII Coimbatore Zone, Entrepreneurs Forum

MASTER OF BUSINESS ADMINISTRATION

Event Organised

SoM organised **Mar-Q: Marketing Quiz** on 22 October 2024 for Students of First MBA. Mar-Q tested the knowledge of the students on marketing concepts and promoted Brand Awareness.

MASTER OF BUSINESS ADMINISTRATION

Students' Achievement

Mr Sudeep S, Ms Jeffri Priyadarsini T and **Ms Kaviya N S,** Students of First MBA bagged the **First Prize** in **"Macathon 2.0 (The Great Management Ideathon)"** organised by the Coimbatore Institute of Technology, Coimbatore during 24-25 October 2024. Their hard work and determination have earned them not only the prestigious title but also a cash award of Rs. 25,000/-

MASTER OF BUSINESS ADMINISTRATION

Guest Lecture

SoM SKCT Student Activity Hub organised a Guest Lecture on BIZEX facilitated by **Mr C A Surya Chinnadurai**, Founder - Surya & Co., Chartered Accountants for the Students of First MBA on 25 October 2024.

MASTER OF BUSINESS ADMINISTRATION

Seminar

SoM organised a seminar on "**Brand Management Pragmatic PR Pulse and Branding"** facilitated by **Ms Kaavya Sundar – Head of Brand-Comm, Coimbatore** on 26 October 2024.

SCIENCE AND HUMANITIES

Faculty Achievement

Dr N Venugopal, Assoc. Professor, acted as a Board of Studies Member at EASA College on 17 October 2024.

EASA COLLEGE
OF ENGINEERING & TECHNOLOGY (ECET)
ULTIMATE DESTINATION FOR TECHNICAL EXCELLENCE
APPROVED BY AICTE, NEW DELHI | AFFILIATED TO ANNA UNIVERSITY, CHENNAI
NH - 47, Palakkad Main Road, Navakkarai (PO), Coimbatore - 641 105

Ref.No.ECET/Auto/2416 17.10.2024

To
Dr. N. Venugopal
Associate Professor of English
Department of Science and Humanities
Sri Krishna College of Technology,
Coimbatore-641 042

Dear Sir /Madam

Subject: Member of the Board of Studies –Department of Science & Humanities Reg.

We feel honored to have you as a member of the Board of Studies at EASA College of engineering & Technology, Coimbatore 641105, for the department of Science & Humanities for the academic year 2024-25. As a member of the board, we look forward to review the academic regulations, syllabi & curricula proposals for the development and enhancement of our academic activities in this Department.

Thank you in anticipation.

Warm Regards,

Dean (Autonomous)

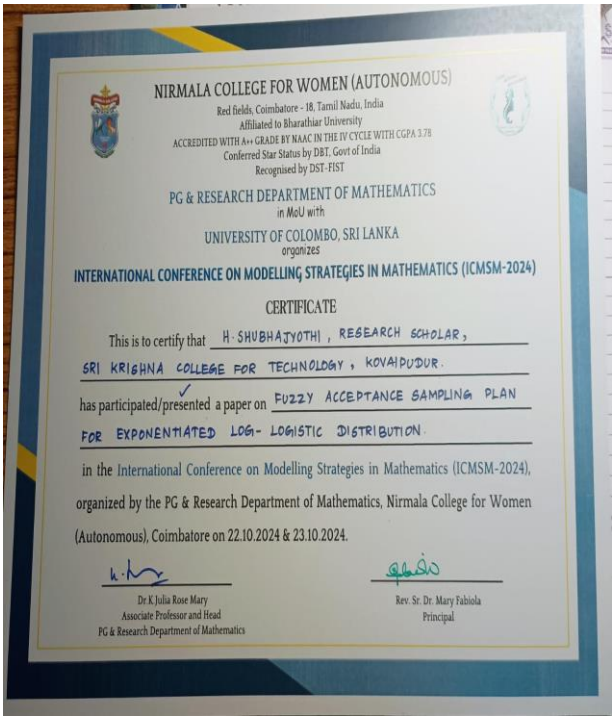
Principal

Principal
EASA COLLEGE OF ENGINEERING AND TECHNOLOGY
NAVAKKARAI (POST), COIMBATORE 641 105.

SCIENCE AND HUMANITIES

Faculty Participation

Ms H Shubhajoythi, Asst. Professor, presented a paper on **"Fuzzy Accepted Sampling Plan for Exponentiated Lo-Logistic Distribution"** at Nirmala College for Women on during 22-23 October 2024.



NIRMALA COLLEGE FOR WOMEN (AUTONOMOUS)
Red fields, Coimbatore - 18, Tamil Nadu, India
Affiliated to Bharathiar University
ACCREDITED WITH A++ GRADE BY NAAC IN THE IV CYCLE WITH CGPA 3.78
Conferred Star Status by DBT, Govt of India
Recognised by DST-FIST

PG & RESEARCH DEPARTMENT OF MATHEMATICS
in MoU with
UNIVERSITY OF COLOMBO, SRI LANKA
organizes

INTERNATIONAL CONFERENCE ON MODELLING STRATEGIES IN MATHEMATICS (ICMSM-2024)

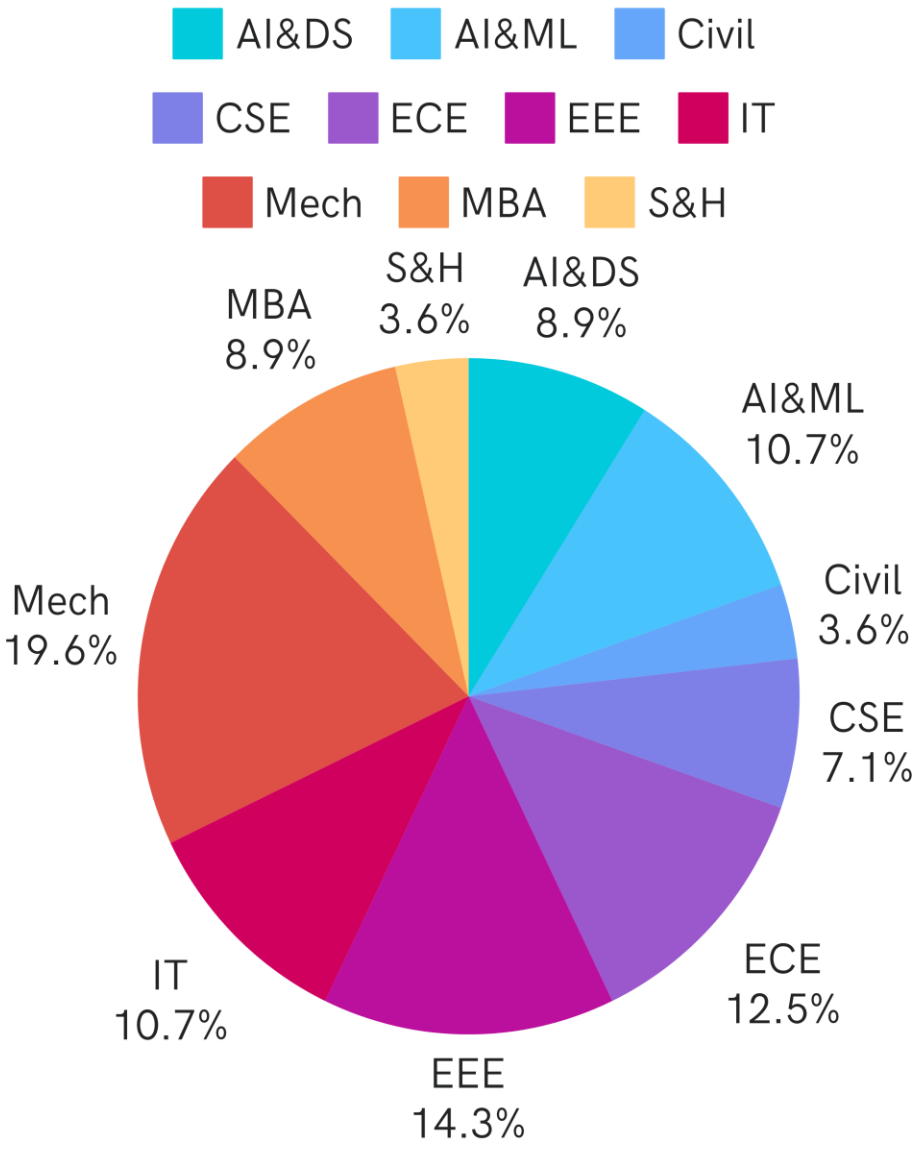
CERTIFICATE

This is to certify that H. SHUBHAJYOTHI, RESEARCH SCHOLAR, SRI KRISHNA COLLEGE FOR TECHNOLOGY, KOVAIPUDUR. has participated/presented a paper on FUZZY ACCEPTANCE SAMPLING PLAN FOR EXPONENTIATED LOG-LOGISTIC DISTRIBUTION in the International Conference on Modelling Strategies in Mathematics (ICMSM-2024), organized by the PG & Research Department of Mathematics, Nirmala College for Women (Autonomous), Coimbatore on 22.10.2024 & 23.10.2024.

Dr K Julia Rose Mary
Associate Professor and Head
PG & Research Department of Mathematics

Rev. Sr. Dr. Mary Fabiola
Principal

CONTENT CONRIBUTIONS BY THE DEPARTMENTS



SRI KRISHNA INSTITUTIONS COIMBATORE

SUSTAINABLE DEVELOPMENT GOALS

SKCT supports the Sustainable Development Goals

NAAC A++ GRADE

NBA NATIONAL BOARD OF ACCREDITATION CSE | CIVIL | EEE | ECE MECH | IT

nirf Band 151-200 Engineering 2024

INSTITUTION'S INNOVATION COUNCIL (Ministry of Education Initiative)

CHIEF EDITOR

Dr M G Sumithra
Principal

DESIGN & CONTENT EDITORS

Mr M K Prabhu
Assistant Professor
Mechanical Engineering

Ms B Pavithra
Assistant Professor
English

DEPARTMENT COORDINATORS

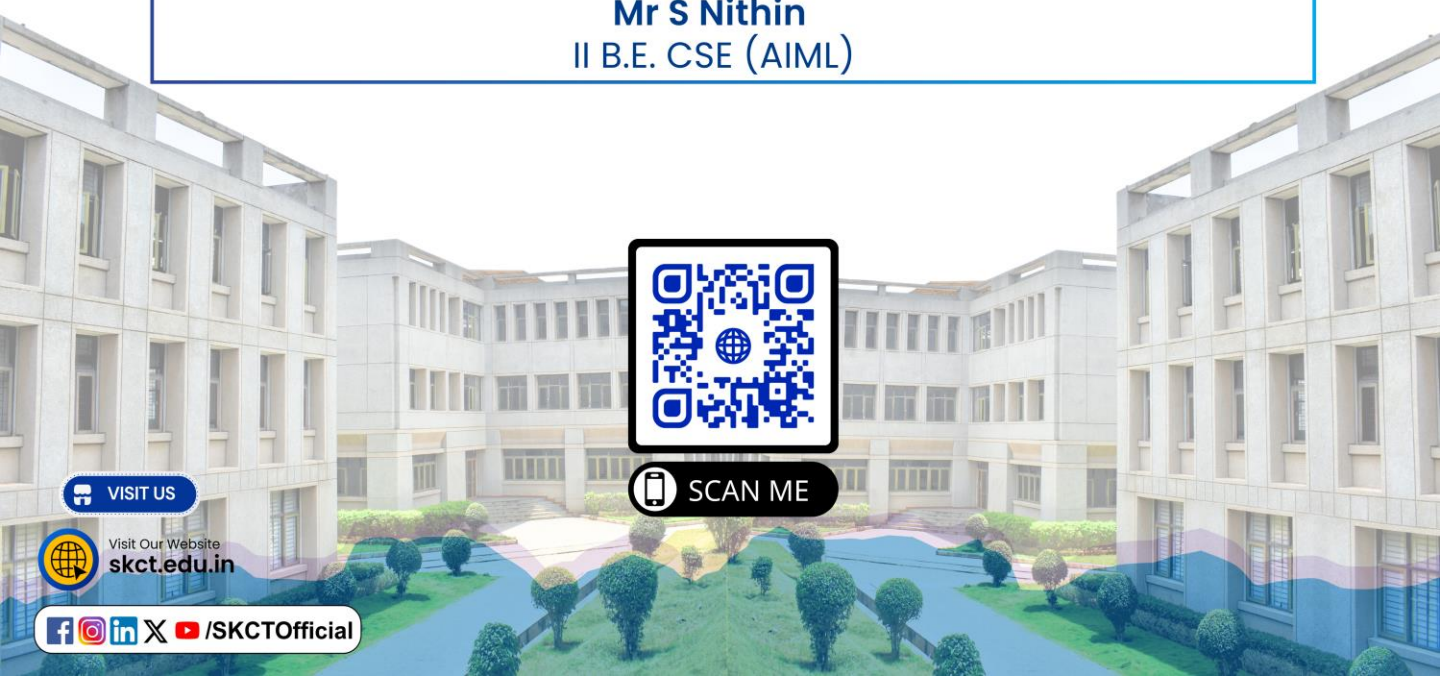
- Ms S Soundarya, AP/AIML
- Dr K Vimala, AP/AI&DS
- Ms A Gomathy, AP/CSE
- Ms K Mythili, AP/IT
- Mr K M Manoj, AP/Civil
- Mr G Santhakumar, AP/ECE
- Mr Ajith B Singh, AP/EEE
- Mr K Senthil Kumar, AP/Mech
- Ms S Jaya Preethi, AP/MBA
- Dr B Kogilavani, AP/English

STUDENT EDITORS

Mr T Lokesh
IV B.Tech. AI&DS

Mr R Yashwanthraja
III B.E. Mechanical Engineering

Mr S Nithin
II B.E. CSE (AIML)



SCAN ME

VISIT US

Visit Our Website
skct.edu.in

/SKCTOfficial