SRI KRISHNA COLLEGE OF TECHNOLOGY

(An Autonomous Institution)
Affiliated to Anna University | Approved by AICTE
Accredited by NAAC with 'A' Grade
KOVAIPUDUR, COIMBATORE – 641 042.

APRIL

2024

VOL 24 – ISSUE 04

SKCT DIGEST

THE PRIDE OF OUR REFLECTION

ELECTRICAL SCIENCES BLOCK

SCHOOL OF MANAGEMENT

CONTENTS

S&H
18.4%

AI&DS
6.1%

Civil
7.9%

CSE
7%

ECE
26.3%

EEE
10.5%

IT
5.3%

Mech
9.6%

MBA
8.8%

ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

PLACEMENTS

Congratulations to **Mr Sreehariharan V and Ms Sneha R S** on receiving **placement offers from Codingmart Technologies Pvt. Ltd.** Their achievement highlights their excellence in technology and coding, showcasing their potential by excelling in the dynamic field of software development. We wish them continued success and growth as they embark on this exciting professional journey.

Congratulations
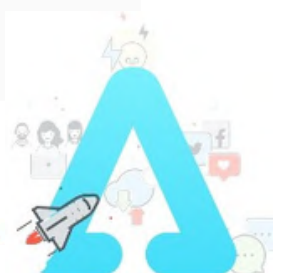
Sreehariharan V
Batch 2021-25

Sneha R S
Batch 2021-25

For Receiving Placement Offer with

Codingmart Technologies Pvt Ltd

STUDENTS ACHIEVEMENT

ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

INTERNSHIP OFFER

The Department of AI & DS is delighted to extend its warmest congratulations to **Ms S Acshaya Sri**, Student of III B.Tech. AI & DS, for her outstanding achievement in receiving an **internship offer from Accenture**. This accomplishment reflects her dedication and proficiency, highlighting her exceptional skills and potential in the field of Artificial Intelligence and Data Science.

Hi Acshayasri Senthil Kumar ,

At Accenture, we take pride in helping talented students like you and provide them with a learning exposure and environment (including giving an exposure to some Live Projects) so that they can enhance or acquire new working skills, and this could help in preparing you for the jobs of the future.

We realize everyone does their best when they are able to collaborate with one another and feel connected both virtually and physically. With this in mind, we are excited to welcome you all for your internship experience.

We are pleased to confirm and offer you an internship with **Accenture** as per below terms.

1. Full name of the intern: **Acshayasri Senthil Kumar**
2. Start of Internship: **May 20th, 2024**
3. Base location*: **Chennai**
4. Internship Duration: **2 Months**
5. Stipend per month (including tax): **INR 16,100** (Stipend will be calculated on pro rata based on internship duration)
6. Additional monthly allowance: **NA**
7. One-time allowance: **NA**

STUDENT ACHIEVEMENT

ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

INTERNSHIP OFFER

The Department of AI&DS extends heartfelt congratulations to **Mr N Sairam** of III B.Tech. AI&DS for receiving an **Internship offer from Accenture.** We express profound gratitude to our esteemed mentors and department head for unwavering guidance and support throughout this remarkable journey.
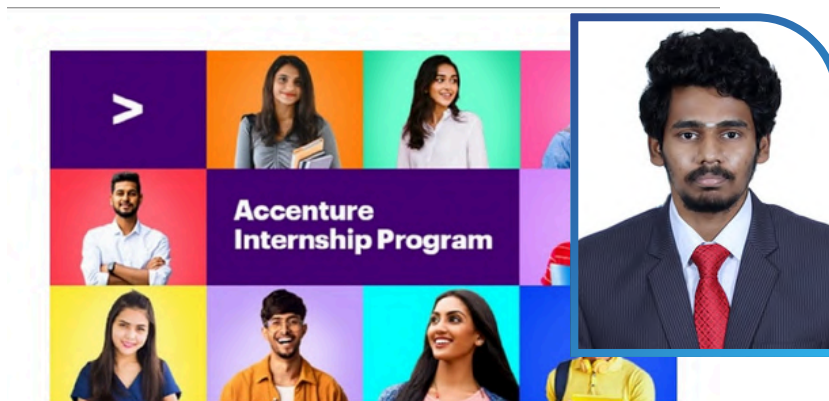
Hi Sairam Nagarajan ,

At Accenture, we take pride in helping talented students like you and provide them with a learning exposure and environment (including giving an exposure to some Live Projects) so that they can enhance or acquire new working skills, and this could help in preparing you for the jobs of the future.

We realize everyone does their best when they are able to collaborate with one another and feel connected both virtually and physically. With this in mind, we are excited to welcome you all for your internship experience.

We are pleased to confirm and offer you an internship with **Accenture** as per below terms.

1. Full name of the intern: **Sairam Nagarajan**
2. Start of Internship: **May 20th, 2024**
3. Base location*: **Chennai**
4. Internship Duration: **2 Months**
5. Stipend per month (including tax): **INR 16,100** (Stipend will be calculated on pro rata based on internship duration)
6. Additional monthly allowance: **NA**
7. One-time allowance: **NA**

Please note that Accenture at its sole discretion may suspend the above internship duration. Accenture may after discussion with the Intern may also consider extending the internship duration.

At Accenture, the health and well-being of our people, our clients and the community is our top priority. Before onboarding, we encourage you to take both doses of the COVID-19 vaccine as per government prescribed timelines.

STUDENT ACHIEVEMENT

ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

INTERNSHIP OFFER

The Department of AI & DS is delighted to extend its heartfelt congratulations to **Mr Yeswanth** of III B.Tech. AI&DS for receiving an **internship offer from Klenty India Pvt. Ltd.**

KLENTY INDIA PVT LIMITED

Date : 15 April 2024

Dear Mr.Yeswanth,

Congratulations! We are pleased to extend the following offer of employment to you on behalf of **Klenty India Pvt Limited.**

1. <u>Title</u> : **Software Development Engineer - Intern**

2. <u>Roles & Responsibilities:</u>

- Knowledge in MERN Stack is mandatory.
- Work with development teams and product managers to ideate software solutions.
- Design client side & server side architecture.
- Conducting Testing & Debugging, utilize script tools & write basic codes for design specifications
- Build the front end of applications through appealing visual design.
- Develop and manage well functioning databases and applications.
- Write Effective APIs
- Troubleshoot, debug and upgrade software.
- Create security & data protection settings.
- Build features and applications with a mobile responsive design .
- Write technical documentation.
- Work with data scientists and analysts to improve software.

3. <u>Start Date:</u> This appointment will take effect from 22nd April 2024

STUDENT ACHIEVEMENT

ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

PUBLICATION

Dr Suma Sira Jacob, Associate Professor, **published an article in SCI-indexed journal** with research on VANET traffic coordination titled "Traffic coordination by reducing jamming attackers in VANET using probabilistic Manhattan Grid Topology for automobile applications."

RESEARCH SPOTLIGHT

SCI

Sri Krishna College of Technology
An Autonomous Institution
KOVAIPUDUR CAMPUS, COIMBATORE – 641 042.

Research Publication by

Dr. Suma Sira Jacob
Associate Professor
Artificial Intelligence and Data Science

Santhi, G.B., Jacob, S.S., Sheela, D. et al. Traffic coordination by reducing jamming attackers in VANET using probabilistic Manhattan Grid Topology for automobile applications. Sci Rep 14, 8365 (2024). https://doi.org/10.1038/s41598-024-58240-2

ABSTRACT: In recent years Intelligent Transportation System (ITS) has been growing interest in the development of vehicular communication technology. The traffic in India shows considerable fluctuations owing to the static and dynamic characteristics of road vehicles in VANET (Vehicular Adhoc Network). These vehicles take up a convenient side lane position on the road, disregarding lane discipline. They utilize the opposing lane to overtake slower-moving vehicles, even when there are oncoming vehicles approaching. The primary objective of this study is to minimize injuries resulting from vehicle interactions in mixed traffic conditions on undivided roads. This is achieved through the implementation of the Modified Manhattan grid topology, which primarily serves to guide drivers in the correct path when navigating undivided roads. Furthermore, the Fuzzy C-Means algorithm (FCM) is applied to detect potential jamming attackers, while the Modified Fisheye State Routing (MFSR) Algorithm is employed to minimize the amount of information exchanged among vehicles. Subsequently, the Particle Swarm Optimization (PSO) algorithm is developed to enhance the accuracy of determining the coordinates of jamming attackers within individual clusters. The effectiveness of the outcomes is affirmed through the utilization of the Fuzzy C-Means algorithm, showcasing a notable 30% reduction in the number of attackers, along with the attainment of a 70% accuracy rate in this research endeavor.

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Publication Page

skct.edu.in
/SKCTOfficial

FACULTY ACHIEVEMENT

ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

PUBLICATION

Dr Suma Sira Jacob, Associate Professor, proudly presents her latest publication titled "Machine Learning Assisted Autonomous Vehicle in an IoT Environment" in the esteemed SCI Journal, Proceedings of the Bulgarian Academy of Sciences. Co-authored by Dr. Lijo Jacob Varghese, Prof/EEE, and Dr. Jaisiva Selvaraj, ASP/EEE, this groundbreaking article advances our understanding of AI-driven autonomous vehicles within IoT ecosystems.

ENGINEERING SCIENCES

Control systems

MACHINE LEARNING ASSISTED AUTONOMOUS VEHICLE IN AN IoT ENVIRONMENT

Suma Sira Jacob[1⊠], Lijo Jacob Varghese[2], Jaisiva Selvaraj[2], Sathish Kumar Shanmugam[3]

Abstract

The article presents the design of a controlled autonomous vehicle intended to perform specific job functions for impaired people by integrating Machine learning technique in an IoT environment along with hand-controlled gestures. In this paper, a novel multi-control autonomous vehicle is specially designed to cater the needs of disabled patients and senior citizens. The operation of this vehicle is fully motorized and gesture-controlled which involves physical implementation of hardware device with software for integrating, coding, interfacing and testing. This Machine learning based autonomous vehicle is completely designed with sensors and interactive cameras controlled by a smart processor unit that can control the various tasks which are designed to perform for the physically impaired people.

Key words: gesture control, machine learning, autonomous vehicle

FACULTY ACHIEVEMENT

ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

CONFERENCE

Ms S Soundarya, Assistant Professor in AI & ML, **presented a paper** titled "EEG Based Brain Behavior Analysis Using Deep Learning" at the 2nd International Conference on Innovative Trends in Engineering and Sciences (ICITES - 2024), organised by Bannari Amman Institute of Technology, Sathyamangalam on March 27, 2024.

FACULTY PARTICIPATION

ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

SKCT-AI&DS and AI&ML partnered with **Cognizant for the Nurture Partner Network Program (NPN)** led by **Mr Monish, Project Manager** in Coimbatore. The session on 26.04.24 featured segments on ETL tools, rapid fire sessions, and team activities. **Dr T Rajesh Kumar and Dr S Dilip Kumar** coordinated the event. Sixty students from III B.Tech. AI&DS gained practical insights and clarification on **foundational topics**, enhancing their understanding of real-world applications. The program emphasized hands-on learning, providing invaluable experience and fostering collaboration between academia and industry.

EVENT ORGANIZED

CIVIL

CERTIFICATIONS

Mr Jayavarshan M, Ms Suha Mercy J, Mr Mohan Raj K and Mr Dinesh Kumar T S of II B.E. Civil Engineering secured the 1st place in **Paper Presentation** of FIESTAA'24, organized by KPR Institute of Engineering and Technology, Coimbatore. They have been awarded with a cash prize of Rs. 3000/- on March 27, 2024.

Mr Jayavarshan

Ms Suha Mercy J

Mr Mohan Raj K

Mr Dinesh Kumar T S

FACULTY PARTICIPATION

CIVIL

CERTIFICATIONS

Mr Jayavarshan M of II B.E. Civil Engineering **secured the 2nd place in the CADD Contest** of FIESTAA'24, organized by KPR Institute of Engineering and Technology, Coimbatore. They have been awarded with a cash prize of Rs. 1000/- on March 27, 2024.

STUDENT ACHIEVEMENT

Ms Dhanya N of II B.E. Civil Engineering **secured the 3rd place in CADD Contest** of FIESTAA'24, organized by KPR Institute of Engineering and Technology, Coimbatore. They have been awarded with a cash prize of Rs. 500/- on March 27, 2024.

STUDENT ACHIEVEMENT

CIVIL

CERTIFICATIONS

Mr M Jayavarshan, Ms J Suha Mercy, Mr T S Dinesh Kumar, Ms N Dhanya, Ms R Prathipa, Ms K Hemadharshini and Mr K Mohan Raj of II B.E. Civil Engineering **attended a Workshop on "SKETCHUP"** organised by KPR Institute of Engineering and Technology, Coimbatore during 27-28 March 2024.

STUDENTS PARTICIPATION

CIVIL

CERTIFICATIONS

Mr M Jayavarshan, Ms J Suha Mercy, Mr T S Dinesh Kumar, Ms N Dhanya, Ms R Prathipa, Ms K Hemadharshini and Mr K Mohan Raj of II B.E Civil Engineering **attended a Workshop on "Tekla structures"** organised by KPR Institute of Engineering and Technology, Coimbatore during 27-28 March 2024.

STUDENTS PARTICIPATION

CIVIL

CERTIFICATIONS

Mr P Mathavan, Mr S Mugesh and Mr T Selva Kumar of III B.E. Civil Engineering **attended a workshop on "Concrete 3D Printing"** organized by IIT Madras, Chennai during 29-31 March 2024.

STUDENTS PARTICIPATION

CIVIL

CERTIFICATIONS

Mr R Gokul Raj and Mr P Mathavan of III B.E. Civil Engineering **attended a workshop on "ETABS Software"** organized by IIT Madras, Chennai on 30 March 2024.

Date: 05/04/2024

CERTIFICATE
OF PARTICIPATION
PROUDLY PRESENTED TO

Gokul Raj R

For attending,
Workshop on ETABS software at Indian Institute of Technology, Madras in collaboration with the Civil Engineering Association
Held on 30th March 2024

Rajiv Sharma
Director

Vivek R Prasad
Head of Technical Support

Date: 05/04/2024

CERTIFICATE
OF PARTICIPATION
PROUDLY PRESENTED TO

Mathavan P

For attending,
Workshop on ETABS software at Indian Institute of Technology, Madras in collaboration with the Civil Engineering Association
Held on 30th March 2024

Rajiv Sharma
Director

Vivek R Prasad
Head of Technical Support

STUDENTS PARTICIPATION

CERTIFICATIONS

Mr R Gokul Raj, Mr P Mathavan, Mr S Mugesh and Mr T Selva Kumar of III B.E. Civil Engineering **attended a workshop on "SAP2000 Software"** organized by IIT Madras, Chennai on 30 March 2024.

STUDENTS PARTICIPATION

CIVIL

CERTIFICATIONS

COURSE

Design Thinking – A primer

ELITE CERTIFICATION

Mr. A.S. Vimal – III Civil
Mr. C. Somesh – III Civil
Ms. S. Amirthavarshini – III Civil
Ms. A. S. Dishita – III Civil
Ms. N. Dhanya – II Civil

CERTIFICATION

Mr. P. A. Kishore – III Civil
Mr. B. Santhoshkumar – III Civil
Mr. A. Shenbagamoorthi – III Civil
Mr. M. Sankeerthan – III Civil
Ms. M. Shagana Shree – III Civil
Mr. V. Manikandan – III Civil
Mr. T. S. Dinesh kumar – II Civil
Mr. M. Sankar – II Civil
Mr. E. Tamil maran - II Civil

STUDENTS ONLINE CERTIFICATION

CIVIL

CERTIFICATIONS

"

NPTEL

COURSE

Introduction to Civil Engineering Profession

ELITE CERTIFICATION

Mr. S. Arulraj – II Civil
Mr. S. Gokul – II Civil
Ms. K. Hemadharshini – II Civil
Mr. M. Jayavarshan – II Civil
Ms. M. Kaviyanjali – II Civil
Mr. K. Mohan Raj – II Civil
Mr. S. Pandi Raja – II Civil
Mr. M. Perarasan – II Civil
Mr. Periyannan Vaithilingam – II Civil
Mr. M. S. Pradeesh – II Civil
Ms. R. Prathipa – II Civil
Mr. S. Santhosh – II Civil
Mr. K. Saranraj – II Civil
Ms. S. Sivaranjani – II Civil
Ms. J. Suha Mercy – II Civil
Mr. S. Surya Krishna – II Civil
Ms. S. Suryaragavi – II Civil
Mr. M. Sankar – II Civil
Ms. N. Dhanya – II Civil

CERTIFICATION

Mr. R. Adhithya – II Civil
Mr. S. Barani – II Civil
Mr. M. Karthick – II Civil
Mr. M. Kathirvel – II Civil
Mr. S. Krishnakanth – II Civil
Mr. M. Prasanna – II Civil
Mr. A. Tamilarasu – II Civil
Mr. T. S. Dinesh Kumar – II Civil

STUDENTS ONLINE CERTIFICATION

CERTIFICATIONS

COURSE

SOFT SKILL DEVELOPMENT

ELITE CERTIFICATION

Ms. R. Rithu Burniga – III Civil

CERTIFICATION

Mr. R. Deepak – III Civil

Mr. M. Dhavanesh – III Civil

Mr. Logesh – III Civil

Mr. S. Mugesh – III Civil

Mr. Santhoshkumar Bojarajan – III Civil

Mr. V. G. Dhanush – III Civil

STUDENTS ONLINE CERTIFICATION

CIVIL

PUBLICATION

Dr P Subashree, Associate Professor, Department of Civil Engineering, **published a paper titled "Unleashing the Flexural Behaviour of Ceramic Hybrid Rubber Reinforced Composites for Sustainable Industry"** in the Journal of Environmental Nanotechnology indexed in Scopus in the month of March 2024.

Doi: https://doi.org/10.13074/jent.2024.03.241509
Link: https://nanoient.org/journals/index.php/jent/article/view/1004
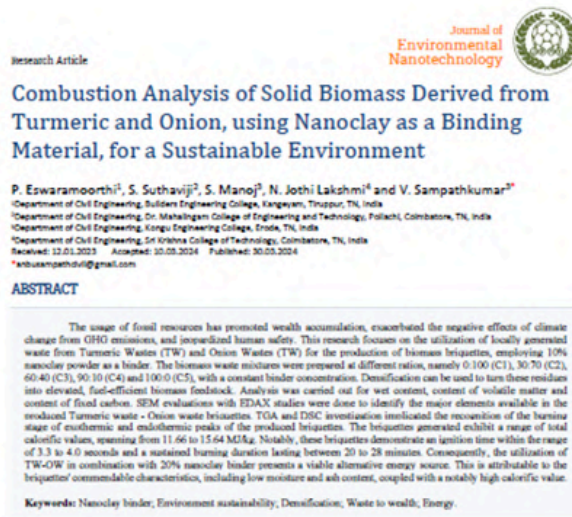

FACULTY PUBLICATION

CIVIL

PUBLICATION

Ms N Jothi Lakshmi, Assistant Professor, Department of Civil Engineering, **published a paper titled "Combustion Analysis of Solid Biomass Derived from Turmeric and Onion, using Nanoclay as a Binding Material, for a Sustainable Environment"** in the Journal of Environmental Nanotechnology indexed in Scopus in the month of March 2024.

Doi: https://doi.org/10.13074/jent.2024.03.241496
Link: https://nanoient.org/journals/index.php/jent/article/view/982

Research Article

Journal of Environmental Nanotechnology

Combustion Analysis of Solid Biomass Derived from Turmeric and Onion, using Nanoclay as a Binding Material, for a Sustainable Environment

P. Eswaramoorthi[1], S. Suthaviji[2], S. Manoj[3], N. Jothi Lakshmi[4] and V. Sampathkumar[5*]
[1]Department of Civil Engineering, Builders Engineering College, Kangeyam, Tiruppur, TN, India
[2]Department of Civil Engineering, Dr. Mahalingam College of Engineering and Technology, Pollachi, Coimbatore, TN, India
[3]Department of Civil Engineering, Kongu Engineering College, Erode, TN, India
[4]Department of Civil Engineering, Sri Krishna College of Technology, Coimbatore, TN, India
Received: 12.01.2023   Accepted: 10.03.2024   Published: 30.03.2024
*anbusampathcivil@gmail.com

ABSTRACT

The usage of fossil resources has promoted wealth accumulation, exacerbated the negative effects of climate change from GHG emissions, and jeopardized human safety. This research focuses on the utilization of locally generated waste from Turmeric Wastes (TW) and Onion Wastes (TW) for the production of biomass briquettes, employing 10% nanoclay powder as a binder. The biomass waste mixtures were prepared at different ratios, namely 0:100 (C1), 30:70 (C2), 60:40 (C3), 90:10 (C4) and 100:0 (C5), with a constant binder concentration. Densification can be used to turn these residues into elevated, fuel-efficient biomass feedstock. Analysis was carried out for wet content, content of volatile matter and content of fixed carbon. SEM evaluations with EDAX studies were done to identify the major elements available in the produced Turmeric waste - Onion waste briquettes. TGA and DSC investigation implicated the recognition of the burning stage of exothermic and endothermic peaks of the produced briquettes. The briquettes generated exhibit a range of total calorific values, spanning from 11.66 to 15.64 MJ/kg. Notably, these briquettes demonstrate an ignition time within the range of 3.3 to 4.0 seconds and a sustained burning duration lasting between 20 to 28 minutes. Consequently, the utilization of TW-OW in combination with 20% nanoclay binder presents a viable alternative energy source. This is attributable to the briquettes' commendable characteristics, including low moisture and ash content, coupled with a notably high calorific value.

Keywords: Nanoclay binder; Environment sustainability; Densification; Waste to wealth; Energy.

1. INTRODUCTION

The increase in energy demand can be ascribed to the growing population and also a major increase in residential and retail activity around the world (Adelake et al. 2019). Liquid fuels, coal, oil and gas, and other fossil fuels are the major energy sources, accounting for over 80% of worldwide energy requirements (Afra et al. 2020). Briquettes made from biomass are powerful enough to compete, with free biomass, allowing easier transport and storage (Balraj et al. 2020). It could be transferred over greater distances with reliable energy storage choices while minimising adequate size and density. In terms of cost, biomass briquettes were inexpensive to purchase, load, and unload (Bhagwanrao and Singarvelu, 2014). Combustion, gasification, and pyrolysis are examples of thermochemical conversion methods that use briquettes (Bhuvaneshwari et al. 2019). However, because of its low prices and great reliability, ignition is now the most advanced and commonly utilised technology for such applications (Blessymol et al. 2023). After the biomass was molded into compact briquettes, studies indicated that the burning characteristics improved by 20%, and the natural greenhouse effect

NOx, and SO₂ emissions were only one-ninth, one-fifth and one-tenth of coal (Carnro et al. 2019). Solid fuels are used to generate power and heat in both the home and the workplace. Biomass-based alternative source is one of the few demonstrated, cost-effective, and easily accessible solutions for reducing emissions of carbon dioxide (Cavallo and Pasupuro, 2017). Biomass briquette manufacturing and usage are deemed environmentally responsible if they meet a set of environmental sustainability parameters, which are divided into four general categories: land usage, water and air quality, earth and wildlife conservation, and carbon stock protection (Debdoubi et al. 2005). The goal of this study is to examine biomass briquetting technology as a sustainable bioenergy production method, with a focus on renewable sources, briquetting procedures, technological evaluation, and financial consequences. Several types of biomass materials have been studied: some in combination with non-biomass components used in briquetting. Briquette quality is determined by the raw ingredients used and the briquetting procedure used. Good ignition, durability and stability in handling and storage, and environmental safety when combusted are the desirable properties for briquettes as a fuel (Efomah

CIVIL

EVENT

The Department of Civil Engineering of Sri Krishna College of Technology conducted a seminar on **"Life Skills and Etiquette"** on 13 April 2024.
Resource Person: Ms. Ashwathi Ashokan, Soft Skill Trainer- Mind Bloomz, Coimbatore.

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DEPARTMENT OF CIVIL ENGINEERING
(Accredited by NBA)

Presents

LIFE SKILLS AND ETIQUETTE

ES SEMINAR HALL

13 APR 2024
10 : 30 AM

Resource Person
Ms.Ashwathi Ashokan
Soft Skills Trainer - Mind Bloomz

CO-ORDINATOR
Mr.R.Ramesh

CONVENOR
Dr.I.Padamanaban

PRINCIPAL
Dr.M.G.Sumithra

Visit Our Website
Skct.edu.in

/SKCTOfficial

EVENT ORGANIZED

SKCT supports the Sustainable Development Goals

CIVIL

ALUMNI

Ms R Asha, Batch 2013-2017 has been appointed as Junior Draughting Officer in Tamil Nadu Water Supply and Drainage Board (TWAD) on April 03, 2024.
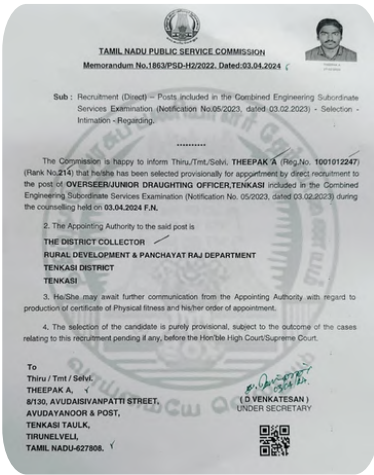
ALUMNI CORNER
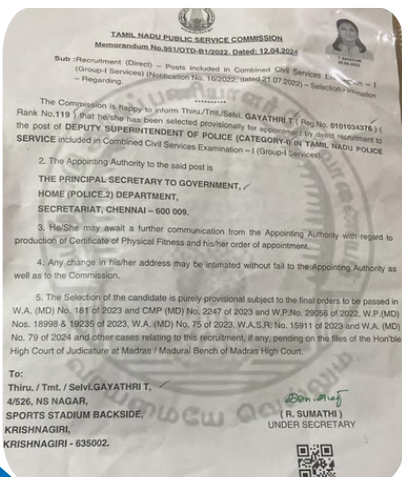
Ms T Gayathri, Batch 2020 has been appointed as Deputy Superintendent of Police in Tamil Nadu Police Service.

ALUMNI CORNER

CIVIL

ALUMNI

Mr A Theepak, Batch 2015-2019 has been appointed as Overseer/Junior Draughting Officer in the Rural Development & Panchayat Raj Department on April 03, 2024.

ALUMNI CORNER

Mr V M Sharan Karthick, Batch 2018-2022 has been selected as the Best Outgoing Student of Structural Engineering Programme at PSG College of Technology, Coimbatore during Tech Day 2024.

ALUMNI CORNER

COMPUTER SCIENCE AND ENGINEERING

CERTIFICATIONS

Mr Krishnan K of II CSE B secured the second place in "TECH TUSSLE "with cash prize of Rs. 1000/- in an event organised by the Department of Information Technology, Sri Ramakrishna Engineering College on 26 March 2023.

Mr Mohammed Ibrahim H of II CSE B secured the third place in "TECH TUSSLE" with a cash prize of Rs. 700/- in an event organised by the Department of Information Technology, Sri Ramakrishna Engineering College on 26 March 2023.

STUDENTS ACHIEVEMENT

COMPUTER SCIENCE AND ENGINEERING

CERTIFICATION

Mr Lingesh Sathya Narayana of II B.E. CSE B completed Data Mining Course **with 80%.**

STUDENT PARTICIPATION

COMPUTER SCIENCE AND ENGINEERING

CERTIFICATION

Ms Anita of II CSE completed a course on **"Learn CCNA 200-301 Network Fundamentals Online."**

STUDENT CERTIFICATION

Mr Bhuvanesh of II CSE completed a course on **"Basics of Computer Networking."**

STUDENT CERTIFICATION

COMPUTER SCIENCE AND ENGINEERING

CERTIFICATION

Mr Bhuvanesh of II CSE completed a course on **"Become Job-ready in Coding."**

STUDENT CERTIFICATION

Ms Viraja Ravi AP/CSE completed **IIC Innovation Ambassador Training** (Advanced Level) offered by MOE's Innovation Cell and AICTE.

FACULTY CERTIFICATION

COMPUTER SCIENCE AND ENGINEERING

CERTIFICATION

Ms R Gnanakumari, Assistant Professor, Department of CSE **completed NPTEL course on "Python for Data Science" with grade "Elite. "**

FACULTY CERTIFICATION

Ms R Gnanakumari, Assistant Professor, attended a six day International level Virtual Faculty Development Programme on "AI for Educators" during 18 March – 23 April 2024, organized by **Periyar Maniammai Institute of Science and Technology.**

FACULTY CERTIFICATION

COMPUTER SCIENCE AND ENGINEERING

CERTIFICATION

Dr M Dhurgadevi of CSE department **presented a paper in an International Conference on Artificial Intelligence and Smart Computing-2024** during 14-16 March 2024 in Bannari Amman Institute of Technology, Sathyamangalam.

FACULTY PARTICIPATION

Dr M Dhurgadevi acted as a reviewer for an international conference on Artificial Intelligence and Machine Learning Applications during 15-16 March 2024 **in K. S. Rangasamy College of Technology.**

FACULTY ACHEIVEMENT

COMPUTER SCIENCE AND ENGINEERING

CERTIFICATION

Dr M Dhurgadevi along with the Students of Final Year published a patent titled **"Enhancing cybersecurity through advanced network analysis and attribute optimization for intrusion detection using random forest approach"** on 29 March 2024.

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/03/2024

(21) Application No.202441019660 A

(43) Publication Date : 29/03/2024

(54) Title of the invention : ENHANCING CYBER SECURITY THROUGH ADVANCED NETWORK ANALYSIS AND ATTRIBUTE OPTIMIZATION FOR INTRUSION DETECTION USING MODIFIED RANDOM FOREST APPROACH

(51) International classification : G06F0021550000, G06F0021560000, G06N0005040000, H04W0036140000, G06Q0010060000	**(71)Name of Applicant :** 1)Dr.M.Dhurgadevi Address of Applicant :Associate Professor / CSE, Sri Krishna College of Technology, Golf Rd, Arivoli Nagar, Vivekanandapuram, Kovaipudur, Tamil Nadu 641042 ---------- 2)Mr.M.Kalyan Thiagarajan 3)Mr.S.M.Pranav Varun 4)Mr.J.Jayasuriya 5)Ms.N.Naveena Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Dr.M.Dhurgadevi Address of Applicant :Associate Professor / CSE, Sri Krishna College of Technology, Golf Rd, Arivoli Nagar, Vivekanandapuram, Kovaipudur, Tamil Nadu 641042 ---------- 2)Mr.M.Kalyan Thiagarajan Address of Applicant :Sri Krishna College of Technology, Golf Rd, Arivoli Nagar, Vivekanandapuram, Kovaipudur, Tamil Nadu 641042 ---------- 3)Mr.S.M.Pranav Varun Address of Applicant :Sri Krishna College of Technology, Golf Rd, Arivoli Nagar, Vivekanandapuram, Kovaipudur, Tamil Nadu 641042 ---------- 4)Mr.J.Jayasuriya Address of Applicant :Sri Krishna College of Technology, Golf Rd, Arivoli Nagar, Vivekanandapuram, Kovaipudur, Tamil Nadu 641042 ---------- 5)Ms.N.Naveena Address of Applicant :Assistant Professor / CSE, Sri Krishna College of Technology, Golf Rd, Arivoli Nagar, Vivekanandapuram, Kovaipudur, Tamil Nadu 641042 ----------
(86) International Application No : NA Filing Date : NA	
(87) International Publication No : NA	
(61) Patent of Addition to Application Number : NA Filing Date : NA	
(62) Divisional to Application Number : NA Filing Date : NA	

(57) Abstract :

The proposed invention presents a novel approach to cybersecurity, integrating advanced network analysis and attribute optimization techniques within a modified Random Forest framework to enhance intrusion detection capabilities. Through iterative refinement and prioritization of network attributes, the system achieves heightened accuracy in identifying and mitigating malicious activities within network traffic. By dynamically adapting to evolving threats and changing network conditions, the system enables organizations to proactively defend against a wide range of cyber threats in real-time. Furthermore, its user-centric design and seamless integration with existing cybersecurity infrastructure ensure usability and scalability across diverse network environments. This comprehensive solution empowers cybersecurity professionals with actionable insights and alerts, facilitating timely response and mitigation of potential threats, thereby bolstering the overall resilience and security of digital assets.

FACULTY PUBLICATION/GRANTS/AWARDS/ACHIEVEMENTS

COMPUTER SCIENCE AND ENGINEERING

CERTIFICATIONS

Dr R Vidhya, Professor & Head, Ms G Sandhya, Asst. Professor, Mr T Kapil, Mr J B Jayadev, Mr R Jude Rachan and Ms J Kousalya, Final year students published an article entitled **"Effective Deep Learning Model to Diagnose Plant Disease and Identify the Location of the Spread"** in the International Journal of Applied Engineering and Technology on 11 April 2024.

FACULTY PUBLICATION/GRANTS/AWARDS/ACHIEVEMENTS

COMPUTER SCIENCE AND ENGINEERING

The Department of Computer Science and Engineering organized a **seminar on Creativity and Innovation** by Ms R Gnanakumari, AP/CSE - the Innovation Ambassador.

EVENT ORGANIZED

SCIENCE AND HUMANITIES

Ms Shanmugapriya T, First B.E. CSE secured the **First Prize** in **a course on National Energy Literary Work Poster Design** conductedd during 18-20 April 2024.

STUDENT ACHIEVEMENT

Mr Dhiyanesh S from CSE A completed a course on **Data Science for Engineers** through NPTEL in February 2024.

STUDENT NPTEL CERTIFICATION

SCIENCE AND HUMANITIES

CERTIFICATION

In February 2024, a total of **1101 first-year students** have successfully obtained certifications in **a course on Effective Writing** through NPTEL.

STUDENT NPTEL CERTIFICATIONS

SCIENCE AND HUMANITIES

Ms Shanmugapriya T, First B.E. CSE completed four-week **Virtual Internship Programme** on Web Development at OCTANET SERVICES PVT. LTD. during March-April 2024.

STUDENT CERTIFICATION

Ms Shanmugapriya T, First B.E. CSE completed four-week Virtual Internship Programme on Java Programming at CODSOFT during 25-26 April 2024.

STUDENT CERTIFICATION

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f 🅾 in X ▶ /SKCTOfficial

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SCIENCE AND HUMANITIES

CERTIFICATIONS

Ms Priyadharshini R S, Ms Sruthilaya S and Ms Sudarshana S completed two-day offline **workshop** on Electric Vehicles conducted by Ethical Edufabrics Pvt.. Ltd., in association with Soorang 2024, IIT Madras during 06-07 April 2024.

Mr P Santhosh, Student of First B.E./B.Tech., attended a workshop on Start-up Electric Vehicles in a **Technical Symposium on CRYPTERA** conducted by Coimbatore Institute of Technology, Coimbatore during 01-02 March 2024.

STUDENTS PARTICIPATION

SCIENCE AND HUMANITIES

Ms Shanmugapriya T, First B.E. CSE, attended a **webinar** on Industrial Innovation using IOT organized by SKCT on 18.02.2024.

STUDENT PARTICIPATION

Ms Shanmugapriya T, First B.E. CSE, completed the **NPTEL Online Certification Course** on Effective Writing.

STUDENT PARTICIPATION

SCIENCE AND HUMANITIES

CERTIFICATIONS

Mr Karthickumar S, Mr Hari Hara Sudhan and Mr Kamalanand attended a **workshop** on Introduction to Quantum Computing held on 20.03.2024 during Yugam Amega Techno Cultural Sports Fest at Kumaraguru College of Technology, Coimbatore.

STUDENTS PARTICIPATION

SCIENCE AND HUMANITIES

Ms Muthubharathi attended a **workshop** on CAPENECE Chronicle during YUKTHA 24 organized by PSG Institute of Technology, Coimbatore during 15-16 March 2024.
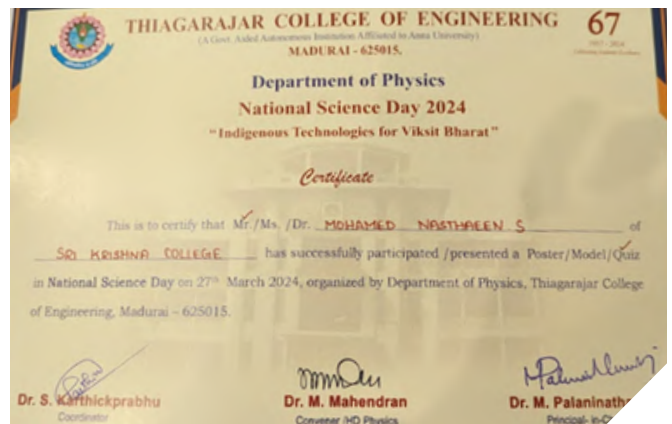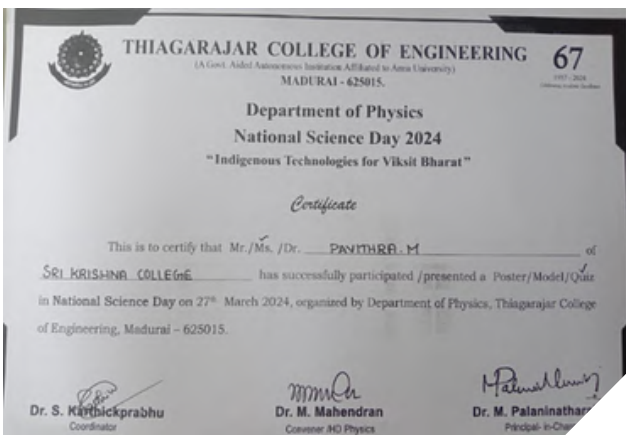

STUDENT PARTICIPATION

Ms R Gothai Nachiyar participated in a event on Just A Try in **E-AUCTION** conducted by Entrepreneurship Cell - IIT Madras.

STUDENT PARTICIPATION

SCIENCE AND HUMANITIES

Ms M Pavithra and Mr Mohammed Nasthaeen S, Students of First Year, completed a **Quiz** conducted as a part of National Science Day on 27.03.2024 organized by the Department of Physics, Thiagarajar College of Engineering, Madurai.

STUDENTS PARTICIPATION
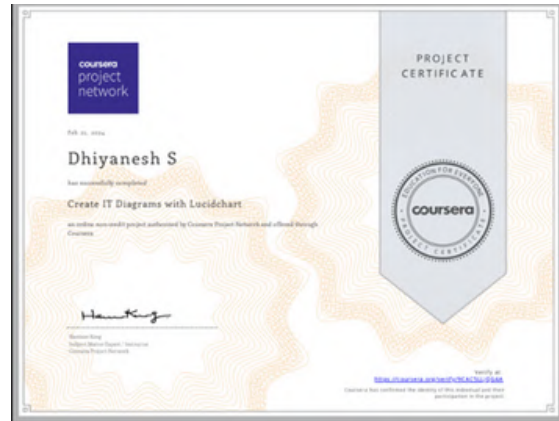
SCIENCE AND HUMANITIES

Mr Salaijaya Vishnu G, Mr Madhan Raj T, Mr Sanjay S, Mr R Shanukavin, Mr N Sabreeshraj, Mr N Balavignesh and Mr Tamilarasu R, participated in LUNARA'24 conducted by Bannari Amman Institute of Technology, Sathyamangalam on 12 April 2024.

STUDENTS PARTICIPATION

SCIENCE AND HUMANITIES

101 first year students completed certifications in various **courses through Coursera.**

STUDENTS PARTICIPATION

The Department of Science and Humanities is happy to share an article titled, **"Tannic acid- Functionalised MoS2 and g-C3N4 Thin Film Lamellar Membranes for Improved Permeance and Rejection in Nano filtration"** published by **Dr. K. Venkatesh AP/S&H** in Applied Nano materials under American Chemical Society with an impact factor of 5.9.
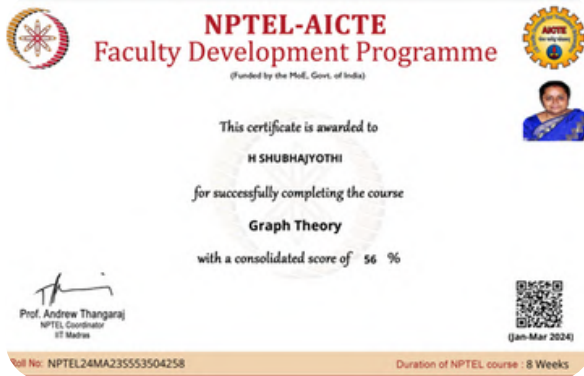
SCIENCE AND HUMANITIES

Ms P Jinsha, Assistant Professor, Department of Science and Humanities, completed **online training** on Soft Skills & Personality Development during 19.02.2024 - 18.03.2024

FACULTY PARTICIPATION

Mrs H Shubhajyothi, Assistant Professor, completed Faculty Development Course on Graph Theory.

FACULTY PARTICIPATION

SUSTAINABLE DEVELOPMENT GOALS

SKCT supports the Sustainable Development Goals

SRI KRISHNA INSTITUTIONS COIMBATORE

nirf Band 101-150 Engineering 2023

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

NAAC NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

INSTITUTION'S INNOVATION COUNCIL (Ministry of Education Initiative)

SKCT DIGEST

SCIENCE AND HUMANITIES

CERTIFICATIONS

FACULTY NPTEL CERTIFICATIONS

SCIENCE AND HUMANITIES

The Department of Science and Humanities in Sri Krishna College of Technology, Coimbatore organised a video presentation event titled "**Wagging Wisdom**" as a part of National Pet Day on 10.04.2024.

EVENT ORGANIZED

SCIENCE AND HUMANITIES

The **Department of Science and Humanities** and Product Development Centre (PDC), SKCT in association with the IEP Solutions, Hosur organized **30hrs of Value Added Course - Wheels on BOT** for Batch 2 constituting 40 students from various departments (ECE-19, AIML-12, AIDS-4, EEE-4, Civil-1) of 1st year at IoT Innovation Lab(PG block), SKCT.

EVENT ORGANIZED

SCIENCE AND HUMANITIES

A **guest lecture** titled "**Unlocking the Power of Communication: Strategies for Succuess**" was incredibly organized by the Department of Science and Humanities at Sri Krishna College of Technology. It was held on April 13, 2024 at PG Seminar Hall between 3.00 and 4.00 p.m. in association with IQAC and SAHA.

EVENT ORGANIZED

SCIENCE AND HUMANITIES

The Department of Science and Humanities organised a **seminar** in association with IIC and SAHA on "**Innovative Technology for Waste Water Treatment using Ultra Filtration Membranes**" on 08.04.2024 between 10.00 am and 12.

EVENT ORGANIZED

SCIENCE AND HUMANITIES

The Department of Science and Humanities at Sri Krishna College of Technology, in association with **IQAC and SAHA** conducted a session on **"Health and Wellbeing for Girl Children"** through online mode on 23.04.2024.

EVENT ORGANIZED

SCIENCE AND HUMANITIES

The Department of Science and Humanities in association with **SAHA organised** an expert talk on **"Balancing Act: Juggling Academics, social life and Personal Growth"** on 23.04.2024.

EVENT ORGANIZED

The Department of Science and Humanities in association with **SAHA** organised an online Guest Lecture on **"From Idea to Implementation: Navigating the Innovation Process."**

EVENT ORGANIZED

SCIENCE AND HUMANITIES

The Department of Science and Humanities in association with **SAHA** celebrated **English Language Day** on 23.04.2024.

EVENT ORGANIZED

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATION

Mr Ajay S, Third year ECE A, secured the **First Place** in Road Master Challenge' with a **cash prize of Rs 2000/-** at Yugam'24, held at Kumaraguru College of Technology, Coimbatore on 22.03.2024.

Mr Shanmugapriyan K and Mr Vimaladettyea K M, Students of Second year ECE, secured the **2nd Prize** in a Technical event on Code2Duo with a **cash prize of Rs 2000/-** in Kumaraguru College of Technology, Coimbatore on 23.03.2024.

STUDENTS ACHIEVEMENT

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATION

Mr Harisudhan T, Second B.E. ECE, secured the **2nd Prize** in a Technical event on Design Fiesta (UI & UX) organised by Bannari Amman Institute of Technology, Sathyamangalam on 06.04.2024.

Mr BALAKUMARAN S K, Second B.E. ECE, secured the **2nd Prize** in a Technical event on Circuit Hunt with a **cash price of Rs 500/-** in Excel Engineering College on 06.04.2024.

STUDENT ACHIEVEMENT

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Mr Kabilesh K and **Mr Sai Rishi** of Second B.E. ECE, secured the **2nd Prize** in a technical event on Paper presentation with a **cash prize of Rs 1500/-** in JCT College of Technology on 03.04.2024.

STUDENTS ACHIEVEMENT

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Mr Kabilesh K , Mr Aswanth. K and **Mr Aswin S** of Second B.E. ECE secured the **2nd Prize** in a Technical Quiz with a **cash prize of Rs 1500/-** in JCT College of Technology on 03.04.2024.

STUDENTS ACHIEVEMENT

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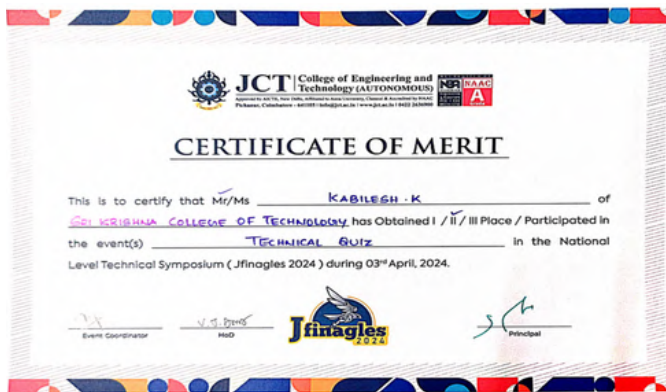
CERTIFICATIONS

Mr Harish Khumar P, Mr Aswanth K and **Mr Aswin s** of Second B.E. ECE secured the **1st Prize** in a Technical event on Circuit Debugging with a **cash price of Rs 2000/-** in JCT College of Technology on 03.04.2024.
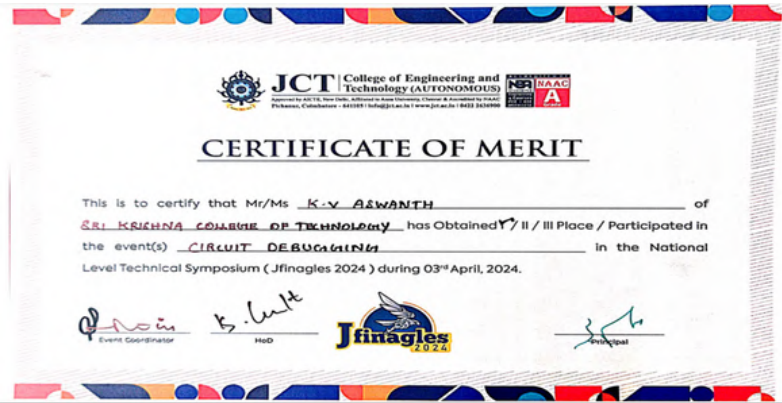
STUDENTS ACHIEVEMENT

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Mr Akshay G V, Mr Deo Williams S and **Mr Dharshan K** of Second B.E. ECE, secured the **2nd Prize** in a Non-technical event on IPL AUCTION with a **cash price of Rs 750/-** in Kongu Engineering College, Erode on 02.04.2024.

STUDENTS ACHIEVEMENT

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Ms C V VEDASHRI and **Mr G SUGAVAN** of Second B.E. ECE, secured the **1st Place** in a event on "PROGRAMMING PUZZLE HUNT" with a **cash prize of Rs 7000/-** in Euphoria, a Techno Management Meet held at Kalasalingam Academy of Research Education (Deemed to be University), Virudhunagar on 27.03.2024.

STUDENTS ACHIEVEMENT

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Mr UTTANDARAMAN B, Ms UVALASKHMI S and **Ms SUGANYA M**, Second B.E. ECE, secured the **3rd Place** in an event on "PROGRAMMING PUZZLE HUNT" with a **cash prize of Rs 3000/-** in Euphoria, a Techno Management Meet held at Kalasalingam Academy of Research Education(Deemed to be University), Virudhunagar on 27.03.2024.

Ms KIRUTHIKA V and **Ms SANGAVI S** from II ECE B secured the **1st Place** in a event on "Tech Quiz" with a **cash prize of Rs 750/-** held at Hindustan Institute of Technology, Coimbatore on 26.03.2024.

STUDENTS ACHIEVEMENT

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Mr Aswin S and **Mr Aakash V A** secured the **3rd Prize** in a Non-technical event on K'wood quiz with a **cash prize of Rs 1000/-** in KPR Institute of Engineering and Technology, Coimbatore on 27.03.2024.

Mr Syed Numaan S and **Mr Sarvesh P S** secured the **3rd Prize** in a Technical event on Techquiz with a **cash prize of Rs 1000/-** in KPR Institute of Engineering and Technology, Coimbatore on 27.03.2024.

STUDENTS ACHIEVEMENT

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Mr Arunagiri N, Mr Dinesh S, Mr Hariharan K S, Mr Karthick Chidambaram S, Mr Kapilan V and Mr Abilashmani P of Second B.E. ECE **participated in a Technical and Non-technical events** on "Quiz, Connexion, Singing, Lyric Root" in Hindusthan Institute of Technology, Coimbatore on 05.04.2024.

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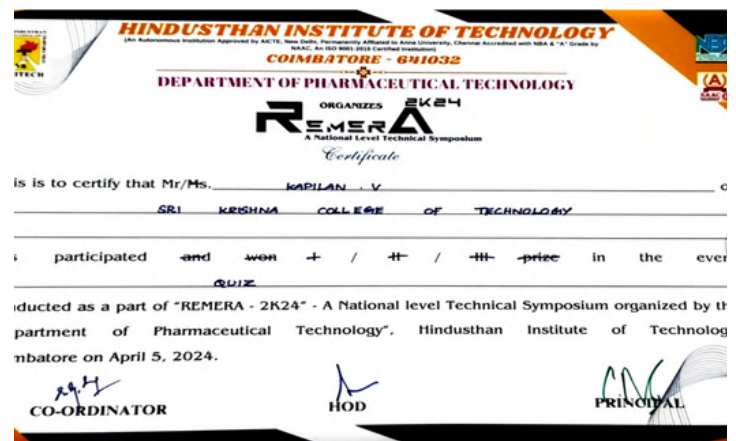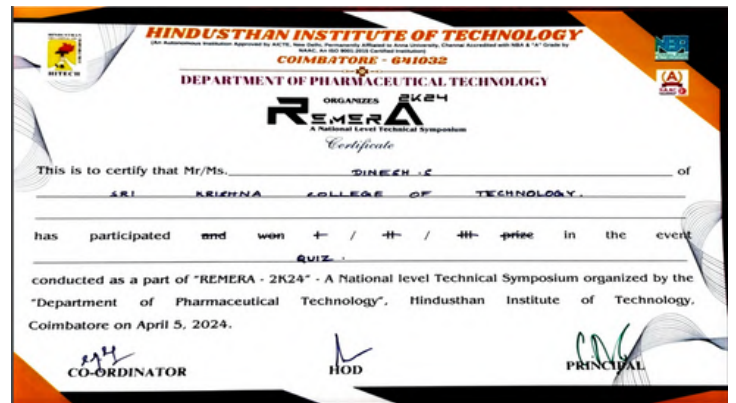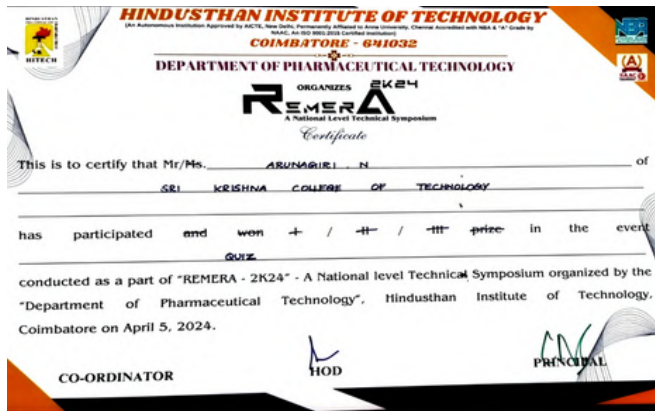
STUDENTS PARTICIPATION

ELECTRONICS AND COMMUNICATION ENGINEERING
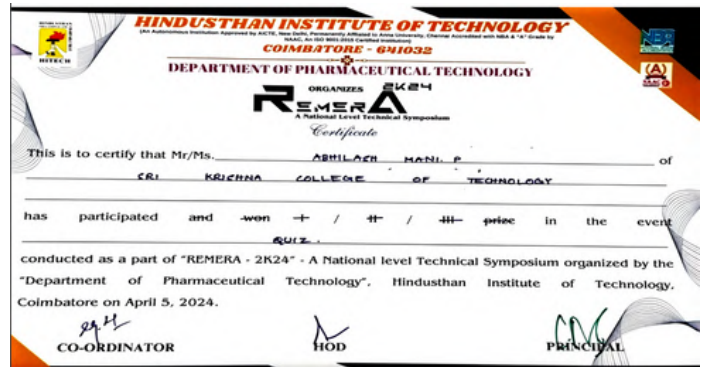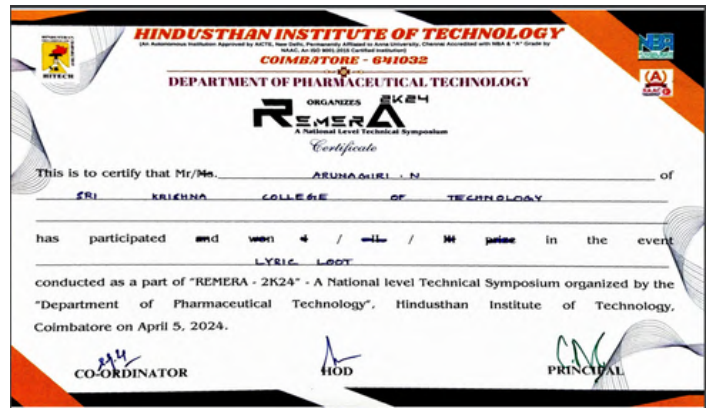
CERTIFICATIONS

STUDENTS PARTICIPATION

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Ms Siva Surya B and Ms Sathyashree R, Second B.E. ECE, **participated in a National level conference** on "Innovations in Electronics, Communication Systems and Information Technology" and presented a paper on **"MACHINE LEARNING BASED DISEASE DETECTION SYSTEM USING TONGUE IMAGES"** organized by Hindustan Institute of technology, Coimbatore on 04.04.2024.
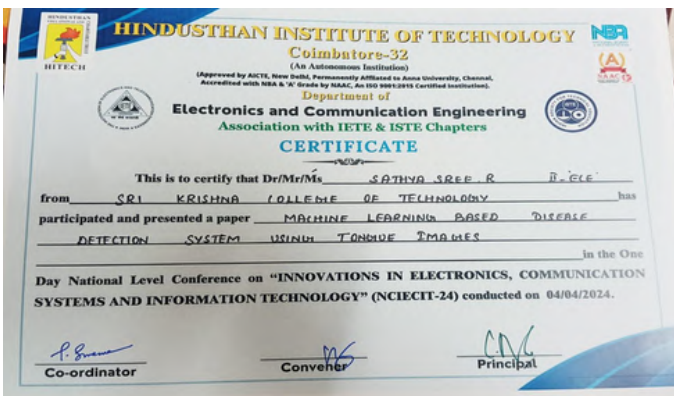
STUDENTS PARTICIPATION

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Ms Subhadharani M and Ms Sree Yazhini M of Second B.E. ECE, **participated in a National level conference** on "Innovations in Electronics, Communication systems and Information technology" and presented a paper on **"Health Tracking System for Elderly People using LoRa Communication"** organized by Hindustan Institute of Technology,, Coimbatore on 04.04.2024.

STUDENTS PARTICIPATION

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Mr Athul Krishna U, Mr Dhakschin Vishak M, Mr Chandru V and Mr Syed Namaan S of Second B.E. ECE **participated in a National level conference** on "Innovations in Electronics, Communication systems and Information Technology" and presented a paper on **"Luggage Theft Identification and Smart Lock using Face Recognition"** organized by Hindustan Institute of Technology, Coimbatore on 04.04.2024.

STUDENTS PARTICIPATION

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Mr Akshay Kumar P, Mr Dharshan K, Mr Gowshick Raja B of Second B.E. ECE **participated in a National level conference** on "Innovations in Electronics, Communication Systems and Information Technology" and presented a paper on **"Monitoring Mental Health and Care"** organized by Hindustan Institute of Technology, Coimbatore on 04.04.2024.

STUDENTS PARTICIPATION

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Mr Arun Raj A, Mr Guru Sangar M, Mr Boobalan S, Mr Akshay G V, Mr Dharshan Kuru Sangar M, Mr Boobalan S, Mr Akshay G V, Mr Deo Williams S and Mr Dharshan K of Second B.E. ECE **participated in a Technical and Non-technical events** on Coding Zenith, IPL auction, Ideathon, Paper Presentation organized by Kongu Engineering College, Erode on 02.04.2024.

STUDENTS PARTICIPATION

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ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Mr Santhosh Krishna K S, Second B.E. ECE, has been **certified with Microsoft Certified: Azure Fundamentals** on 30 March 2024.

STUDENT PARTICIPATION

ELECTRONICS AND COMMUNICATION ENGINEERING

NPTEL CERTIFICATIONS

STUDENTS PARTICIPATION

ELECTRONICS AND COMMUNICATION ENGINEERING

NPTEL CERTIFICATIONS

STUDENTS PARTICIPATION

ELECTRONICS AND COMMUNICATION ENGINEERING

NPTEL CERTIFICATIONS

NPTEL Online Certification — Elite
(Funded by the MoE, Govt. of India)

This certificate is awarded to
TAMILSELVAN N
for successfully completing the course
Effective Writing
with a consolidated score of **63** %

| Online Assignments | 22.5/25 | Proctored Exam | 40.5/75 |

Total number of candidates certified in this course: 7837

Prof. Kaushik Ghosh,
Professor(Chemistry)
Coordinator CEC

Jan-Feb 2024
(4 week course)

Indian Institute of Technology Roorkee

Roll No: NPTEL24HS23S253501816   To verify the certificate   No. of credits rec

NPTEL Online Certification — Elite
(Funded by the MoE, Govt. of India)

This certificate is awarded to
SHANMUGAPRIYAN K
for successfully completing the course
Effective Writing
with a consolidated score of **70** %

| Online Assignments | 21.67/25 | Proctored Exam | 48/75 |

Total number of candidates certified in this course: 7837

Jan-Feb 2024
(4 week course)

Prof. Ranjana Pathania,
Professor (BSBE),
Coordinator (NPTEL)

of Technology Roorkee   53501814   To verify the certificate   No. of credits recommended: 1 or 2

NPTEL Online Certification — Elite
(Funded by the MoE, Govt. of India)

This certificate is awarded to
THARUN S I
for successfully completing the course
Effective Writing
with a consolidated score of **68** %

| Online Assignments | 23.33/25 | Proctored Exam | 45/75 |

Total number of candidates certified in this course: 7837

Prof. Kaushik Ghosh,
Professor(Chemistry)
Coordinator CEC

Jan-Feb 2024
(4 week course)

Prof. Ranjana Pa
Professor (BSB
Coordinator (NP

Indian Institute of Technology Roorkee

Roll No: NPTEL24HS23S455200266   To verify the certificate   No. of credits recommended:

NPTEL Online Certification — Elite
(Funded by the MoE, Govt. of India)

This certificate is awarded to
SRIVATSAN A
for successfully completing the course
Effective Writing
with a consolidated score of **66** %

| Online Assignments | 22.5/25 | Proctored Exam | 43.5/75 |

Total number of candidates certified in this course: 7837

Prof. Kaushik Ghosh,
Professor(Chemistry)
Coordinator CEC

Jan-Feb 2024
(4 week course)

Prof. Ranjana Pathania,
Professor (BSBE),
Coordinator (NPTEL)

Indian Institute of Technology Roorkee

Roll No: NPTEL24HS23S253501440   To verify the certificate   No. of credits recommended: 1 or 2

STUDENTS PARTICIPATION

Dr S Ramya, Assistant Professor, Department of ECE, published a paper on **"Narrow and Wide Band Monopole Antenna Design using Heterogeneous Bidirectional Recurrent Neural Network for LTE and UWB Applications"** in an International Journal of Communication during March 2024. https://doi.org/10.1002/dac.5763.

Enhancing Wireless Sensor Network Lifetime through Energy-Efficient Data Clustering and Compressed Forwarding in video Processing

Jayasudha A. R.[*1], Ramya S.[2], Vairaprakash S.[3], N. Kannaiya Raja[4]

[1] Department of computer applications, Hindusthan college of engineering and technology
[2] Department of ECE, Sri Krishna College of Technology, India.
[3] Department of Electronics and Communication Engineering, Ramco Institute of Technology, India.
[4] Department of Computer Science, Ambo
University, Ambo, Ethiopia
Emails: jayasudhacbe71@gmail.com ; ramyaprasadpbd@gmail.com ; vairaprakashkla@gmail.com;
kannaiya.raja@ambou.edu.et

Abstract

Wireless Sensor Networks (WSN) play a crucial role in diverse data gathering applications, but face a significant challenge in the form of limited energy reserves within sensor nodes. Enhancing the network's Quality of Service, particularly its lifetime, is paramount. Prolonging the network's operational span hinges on mitigating energy consumption, with communication accounting for a substantial portion of nodal power usage. By reducing data transmission, not only can energy consumption be curtailed, but also bandwidth requirements and network congestion can be minimized. In the context of Wireless Sensor Networks, the Distributed Similarity-based Clustering and Compressed Forwarding (DSCCF) approach strives to construct data-similar iso-clusters with minimal communication overhead. This technique involves extracting trend and magnitude components from lengthy data series using an LMS filter, resulting in what is termed "data projection." Data similarity between nodes is assessed by measuring the Euclidean distance between these data projections, thereby facilitating efficient and low-overhead iso-cluster formation. To further economize intra-cluster communication, an adaptive-nLMS-based dual prediction framework is employed. During each data collection round, the cluster head holds instantaneous data for each cluster member, using either prediction or direct data communication. Furthermore, inter-cluster data is reduced via a multi-level lossless compressive forwarding technique. Impressively, this proposed approach has achieved an 80% reduction in data while maintaining optimal data accuracy for the collected information. The transmission of inter-cluster data exclusively occurs through a network backbone comprised solely of cluster heads. Initially, the cluster heads establish this network backbone. Each cluster head dispatches a link request query towards the sink through the backbone, receiving a link reply message containing path length and the weakest link of the path. The cluster head repeats this process for each available path, subsequently selecting the most optimal path based on the acquired information and its reliability in terms of link quality

Keywords: Wireless Sensor Networks (WSN); Energy Efficiency; Data Clustering; Data Projection; Communication Overhead; Network Lifetime Extension; Machine Learning.

1. Introduction

Networks based on Wireless Sensor Data (WSN) are very scalable and adaptable. WSN is the preferred option for dispersed data collection because to its low upfront and ongoing expenses, ease of installation, and compatibility with mobile devices. WSNs are used in a wide variety of commercial [1] settings. In recent years, developments in VLSI design and RF technologies have positioned WSNs as a high-potential player in the fields of precision agriculture [2], intelligent transportation [3] and industrial remote sensing. The tremendous scalability and adaptability of Wireless Sensor Networks (WSN) have made them the preferred alternative to conventional

ELECTRONICS AND COMMUNICATION ENGINEERING

Dr S Ramya, Assistant Professor, Department of ECE, published a paper on **"Enhancing Wireless Sensor Network Lifetime through Energy Efficient Data Clustering and Compressed Forwarding in video Processing"** in an International Journal of Wireless and Ad Hoc Communication (IJWAC). https://doi.org/10.54216/IJWAC.080101.

FACULTY PUBLICATION

Dr K Shanthi, Associate Professor, Department of ECE, published a research article on "**Utilizing Waste Cotton/Pigeon Pea Stalk Fibers Composites for Enhanced Sound Absorption and Insulation in Automotive Interiors**" in a Journal of Natural Fibers published by Taylor & Francis (SCI Indexed - Q2 Journal).

Utilizing Waste Cotton/Pigeon Pea Stalk Fibers Composites for Enhanced Sound Absorption and Insulation in Automotive Interiors

Ariharasudhan Subramanian[a], Senthil Kumar Selvaraj[b], Rajaram Mani[c], Preethibha Chandrasekaran[c], Shanthi Kunjuraman[d], Ramratan Guru[e], and Sakthivel Santhanam[f]

[a]Department of Textile Technology, Kumaraguru College of Technology, Coimbatore, India; [b]Department of Handloom and Textile Technology, Indian Institute of Handloom Technology, Salem, India; [c]Department of Electronics and Communication Engineering, Park College of Engineering and Technology, Coimbatore, India; [d]Department of Electronics and Communication Engineering, Sri Krishna College of Technology, Coimbatore, India; [e]School of Design, Mody University of Science and Technology, Rajasthan, India; [f]Department of Textile and Garment Technology, Faculty of Textile Apparel and Fashion Technology, Ethiopian Technical University, Addis Ababa, Ethiopia

ABSTRACT

This study investigates the synthesis and characterization of composite materials, pigeon pea stem, and cotton fibers blended in different ratios such as 100/0, 70/30, 60/40, 50/50, 30/70, and 0/100. These composite materials were produced using a compression molding technique. According to ASTM standards, the acoustics, thermal conductivity, and physical characteristics of the composite samples were tested to assess their qualities. The impedance tube method detailed in ASTM E1050 was used to determine the sound absorption coefficients (SAC) for acoustics. The SAC values were measured at six frequencies such as 125, 250, 500, 1000, 2000, and 4000 Hz. The results showed that composite samples made from waste cotton and pigeon pea demonstrated sound absorption values of greater than 80%. Superior sound insulation and absorption, moisture absorption, fiber properties have also been demonstrated by waste composites. Especially, the waste cotton/pea stalk waste fiber composites achieved over 75% sound absorption, while the waste 28% composites performed well in terms of sound absorption, moisture absorption, and fiber properties. Even in humid conditions, the composite samples constructed from used cotton and pigeon pea stalks demonstrated good moisture resistance without reducing their insulating qualities. Soundproofing barriers are composite layers of foam or pigeon pea/cotton.

KEYWORDS
Acoustics; composite; impedance tube; Thermal insulation; pigeon pea stalk fibers; sound absorption

关键词
声学; 混合成的; 阻抗管; 隔热; 勇子豌豆茎纤维; Sound absorption吸声

摘要
本研究研究了以 100/0、70/30、60/40、50/50、30/70 和 0/100 等不同比例混合的复合材料、木豆茎和棉纤维的合成和表征。这些复合材料是使用压缩成型技术生产的。根据 ASTM 标准，对复合材料样品的声学、导热性和物理特性进行了测试，以评估其质量。ASTM E1050 中详述的阻抗管方法用于确定声学吸声系数 (SAC)。SAC值是在125、250、500、1000、2000和4000Hz等六个频率下测量的。结果表明，由废棉和木豆制成的复合材料样品的吸声值大于80%。废旧复合材料也表现出了优越的隔音吸音、吸湿、纤维特性。特别是废棉/豌豆杆废纤维复合材料的吸声率达到75%以上，而废28%复合材料在吸声、吸湿和纤维性能方面表现良好。即使在潮湿的条件下，由用过的棉花和木豆杆制成的复合材料样品也表现出良好的防潮性，而不会降低其绝缘性能。隔音屏障是泡沫或木豆/棉的复合层。

Dr S Prema, Assistant Professor, Department of ECE, published a research article on **"Two-Phase Authentication Mechanism for Intelligent Transport System (TAMITS) on VANET"** in an International Journal of Intelligent Systems and Applications in Engineering (Scopus Indexed).

Two-Phase Authentication Mechanism for Intelligent Transport System (TAMITS) on VANET

S. Supriya[1]*, Gopika G. S.[2] , D. Devi[3], S. Prema[4]

Abstract: Routing protocols in VANET are primarily determined by the vehicle's location. It is used for preventing basic collisions such as replay and position spoofing attacks. The absence of verification of the vehicle brings about harsh security collisions in VANET. Intelligent transportation systems are therefore proposed to use the Two-phase Authentication Mechanism for Intelligent Transport System (TAMITS) protocol on VANET, which uses a two-phase authentication mechanism. The vehicle's private and public keys are used to transfer data packets across the communication channel. Transmission in the VANET network is accomplished using geographic routing. This proposed solution employs two distinct rounds of location verification. The transmitted data packet is authenticated once it has been sent from the originating vehicle to its next neighboring vehicle. Finally, in the second stage, the increased distance bounding authentication approach is used to verify its location. In the VANET network, the suggested structure protects geographical routing using a location verification approach. On the basis of packet loss and delivery rates as well as throughput and end-to-end delay the TAMITS' performance is assessed. Riverbed Modeler 17.5 is used to simulate the results. By altering the number of vehicles and their speed, the proposed TAMITS protocol's performance is compared to that of the Geographical secure path routing (GSPR) protocol. Because of this, more packets can be sent to the VANET target vehicle via the TAMITS protocol.

Keywords: *Geographical secure path routing; Throughput; bounding; Packet loss ratio*

1. Introduction

Among Manufacturers have shown an interest in the relatively new technology of vehicle ad hoc networking (VANET). VANET is a promising profitable infrastructure framework used in various areas of applications. Vehicular Ad-hoc Network (VANET) deploys enhancing features such as providing safe, secure and comfortable driving to both the passenger and the driver. VANET is typically used for maintaining effective communication among the vehicles inside a network. Most of the applications in VANET have been used by automobile industries. VANET is exceptionally useful in providing real time data to vehicle clients, providing the notification identified with the post-crash, street side handle measures, and traffic identification ability. It is widely used and is a component of a healthy network request. Yet, VANETs are exposed to few dangers because of its security related difficulties like low resilience for error, high mobility, and so forth. The high rates of collisions like eavesdropping, session seizing on the vehicular system are avoided with the help of VANET applications [1]. Because of its high dynamic nature,

wireless communication channel, and regularly changing topology, VANET has a very wide scope for attacks. Hence, the VANET is more prone to security threats and challenges.

VANET has faced many obstacles, due to its inherent characteristics such as random changes in system topology, unbounded system size and high mobility (Fonseca & Festag 2006). It is also subjected to several attacks like impersonation, session capturing, identity uncovering, location tracking, repudiation, eavesdropping and DoS[2]. Moreover, the location-based attacks on routing like Sybil attack and wormhole attack (Dok et al. 2010) pose major threats to VANET. To make VANET more secure and protected, it's critical to verify the network's location. This chapter proposes a new VANET TAMITS protocol in place of the current one. As previously mentioned, it's based on the GSPR protocol. It conducts Authentication checks to verify the vehicle's position before approving these data packets using a distance bounding approach.

1.1 Contribution

Rivas et al. (2011) have proposed the GSPR for protective path selection which presents a verification plan for information transmission without a location verification scheme. The SLV technique devised by Lin et al. (2008) proposed numerous schemes such as a distance bounding scheme, authentic verification, and estimation based on geographical region to validate the location of a vehicle [6]. A message does not provide the acknowledgement from the destination. Further, it cannot confirm the location of a

[1] Assistant Professor, Department of CSE, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu
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[2] Assistant Professor, Department of CSE ,Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu
Email: gopikags41@gmail.com
[3] Assistant Professor, Department of CSE, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu Email: devi.cse@sathyabama.ac.in
[4] Assistant Professor, Department of ECE, Sri Krishna College of Technology, Coimbatore. Email: prema.s@skct.edu.in

Dr P Divya, Assistant Professor, Department of ECE, published a book chapter on "Blockchain Powered Medical Sector - Applications, Challenges and Future Research Scope" in Bentham Science. DOI: 10.2174/9789815196290124010009.
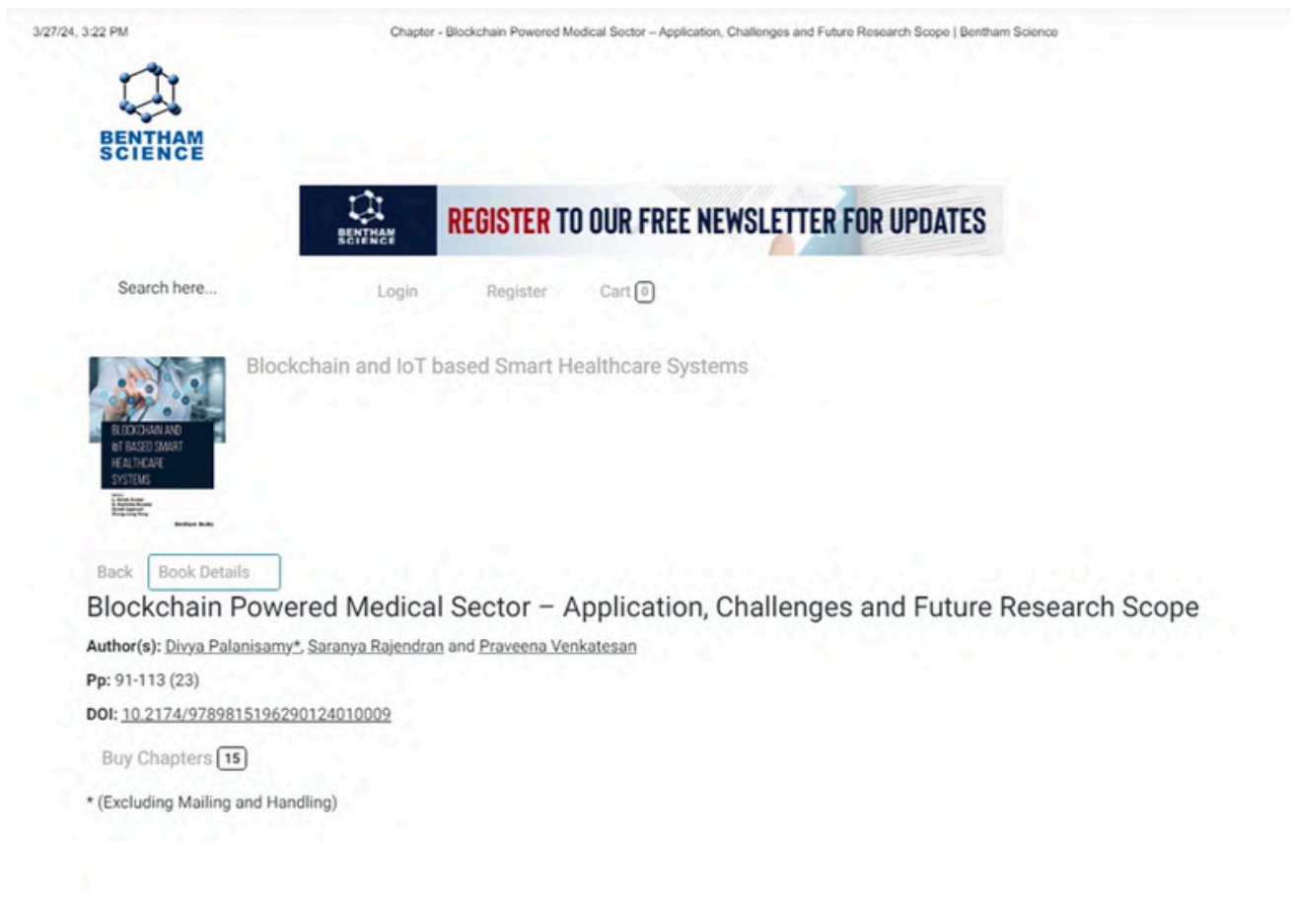
ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Mr Santhakumar G, Assistant Professor, Department of ECE, attended a webinar on **"Additive Manufacturing: Emerging Opportunities for Microwave Components"** organized by IEEE Student Branch MNNIT Allahabad on 22 March 2024.

Dr M Thillai Rani, ASP completed one-week FDP on "**Revolutionizing Industries: AI's Impact in Today's World**" organized by KPR Institute of Engineering and Technology, Coimbatore during 20-26 March 2024.
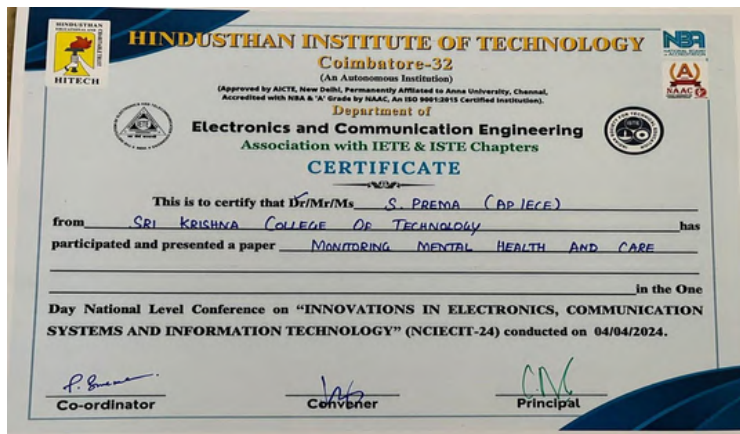

FACULTY PARTICIPATIONS
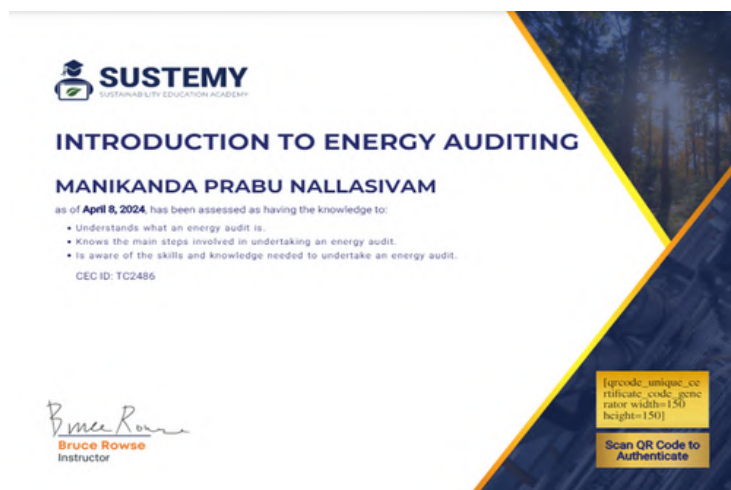
ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Dr S Prema, Assistant Professor, Department of ECE, participated in a paper presentation and presented a paper on "**Monitoring Mental Health and Care**" in a One-day National level Conference on "Innovations in Electronics, Communication Systems and Information Technology" conducted on 04.04.2024.

Dr Manikanda Prabu Nallasivam, Assistant Professor, Department of ECE completed an **introductory course on Energy Auditing from the Sustainability Education Academy** on April 08, 2024.
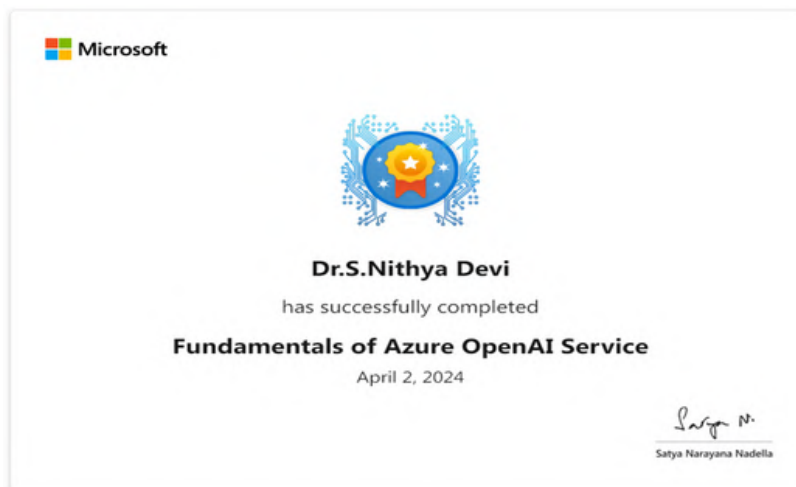

FACULTY PARTICIPATIONS

ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATIONS

Dr K Muthulakshmi, Professor, Department of ECE, participated in the **AICTE Recognized Faculty Development Programme** on Digital Tools for Teaching and Learning Conducted by Media Engineering Department during 11-15 March 2024 organized by NITTTR, Chandigarh.

Dr S Nithyadevi, Assistant Professor, Department of ECE, attended **"Fundamentals of Azure OpenAI Service"** in Microsoft in the month of April 2024.

FACULTY PARTICIPATIONS

CERTIFICATION

Dr S Nithya Devi, Assistant Professor, Department of ECE, participated in a one-day National level FDP on **"Research Methodology and Research Report Writing"** organized by Trinity College of Engineering& Technology, Hyderabad on March 21, 2024.

FACULTY PARTICIPATION

CERTIFICATION

Dr K Muthulakshmi, Assistant Professor, Department of ECE, presented a paper on **"Wireless Sensor Network and Wi-fi Module Development of Data Acquisition Robot in Pipes"** in the 7th IEEE International Conference on Devices, Circuits and Systems (ICDCS'24) organized at Karunya Institute of Technology and Sciences, Coimbatore during 23-24 April 2024.

FACULTY PARTICIPATION

SKCT supports the Sustainable Development Goals

STABLE DEVELOPMENT GOALS

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★ ★ ★ ★ ★

ELECTRONICS AND COMMUNICATION ENGINEERING

SKCT DIGEST

NPTEL CERTIFICATIONS

Dr M Thillai Rani, Associate Professor, Department of ECE, completed the NPTEL Course on **"Design Thinking - A Primer" with 84% and secured the topper position.**

FACULTY PARTICIPATION

NPTEL CERTIFICATION

Dr S Nithyadevi and Dr P Divya, Assistant Professor, Department of ECE, attended the Faculty Development Programme on **"Introduction to Professional Scientific Communication"** organized through NPTEL during January–February 2024.

ELECTRONICS AND COMMUNICATION ENGINEERING

NPTEL CERTIFICATIONS

FACULTY PARTICIPATIONS

ELECTRONICS AND COMMUNICATION ENGINEERING

NPTEL CERTIFICATION

Dr.Thirrunavukkarasu.R., Assistant Professor, Department of ECE has attended the Faculty Development Programme on **"CMOS Digital VLSI Design"** organized by NPTEL during Jan – Feb 2024.

FACULTY PARTICIPATION

ELECTRONICS AND COMMUNICATION ENGINEERING

The Department of Electronics and Communication Engineering along with the Career Guidance & International Affairs Cell, SKCT organized a Webinar on "**Career in Civil Services**" for all the Students of SKCT. **Mr Israel Jebasingh, Ex- IAS, Founder & Director, IAS Academy** served as a resource person on 08.04.2024.

EVENT ORGANIZED

ELECTRONICS AND COMMUNICATION ENGINEERING

The Department of Electronics and Communication Engineering organized a Mentor Interaction session on **Exploring Industry Trends and Career Paths in Placements** on 06.04.2024 at 2.30 pm. **Ms Suhana Sundaram, Packaged Application Development Associate, Accenture,** Coimbatore, Served as a Resource Person.

EVENT ORGANIZED

ELECTRONICS AND COMMUNICATION ENGINEERING

The Entrepreneurship Development Cell organized an event titled "**Enrepreneurial Tales.**" The students meet the entrepreneurs in their site and spend a quality time with them discussing on entrepreneurship, their hard times and achievements. **Ms Radhika A J, Founder, Queenbee Paper Crafts and Creative Art,** Coimbatore served **as the Resource Person** for on 22.04.2024.

EVENT ORGANIZED

Mr Madhan Raj, Mr Kishore Adithya and Ms Deekshitha V of the Batch 2020-2024 **received the placement offer in Hitachi Energy with 6 LPA.**

EEE

PLACEMENT SPOTLIGHT

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Congratulations

Deekshitha V
Batch 2020-24

Kishore Adithyaa B
Batch 2020-24

Madhan Raj B
Batch 2020-24

For Receiving Placement Offer with

⊚ Hitachi Energy

Visit Our Website
skct.edu.in
/SKCTOfficial

STUDENTS PLACEMENT

ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATION

Mr D Ranjan, Mr K Nathish, Ms R Nishanthi and Ms R Ramya of II EEE secured the **third place** in a "Paper Presentation" with a **cash prize of Rs 3000/-** in Waves 2k24 organised by College of Engineering, Guindy on 03.04.2024.

STUDENTS ACHIEVEMENT

ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATION

Mr Mohammed Aarif of II EEE secured the **first place** in "Programming Puzzle Hunt" with a **cash prize of Rs 7000/-** in Euphoria 2k24 organised by Kalasalingam University on 27.03.2024.

STUDENT ACHIEVEMENT

Mr Bharaniprakash T, Assistant professor, published a research article titled **"Harmonic Elimination using Grid Integrated Hybrid renewable energy systems with optimised control for Nanoscale based 31 level MLI"** in a Journal of Electric Power System and Components – SCI Indexed Journal.
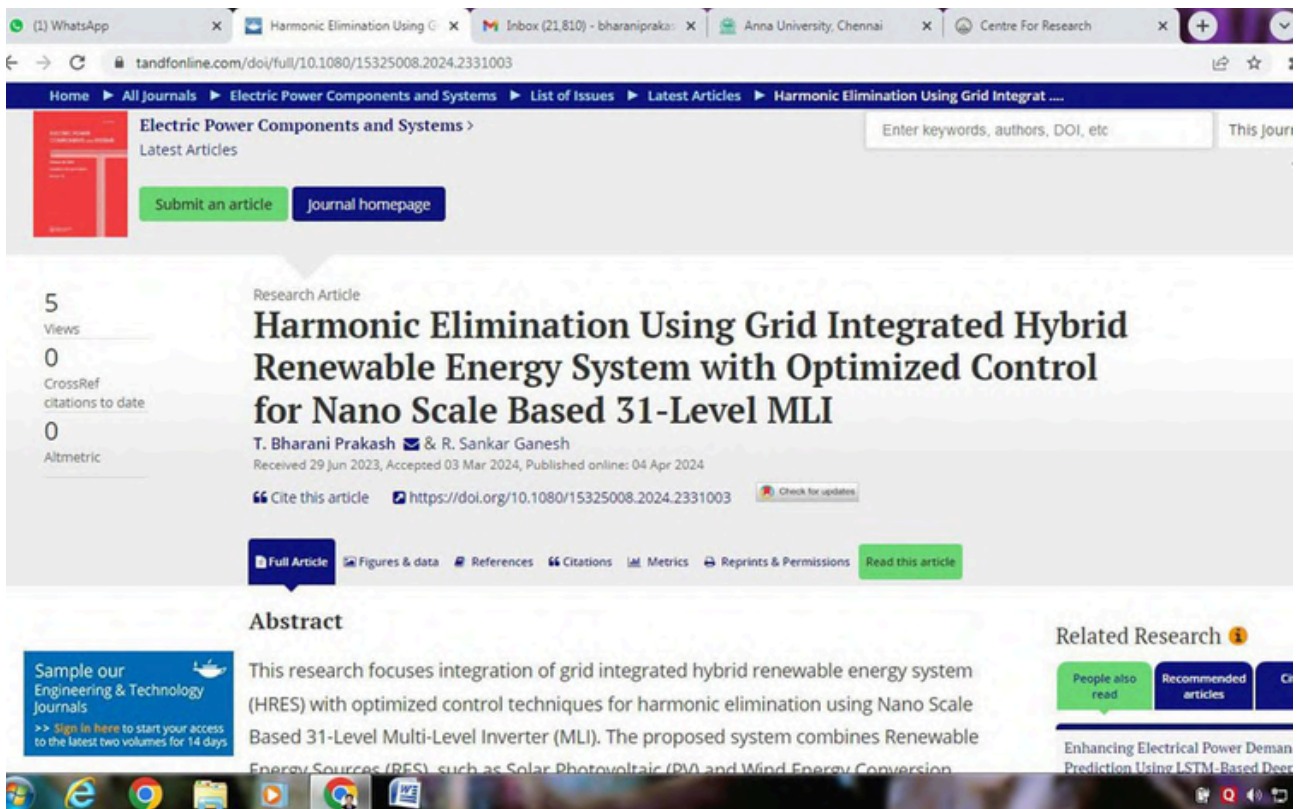
ELECTRICAL AND ELECTRONICS ENGINEERING

Dr J Jency Joseph, Associate professor, published a research article titled **"Bi-directional DC-AC using BLDC motor for electric and hybrid electric vehicles applications with reduced number of switches"** in an International Journal of Power Electronics and Drive Systems (IJPEDS) - Scopus Indexed Journal.

Bi-directional DC-AC using BLDC motor for electric and hybrid electric vehicles applications with reduced number of switches

Nishalini Delcy Arokianathan[1], Francis Thomas Josh[1], Evelyn Brindha[1], Jeyaraj Jency Joseph[2], Raman Mohan Das[3], Suriyan Kannadhasan[4]

[1]Department of Electrical and Electronics Engineering, Karunya Institute of Technology and Sciences, Coimbatore, India
[2]Department of Electrical and Electronics Engineering Sri Krishna College of Technology, Coimbatore, India
[3]Department of Electrical and Electronics Engineering, New Horizon College of Engineering, Bengaluru, India
[4]Department of Electronics and Communication Engineering, Study World College of Engineering, Coimbatore, India

ABSTRACT

Electric scooters often have a single design and are difficult to produce at a greater level than other forms of transportation. A possible cut electric scooter is built with the optimization design of the vehicle combustible wealth and the pollution characteristics in order to arrange to a correct solution by resolving each and every challenge. The engines' electrical systems are comprised of lead acid batteries. For the sake of a straightforward simulation procedure, the engine operates in two states ON and OFF while the vehicle's speed is regulated in three ranges roughly corresponding to high, medium, and low. The planetary speed ratio and the final drive speed ratio are gathered in the computation method's general outline. Utilizing simulation MATLAB, the findings of optimization strategies are resolved. This technique improves the fuel plenty and discharge quality of the possibility cut electric automobiles.

FACULTY PUBLICATION

Dr K P Suresh, Assistant Professor, published a research article titled **"Artificial rabbits optimization algorithm based tunning of PID controller parameters of improving voltage profile in AVR system using IoT"** in the Journal of e Prime - Advances in Electrical Engineering, Electronics and Energy - Elsevier.

Artificial rabbits optimization algorithm based tuning of PID controller parameters for improving voltage profile in AVR system using IoT

G. Saravanan[a], K.P. Suresh[b,*], C. Pazhanimuthu[a], R. Senthil Kumar[c,*]

[a] Department of Electrical and Electronics Engineering, KPR Institute of Engineering and Technology, Coimbatore, 641407, Tamilnadu, India
[b] Department of Electrical and Electronics Engineering, Sri Krishna College of Technology, Coimbatore, 641042, Tamilnadu, India
[c] School of Electrical Engineering, Vellore Institute of Technology, Chennai, 600127, Tamilnadu, India

ARTICLE INFO

Keywords:
ARO algorithm
AVR
Meta-heuristic algorithm
PID controller
IoT

ABSTRACT

The power system is mainly affected by transient situations caused by switching heavy loads. The system may become unstable when transient situations occur. The power system should be able to perform continuous operation to maintain its voltage within acceptable limits. To achieve more stability and increase its speed of response, an Automatic Voltage Regulator (AVR) system requires the inclusion of a controller. The AVR system in the generating station uses the PID controller to adjust the abnormal voltage caused by transient conditions. To maintain the nominal voltage level under all the load conditions in the system, a bio-inspired meta-heuristic algorithm called Artificial Rabbit Optimization (ARO) algorithm is proposed to tune the PID controller gain parameters and obtain the optimal gain, thereby the AVR system adjusts the generator terminal voltage to nominal levels. The ARO algorithm inspires natural survival techniques to improve the AVR performance by reducing errors. To maintain a stable voltage profile in a power system, this research mathematically models survival techniques using the Internet of Things (IoT) to obtain an optimal solution. As a result, all devices connected to the power network receive a stable voltage that ensures their voltage reliability. The effectiveness of the proposed algorithm for the AVR system is verified with the MATLAB R2022a model, and the statistics functions are implemented in the module of Pandas, Scipy and mathematical investigations done in Numpy. The proposed ARO algorithm achieves a better voltage profile with less than 12.63% maximum peak overshoot during the system's transient response. The proposed algorithm provides the fastest response and highest stability comparable to other optimisation algorithms.

1. Introduction

Over the past few years, the electricity demand has been rising globally and astonishingly managed throughout these crises. Power balancing between load and generation is a dynamic grid task and is crucial to meet demand. Nevertheless, it affects the global economy, business and development, the public sector, industry, and commercial and residential areas [1]. Regarding electricity consumption, China, the US and India are the three countries with the highest energy consumption in the world. India is the third largest electricity consumer in the world, with 30-state load despatch centres and five regional grids [2]. The consumer load can be classified into industrial, commercial, transportation, agriculture, and residential. Electricity demand is being met through the integrated power grid, but utilities face many challenges. It turned out that COVID-19 would change the lifestyle vogue entirely within the countries that created the demand for residential loads. The light-off event was one of the most noteworthy events in India and helped manage power demand [3]. Grid challenges include voltage and frequency imbalances and substation overloads. To avoid these issues, the grid frequency and voltage profile parameters must be retained at a permissible level [4]. The voltage profile is considered and ensures that a constant voltage is maintained in the system. Advanced devices like SVC and STATCOM are incorporated to maintain the voltage profile and the instruments' switching devices, namely MOSFET and IGBT are controlled digitally [5,6].

There is a voltage fluctuation in the system due to load variations [7], and it is stabilized in the AVR system [8,9]. The system comprises an amplifier, exciter, generator, sensor, and PID controller. An AVR module's transfer function and constraints are presented [10]. In addition, the Sliding Mode Control (SMC) is utilized in AVR system, but chattering

FACULTY PUBLICATION

CERTIFICATIONS

Mr Ajith B Singh and Mr Bharani Prakash T, Assistant Professors, received **Elite Certification in NPTEL course on Effective writing.**
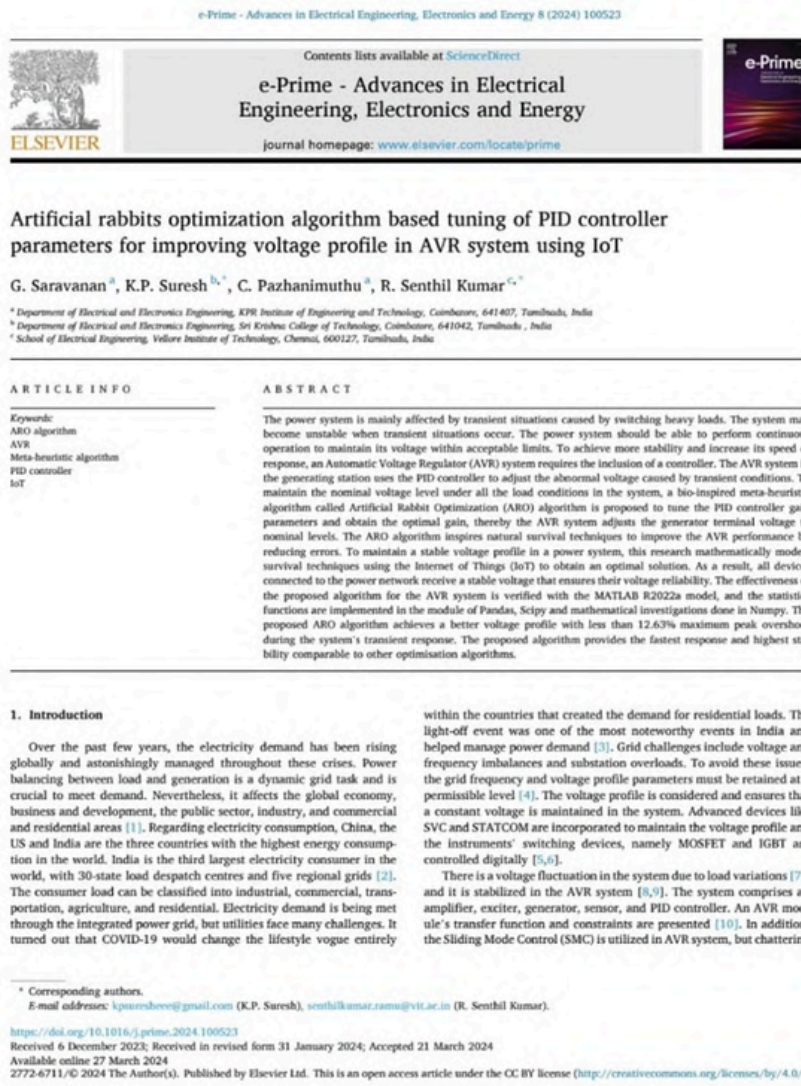
ELECTRICAL AND ELECTRONICS ENGINEERING

Mr Bharaniprakash T and Mr Leninpugalhanthi P, Assistant Professors, published a **research article** titled **"Magnetic Levitation based wireless Power Transfer for Electric Vehicle"** in the 7th International Conference on Inventive Computation Technologies (ICICT 2024), Tribhuvan University, Nepal.

FACULTY ACHEIVEMENTS

ELECTRICAL AND ELECTRONICS ENGINEERING

Ms Elakya, Assistant Professor, published a **research article** titled **"Revolutioning EV Charging: Mobile Power Solutions with SOFC Technology"** in the 7th International Conference on Inventive Computation Technologies (ICICT 2024), Tribhuvan University, Nepal.

Dr Sophia Jasmine G, Associate Professor, published a **research article** titled **"Occupancy based cost efficient campus energy management system"** in the 7th International Conference on Inventive Computation Technologies (ICICT 2024), Tribhuvan University, Nepal.

FACULTY ACHEIVEMENTS

ELECTRICAL AND ELECTRONICS ENGINEERING

Ms Manimegalai V, Assistant Professor, published a **research article** titled **"Graph Neural Networks for Hyper-Accurate Solar power forecasting"** in the 7th International Conference on Inventive Computation Technologies (ICICT 2024), Tribhuvan University, Nepal.

IEEE
XPLORE COMPLIANT ISBN
979-8-3503-5929-9

ICICT

7th International Conference on Inventive Computation Technologies (ICICT 2024)

Certificate of Presentation

This certificate is presented to

V Manimegalai

to acknowledge his/her oral presentation on the topic

Graph Neural Networks for Hyper-Accurate Solar Power Forecasting

at the 7th International Conference on Inventive Computation Technologies (ICICT 2024), held at Tribhuvan University, Nepal, during April 24-26, 2024.

Session Chair

Dr. Joy Iong-Zong Chen
Organizing Chair

Prof. Dr. Subarna Shakya
Conference Chair

EVENT ORGANIZED

ELECTRICAL AND ELECTRONICS ENGINEERING

Mr Santhoshkumar K A, Mr Ajaykumar J, Ms Shwetha Bala A published a **final project thesis on "Internal Model Controller for Conical Tank System"** as a book publication in Lambert Academic Publishing, with the ISBN 9786207474011.
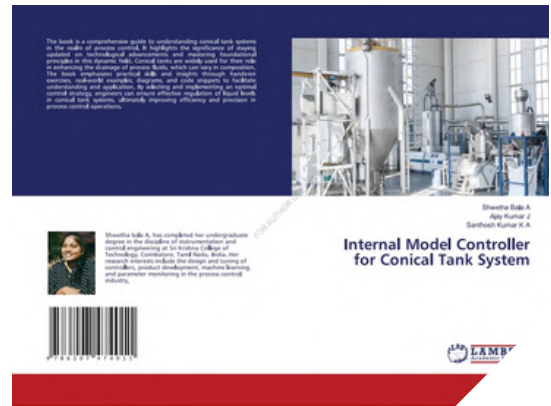
STUDENT ACHIEVEMENT
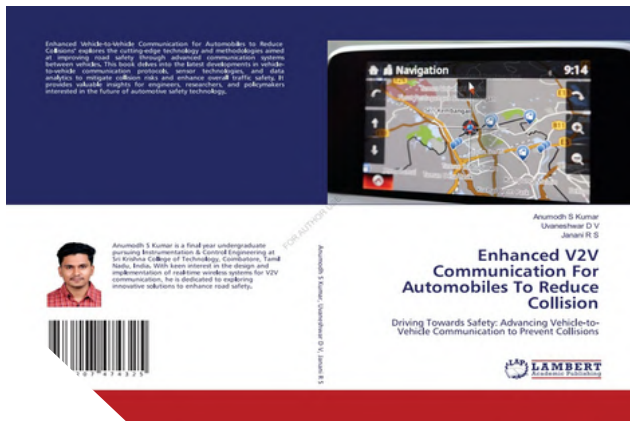
Mr Anumodh S Kumar, Mr Uvaneshwar D V and Ms Janani R S published a **final project thesis on "Enhanced V2V Communication for Automobile to reduce Collision"** as a book publication in Lambert Academic Publishing, with the ISBN 9786207474325.

STUDENT ACHIEVEMENT

ELECTRICAL AND ELECTRONICS ENGINEERING

Mr Isthiyaq Ahamed A, Mr Salmanual Faris M and Ms Sri Ragavarshini K published a **final project thesis on "Fuzzified Control for Band Dryer System"** as a book publication in Lambert Academic Publishing, with the ISBN 9786207465811.

STUDENT ACHIEVEMENT

Dr Jency Joseph J, Associate Professor, published a **research article** titled **"Swarm Robotics based acoustic wave extinguisher bot"** in the 12th International Conference on Contemporary Engineering and Technology, Prince Shri Venkateshwara Padmavathy Engineering College, Chennai during 23-24 March 2024.

FACULTY ACHIEVEMENT

ELECTRICAL AND ELECTRONICS ENGINEERING

Dr Lijo Jacob Varghese, Professor and Head, published a **research article** titled **"A versatile Multi Trajectory wall climbing Quadruped robot for surveillance and Cleaning"** in the 4th International Conference on Recent trends in Engineering, Technology and Management, Suguna College of Engineering, Chennai during 05-06 April 2024.

FACULTY ACHIEVEMENT

Dr Lijo Jacob Varghese, Professor and Head, published a **research article** titled **"Environmental Monitoring Quadcopter"** in the 12th International Conference on Contemporary Engineering and Technology, Prince Shri Venkateshwara Padmavathy Engineering College, Chennai during 23-24 March 2024.

FACULTY ACHIEVEMENT

ELECTRICAL AND ELECTRONICS ENGINEERING

Dr Lijo Jacob Varghese, Professor and Head, published a **research article** titled **"A versatile Multi Trajectory wall climbing Quadruped robot for surveillance and Cleaning"** in the 4th International Conference on Recent trends in Engineering, Technology and Management, Suguna College of Engineering, Chennai during 05-06 April 2024.

FACULTY ACHIEVEMENT

Dr Lijo Jacob Varghese, Professor and Head, published a **research article** titled **"Environmental Monitoring Quadcopter"** in the 12th International Conference on Contemporary Engineering and Technology, Prince Shri Venkateshwara Padmavathy Engineering College, Chennai during 23-24 March 2024.

FACULTY ACHIEVEMENT

ELECTRICAL AND ELECTRONICS ENGINEERING

Ms Sukanya G, Assistant Professor, published a **research article** titled **"Advancing speed regulation and dynamic control in specified zones"** in the 12th International Conference on Contemporary Engineering and Technology, Prince Shri Venkateshwara Padmavathy Engineering College, Chennai during 23-24 March 2024.

FACULTY ACHIEVEMENT

Mr Suresh K P and **Ms Sukanya G,** Assistant Professors, completed the NPTEL Certification course on Patent Drafting for Beginners.

FACULTY ONLINE CERTIFICATIONS

INFORMATION TECHNOLOGY

CERTIFICATION

Mr K Suresh Kumar, Assistant Professor, completed a course on **Tools for Data Science.**

FACULTY ONLINE CERTIFICATION

Mr C RajeshKumar, Assistant Professor served as **a reviewer in the International Conference on Social and Sustainable Innovation in Technology and Engineering** –SASI-ITE'24.

FACULTY ACHIEVEMENT

INFORMATION TECHNOLOGY

CERTIFICATIONS

Ms P Dhivya, Assistant Professor, presented a paper on **Predictive Models for Early Prediction of Parkinson's Disease, A Machine Learning Approach.**

FACULTY PARTICIPATION

Ms P Alaguvatha, Assistant Professor, presented a paper on **Optimizing Industrial Machinery Maintenance through Machine Learning Predictions** at the 7th International Conference on Inventive Computation Technologies - ICICT 2024, organized by Tribhuvan University, Nepal.

FACULTY PARTICIPATION

INFORMATION TECHNOLOGY

CERTIFICATIONS

Ms R Dhana Priya, Ms Monica R and Ms Kavi Priya T, presented a paper titled **"Optimizing crop yield prediction for Agaricus bisporus in controlled environment using Machine Learning Technique"** in the 12th International Conference on Contemporary Engineering and Technology 2024 organised during 23-24 March 2024.

STUDENTS PARTICIPATION

INFORMATION TECHNOLOGY

The Department of Information Technology and the Department of Civil Engineering of Sri Krishna College of Technology in association with IIC organized a **seminar** on **"Intellectual Property Rights"** at PG Block Class Room 2 on 26.04.2024 facilitated by **Dr S Sundararaj**, Professor, Department of Mechanical Engineering, Innovation ambassador of IIC,SKCT.

EVENT ORGANIZED

INFORMATION TECHNOLOGY

CERTIFICATIONS

Mr Vignesh S, Mr ThulasiDharann M L B and Mr Yoganath R M presented a paper on **Optimizing Industrial Machinery Maintenance through Machine Learning Predictions** at the 7th International Conference on Inventive Computation Technologies - ICICT 2024, organized by Tribhuvan University, Nepal.

STUDENT PARTICIPATIONS

INFORMATION TECHNOLOGY

PUBLICATIONS

Mr. C. Rajeshkumar, Assistant Professor Information Technology have published article in Journal of Research titled Hybrid Optimized Energy-Efficient Adaptive Clustered Routing for WSN his research proposes a novel method using GBC and AAVO algorithms to improve energy efficiency in Wireless Sensor Networks.

RESEARCH SPOTLIGHT

SCOPUS

Sri Krishna College of Technology
An Autonomous Institution
KOVAIPUDUR CAMPUS, COIMBATORE – 641 042.

Research Publication by

Mr. C. Rajeshkumar
Assistant Professor
Information Technology

Muneeswari, G., Madavarapu, J. B., Ramani, R., Rajeshkumar, C., & Singh, C. J. C. (2024). GEP optimization for load balancing of virtual machines (LBVM) in cloud computing. Measurement. Sensors, 101076. https://doi.org/10.1016/j.measen.2024.101076

ABSTRACT: Cloud computing relies heavily on load balancing to distribute workloads evenly among servers, network connections, and drives. The cloud system has been assigned some load which can be underloaded, overloaded, or balanced depending on the cloud architecture and user requests. An important component of task scheduling in clouds is the load balancing of workloads that may be dependent or independent of virtual machines (VMs). To overcome these drawbacks, a novel Load Balancing of Virtual Machine (LBVM) in Cloud Computing has been proposed in this paper. The input tasks from multiple users were collected in a single task collector and sent towards the load balancer, which contains the deep learning network called the Bi-LSTM technique. When the load is unbalanced, the VM migration will begin by sending the task details to the load balancer. The Bi-LSTM is optimized by a Genetic Expression Programming (GEP) optimizer and finally, it balances the input loads in VMs. The efficiency of the proposed LBVM has been determined using the existing techniques such as MVM, PLBVM, and VMIS in terms of evaluation metrics such as configuration latency, detection rate, accuracy etc. Experimental results shows that the proposed method reduces the Migration Time of 49%, 41.7%, and 17.8% than MVM, PLBVM, VMIS existing techniques respectively.

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Publication Page

RESEARCH SPOTLIGHT

SCI

Sri Krishna College of Technology
An Autonomous Institution
KOVAIPUDUR CAMPUS, COIMBATORE – 641 042.

Research Publication by

Mr. C. Rajeshkumar
Assistant Professor
Information Technology

Anusha, K., P. Ajay, M. Ramesh, N. Muthukumaran, C. Rajeshkumar, K. Sangeetha, G. Rajeshkumar, and A. Ahilan. "HOEEACR: Hybrid Optimized Energy-Efficient Adaptive Clustered Routing for WSN." IETE Journal of Research, (2024), 1–13. doi:10.1080/03772063.2023.2298510.

ABSTRACT: Wireless Sensor Networks have been used for sensing and gathering data about an environment from a remote location for many years in a variety of engineering applications. In WSN, nodes must overcome energy consumption to function efficiently. To resolve these issues and extend the usefulness of the network, clustering and routing algorithms are promising. One of the main issues with WSNs is that they lack restricted energy sources. To overcome this issue, a Hybrid Optimized Energy-Efficient Adaptive Clustered Routing approach (HOEEACR) has been proposed for WSNs. This paper presents the Genetic Bee Colony (GBC) Algorithm for Cluster Head Selection by considering distances to neighbors, residual energy, node degrees, and node centralities. Furthermore, an optimal routing path for the cluster heads is found by utilizing the Aquila with African Vulture Optimization (AAVO) algorithm. The AAVO optimizes network performance using residual energy, node degree, and distance. The proposed HOEEACR method has been extensively tested to ensure network lifetime and energy efficiency. According to experimental results, the proposed HOEEACR method consistently outperforms existing techniques on a variety of performance metrics..

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Publication Page

FACULTY ACHIEVEMENT

INFORMATION TECHNOLOGY

INTERNSHIP OFFERS

III year students specializing in IT, has clinched a coveted internship position at Accenture. They set to embark on this exciting opportunity, which comes with a stipend of Rs.16,500, showcasing her dedication and prowess in the field.

Mr Sivasankar   **Ms.Hemaharshini**   **Ms Sanchana**

STUDENT PLACEMENT

MECHANICAL

Mr Jeevanandhan and Mr Habeeb of the Batch 2024 received the placement offer in **Pinnacle InfoTech** with a package of **3 LPA** coordinated by Dr R B Jeen Robert, Professor.

PLACEMENT

MECHANICAL

Dr R B Jeen Robert, Professor, participated in a OneYes Startup Fest and **received the award** for the **Best College for Innovation Excellence** at Leo Muthu Indoor Stadium, Chennai scheduled during 05.04.2024.

FACULTY ACHIEVEMENT

MECHANICAL

Investigations on Varying Compositions of Nylon 6 Polymer Matrix Composites for Wear Reduction in Application to Gears

V. Karthi[1,a], N. Mohan Raj[2,b*], J. Baskaran[2,c]

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Keywords: TGA, Tensile, Compression, Flexural Test, Wear test

Abstract. In power transmission systems, gears are the most essential parts. Gear failure would happen at any regular working cycles and it must be avoided with special care. The mode of failure suggests that optimum material and suitable post processing has to be done. Industry demands more efficient, reliable, and lightweight gears. Hence more efficient, reliable, and lightweight gears must be developed and manufactured. Eventhough lot of investment is being done on research and implementing new technologies while manufacturing gears, stills some failures is arised. Many physical factors, including the inappropriate materials composition, may induce gear failure. In this paper, some typical diverse materials, like nylon 6 and glass fibers are mixed with various volume proportions to enhance wear resistance and improve gear's life. Polymer gears developed in this study offer more superior life than pure nylon gears. All the prepared specimen samples are tested to a variety of studies including Tensile, Compression, Flexural, Impact, TGA and Wear tests. Depreciation is not reducing low, however. 90% nylon 6 + 10 % Glass fiber to 10% nylon 6+ 90Glass fiber 10 % Nylon 6 has mixed for investigation. Based on the investigation, 70% of Nylon 6 + 30% glass fiber has high strength, low wear, and high wear resistance.

1. Introduction

Various types of gear are being used to power transmission area. There are various types of gears and made of metallic materials and non-metallic materials. Metallic means Cast Iron, Steel, and Aluminum. Non-metallic materials include wood, polymer, and natural fiber, etc. Polymer gears are commonly used in Light Load and Medium Load applications instead of Metallic Gears [1-3]. Generally Polymer matrix composite is fast becoming popular in many applications of engineering. In particular the automobile industries, textile industries and food industries [4-5]. Polymer matrix composites with high performance and low weight are the best choice for conventional materials. Glass fiber composite polymer matrix gives greater strength and hardness [6-8]. The mechanical strength produced by pure Nylon 6 is inferior in comparison to the results of a combination made of Nylon 6 with glass fiber reinforcement. This will increase the efficiency of Glass Fiber gradually [9-10]. Different thermoplastic polymers can be further strengthened by adding glass fibre [11]. In the past 2 decades, a variety of composites have investigated. The addition of reinforcement in polymer has improved the results [12-13]. Polymer materials have been used at less weight applications and not much lubrication is needed. Polymer Matrix Composites are increasing demand these days due to its excellent quality, attractive look, improved features, and ease of manufacture [14]. Since of its faster production rate and capacity to manufacture complex shape of various sizes at a low in cost and a greater pace of output overall. Injection molding is a widespread and commonly used method for the production of plastics. [15-16]. The flexural yield strength, flexural modulus, and The impact resistance about a polymer in its purest form is the smallest, but they rapidly improve as the glass fiber component increases. ABS and HPDE materials are used to

Dr N Mohan Raj, Associate Professor, published an article in the journal of **Material Science Forum Scopus Indexed (Q4).**

Dr N Mohan Raj, Associate Professor, published an article in the journal of **Key Engineering Materials Scopus Indexed (Q4).**

An Investigation about Microstructures, Mechanical Properties and Corrosion Behaviour of the TIG – MIG Hybrid Welded Dissimilar UNS 2205 and is 2062 Steels

N. Mohan Raj[1,a], N. Mathan Kumar[2,b], S.Nagaraja[3,c], S.Paulsingarayar[4,d]

[1]Associate Professor, Department of Mechanical Engineering, Sri Krishna College of Technology, Coimbatore, Tamilnadu, India.

[2]Associate Professor, Department of Mechanical Engineering, KPR Institute of Technology, Coimbatore India.

[3]Professor, Department of Mechatronics Engineering, Akshaya College of Engineering & Technology, Kinathukadavu, Coimbatore, India.

[4]Associate Professor, Department of Mechanical Engineering, NPR College of Engineering & Technology, Natham, Dindigul.

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Keywords: Stainless steels, dissimilar joints, UNS 2205, IS 2062, microstructures, corrosion behaviour

Abstract. Dissimilar metal joining of double stainless steel to carbon steel was performed using a hybrid welding system. A TIG (Tungsten Inert Gas) welding and MIG (Metal Inert Gas) joining based hybrid joining method was designed. The microstructures of the dissimilar metal joints were studied and the grains are coarser when compared with single welding method alone. The addition of TIG welding to the MIG welding, the wettability improves of the molten metal pool. The nominal corrosion behaviour of the weldments was found better than the single arc welding system alone. The passivation behaviour of the joints was in the similar line to that of double stainless steel base metal. The pitting resistance of the joints in 1 M NaCl solution was inferior to the base metals.

1. Introduction

The necessity of joining dissimilar materials has become increasingly important due to their numerous advantages in manufacturing tailor-engineered structures. Joining dissimilar metals with conventional processes poses many technical issues that mainly related to the joint difficulty. The common problems that are applicable to welding different stainless steels are variations in electrochemical properties, migration of carbon from high carbon alloy to low carbon alloy steels, gap in thermal expansion coefficients, and difficulties in post heat treatments of weld beads [1].Dissimilar joining of austenitic stainless steels to plain carbon steels (CS) has been widely attempted in thermal industries [2 – 4]. The migration of carbon related problems has been discussed by Li and Congleton [5] and a detailed study of joint failure in dissimilar stainless steel of a steam generator was presented by Joseph et al. [6]. Significant advances are being made in dissimilar metals importance in variety of application areas and the necessity of knowing about therelationships of the structure and property of the joints has arisen. The available literatures regarding the relationships of the structure and property of dissimilar ferrite and double stainless steel joints are limited [7, 8]. Further, few attempts has been made on explosive bonding and submerged arc surfacing technique based surfacing or overlaying of DSS to CS for corrosion resistant applications [9, 10]. Shielded welding techniques like MIG and TIG are most commonly used joining processes for piping and structural applications. The most commonly employed shielded welding processes for making a joining dissimilar metals are MIG andTIG due to their

FACULTY ACHIEVEMENTS

MECHANICAL

Dr V S Sreenivasan, ASP/Mechanical published an article titled **"Fabrication of bioinspired SnO2/Few layered rGO nanocomposite coating for preserving Zn metal assets in various environments"** in a Journal of the Indian Chemical Society (Elsevier) (Q3 Journal) on 24 April 2024 with an impact factor of 1.3 - SCIE & Scopus indexing.

Journal of the Indian Chemical Society
Available online 24 April 2024, 101156
In Press, Journal Pre-proof ⑦ What's this?

Fabrication of bioinspired SnO₂/Few layered rGO nanocomposite coating for preserving Zn metal assets in various environments

S.G. Shanmuga Sundaram [1], V.S. Sreenivasan [2] 👤 ✉

[1] Department of Mechanical Engineering, V V College of Engineering, Tisaiyanvilai (Via), Tirunelveli, 627657, Tamil Nadu, India
[2] Department of Mechanical Engineering, Sri Krishna College of Technology, Coimbatore, 641042, Tamil Nadu, India

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FACULTY ACHIEVEMENT

MECHANICAL

NPTEL COURSE

Dr V S Sreenivasan, Professor, completed NPTEL **course on Introduction to Abrasive Machining and Finishing Processes with Elite Silver.**

FACULTY CERTIFICATION

Mr P Sivaraman, Assistant Professor, completed NPTEL course on **Effective Engineering Teaching In Practice** with **Elite.**

FACULTY CERTIFICATION

MECHANICAL

NPTEL COURSE

Mr P Sivaraman, Assistant Professor, attended an **FDP on Effective Engineering Teaching in Practice.**
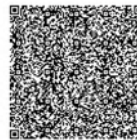
FACULTY CERTIFICATION

COURSE COMPLETION

Mr Sivaraman P, Assistant Professor, completed a course on **"Artificial Intelligence and Machine Learning Training"** through Infosys springboard.

FACULTY CERTIFICATION

MECHANICAL

COURSE COMPLETION

Mr Sivaraman P, Assistant Professor, completed **"Big Data 101"** course through Infosys springboard.

FACULTY CERTIFICATION

COURSE COMPLETION

Mr Sivaraman P, Assistant Professor, completed **a course on "Ethical AI"** through Infosys springboard.
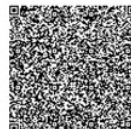
FACULTY CERTIFICATION

MECHANICAL

NPTEL COURSE

Mr Vishal M, II B.E., completed a NPTEL course on **Manufacturing Guidelines For Product Design** with **Elite Silver.**

STUDENT ONLINE CERTIFICATION

Mr Sanjay S, II B.E., completed a NPTEL course on **Manufacturing Guidelines for Product Design.**

STUDENT ONLINE CERTIFICATION

MECHANICAL

NPTEL COURSE

Mr R Karthikeyan, II B.E., completed a NPTEL course on **Manufacturing Guidelines for Product Design**.

STUDENT ONLINE CERTIFICATION

Mr Dhesihan A, Mr Dharshan S, Mr Viswa M and Mr Muthukrishnan D, II B.E., attended a **paper presentation** organised by Coimbatore Institute of Technology, Coimbatore.

STUDENTS PARTICIPATION

MECHANICAL

Sri Krishna College of Technology **organised an International Conference** on **Sustainable and Management (ICSIEM – 2024).**
Chief Guest:
Mr Ahamed Zubair,
Manager,
PPP Bid,
Jeddah,
Saudi Arabia.
&
Dr Nithyanandan Devaraaj,
CEO/Managing Director,
DSIF(FLS),
Innovation and Technology Division.

EVENT ORGANIZED

SCHOOL OF MANAGEMENT

R V Mohankumar, II MBA have been selected as a member of "**Sustainability and Energy Practitioners Association**", a renowned organisation connecting industries and Research institutes around the globe on the focus on Sustainability and Climate Change.

The organisation organises seminars, workshops and conclave on the focus on SDG relating to the UN charter (United Nations Framework Convention on Climate Change) and Paris Accord (Limiting the global temperature raise within 1.5 C). They are a nexus of 1000+ Companies and accelerators around the globe and works on agendas like Decarbonisation, energy efficiency low-carbon mobility etc.

He is honoured to be a part of the organisation and spearhead on SDG-13 (Climate Change).

SEPA — Sustainability & Energy Practitioners Association

CERTIFICATE
OF MEMBERSHIP

This is to certify that

Mohan Kumar

is a member of the Sustainability and Energy Practitioners Association (SEPA), a non-profit association that advocates for sustainable living, Netzero, Climate Change and Clean Energy.

NIKHIL MANGLORI
Secretary - Core Commitee

SEPA

DR. RAGURAM ARJUNAN
President

STUDENT ACHIEVEMENT

SCHOOL OF MANAGEMENT

Mr Rajaganapathi S, II MBA, completed a Project Management Professional Certification on 04.04.2024 through Machine Learning.org.in.

STUDENT ONLINE CERTIFICATION

SCHOOL OF MANAGEMENT

Dr M S Sibi, Assistant Professor, SoM, served as **a Resource Person for** a **Webinar on Research methodology & Data Analysis** organised by Shrikrishnaswamy College for Women on 26.03.2024.

Ms.M.S.Sibi Asst Prof MBA <sibi.ms@skct.edu.in>

Letter of Appreciation

MHRM <mahrmskcw@gmail.com>   Thu, Mar 28, 2024 at 6:52 PM
To: sibi.ms@skct.edu.in

Dear Mam,

Greetings from the PG Department of MA(HRM)

On behalf of the Management,IQAC & The Department of MA(HRM) of Shri Krishnaswamy College for Women, we appreciate your sincere efforts in handling the session on **'Research Methodology & Data Analysis '** on **26/03/2024**. We are thankful for your promptness in accepting our invitation. Participants definitely got a lot of information on the topic. We hope you will provide your valuable expertise for the benefit of our students in the future too.

Warm Regards,
Dr.Kirti Chetty,
Head, Department of MA(HRM)
Shri Krishnaswamy College for Women, Chennai.

FACULTY PARTICIPATION

SCHOOL OF MANAGEMENT

Ms P Thennarasi, Assistant Professor, SOM, SKCT, served as a **mod moder** in a session on Sustainable Management Education organised by AIMS on 10.04.2024.

AIMS
ASSOCIATION OF INDIAN MANAGEMENT SCHOOLS

D No 6-3-668/10/76, First Floor
Near Sri Kalyana Venkateshwara Swamy Temple
Durganagar Colony, Punjagutta, Hyderabad 500 082.
Telangana. Tel: 040-23417876, 48544057
Email:aims.secretariat@gmail.com, Web: www.aims.org.in

10th April 2024

Ms.P.Thennarasi
Assistant Professor
School of Management
Sri Krishna College of Technology
Coimbatore.

Dear Ms P Thennarasi,

Greetings!!

I am writing this to express my sincere appreciation of your contribution as moderator for our Knowledge sharing session on the 10th April 2024.

You created a great environment in welcoming the participants and introducing the speaker, and a wonderful tempo throughout the session. It was truly commendable.

Once again, thank you for your effort and contribution as a moderator. We are grateful for the time and effort you have dedicated to making the session a grand success.

Best regards,

Sudhir Sharma
President, AIMS

FACULTY PARTICIPATION

SCHOOL OF MANAGEMENT

Dr N Nirmala Devi, Professor and Head, chaired and served as a **speaker in AIMS Knowledge sharing session** on "Design Thinking and Frugal Entrepreneurship." **Dr P Shanmugha Priya**, Associate Professor, **served as moderator** throughout the session on 03.04.2024.

More than 80 participants across the nation have attended the session.

FACULTY PARTICIPATIONS

SCHOOL OF MANAGEMENT

Dr M S Sibi, Assistant Professor, attended a knowledge sharing session on **Design Thinking and Frugal Entrepreneurship,** organised by Association of Indian Management Schools(AIMS) on 03.04.2024.

Ms P Tennarasi attended a knowledge sharing session on **Design Thinking and Frugal Entrepreneurship** organised by Association of Indian Management Schools(AIMS) on 03.04.2024.

FACULTY PARTICIPATIONS

SCHOOL OF MANAGEMENT

Dr M S Sibi, Assistant Professor, published a research article titled **Globalization and Higher Education Institutional Opportunities and Challenges** for Academic Institution in Implementing ITC in a Journal of Informatics Education and Research - ABDC Journal- ISSN 1526-4726.

Globalization And Higher Education Institutions: Opportunities and Challenges for Academic Institutions in Implementing ITC

Dr. K. A. Arokiaraj[1], Renjith M[2], Dr. M. S. Sibi[3], Dr. R. Tamilselvi[4], Dr. K. Prakash[5], Dr. Chandrika Reddy[6]

Assistant Professor, Department of Business Administration, Mother Gnanamma Women's College of Arts and Science, Varadarajanpet, Tamil Nadu, India. arovino27@gmail.com
Assistant Professor, Department of Computer Science, Sahrdaya College of Advanced Studies, Thrissur, Kerala, India. renjithm222@gmail.com
Assistant Professor, School of Management, Sri Krishna College of Technology, Coimbatore, Tamilnadu, India. drsibi.ms88@gmail.com
Assistant Professor, Department of Business Administration, Sri Sarada Mahavidyalayam Arts and Science College for Women, Kallakurich, Tamilnadu , India. dakshina0209@gmail.com
Post Doctoral Fellow (RUSA 2.0), Department of Business Administration, Annamalai University, Chidambaram, Tamilnadu, India. thamizh.prakash.2020@gmail.com
Associate Professor, Department Name of MBA, St Francis College, Bangalore, Karnataka, India. chandrikapreddy@gmail.com

ABSTRACT
India's educational path has changed dramatically over the years, moving from traditional mentoring and learning practices to creating the second-largest higher education system in the world. The swift development of Information Technology (IT) has accelerated this shift and brought about significant adjustments in the fields of education, services, employment, and business operations. By removing prior barriers, the integration of information, technology, and communication (ICT) within the educational domain has significantly transformed access to learning resources, knowledge, and information. The Covid-19 pandemic's outbreak sped up the adoption of ICT and made it necessary to switch from traditional in-person instruction to

Dr S Piradeep, Assistant Professor, published a research article entitled **"Financial articulacy accelerates economic growth related to GST transition"** in an International Journal of Electronic Finance - Scopus Indexed and Listed in ABDC Journal.

Financial articulacy accelerates economic growth related to GST transition

T. Shenbagavalli, S. Piradeep, B. Priyadharshini, S. Ramya and Y. Fathima

ABOUT

Abstract

Financial literacy is used to assess both individual and national financial health. Financial articulacy teaches analytical financial decision-making and problem-solving. Real estate, insurance, investment, savings, tax preparation, and retirement are just a few areas where this insight may be useful. Lack of financial articulacy may result in bad financial decisions that harm a country's economy's financial stability. Improper funding causes most national financial issues. Goods and services tax spirals 17 indirect taxes and 22 cesses into one tax. GST is a basic tax with a five-tiered taxation slab for

FACULTY PUBLICATIONS

SCHOOL OF MANAGEMENT

The School of Management **celebrated Ethnic Day** on 06.04.2024.

EVENT ORGANIZED

SCHOOL OF MANAGEMENT

The School of Management **conducted farewell** for the Students II MBA students on 06.04.2024.

EVENT ORGANIZED

SCHOOL OF MANAGEMENT

The Students of the Batch 2022-2024 received a placement offer in **Image Infotainment Limited** for the position of **Executive - Program Development.**

Salary: 2,92,200

After probation: 315000-375000 PA

Ms Kavya L

Mr Bikash Babu

Mr Kishore S

Ms Kaviya B

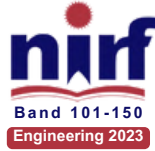Ms Harsha R

Mr Gunal K

Mr Dinesh K P

Ms Devadharshini

PLACEMENTS

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Assistant Professor
Mechanical Engineering

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English

STUDENT EDITORS

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Mr R Yashwanthraja
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