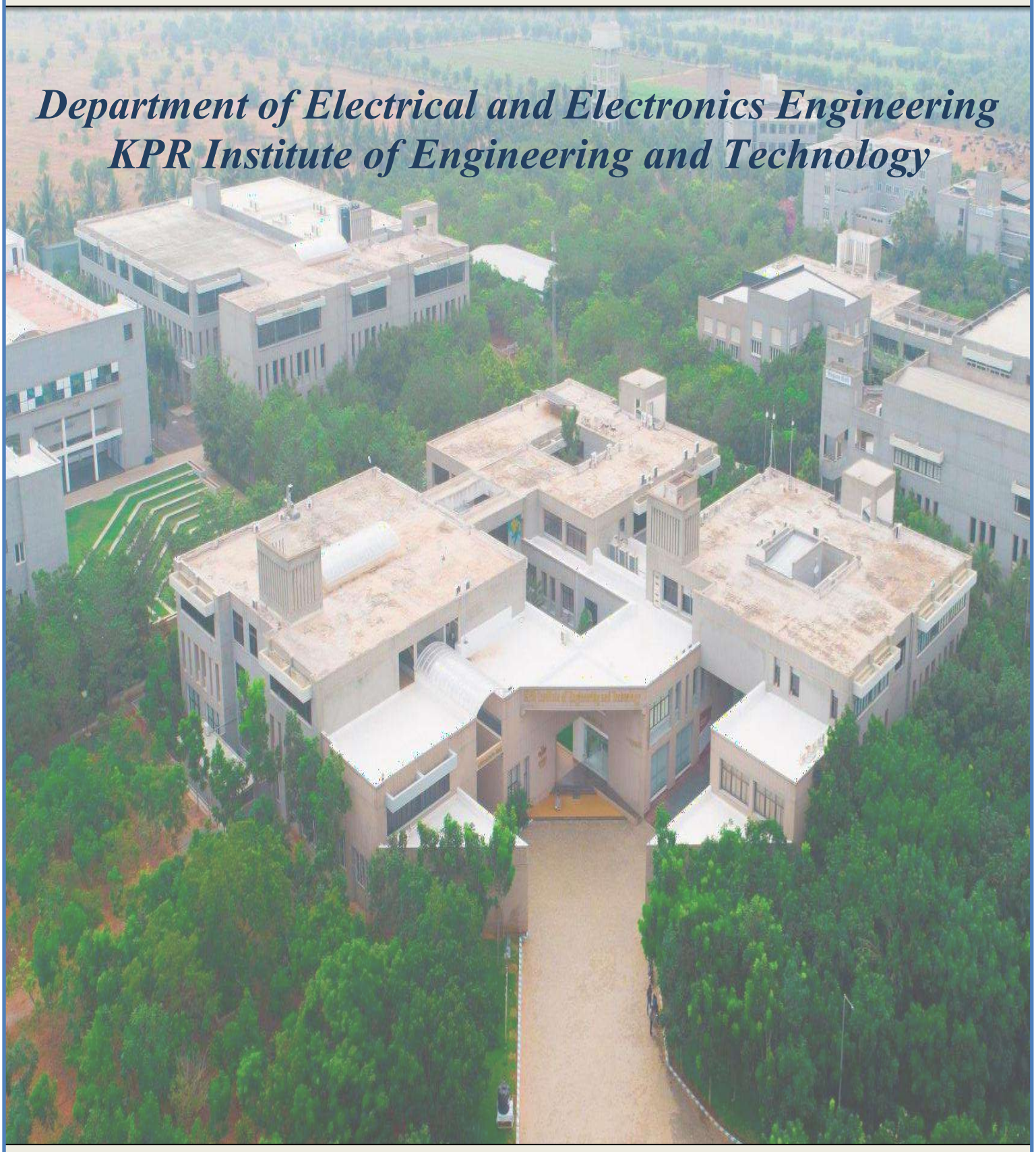
NEWSLETTER

KPRIET
Learn Beyond

Department of Electrical and Electronics Engineering
KPR Institute of Engineering and Technology



VOLUME 11, ISSUE 02
OCTOBER - DECEMBER 2025

News Letter Editorial Team

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

FACULTY ADVISOR

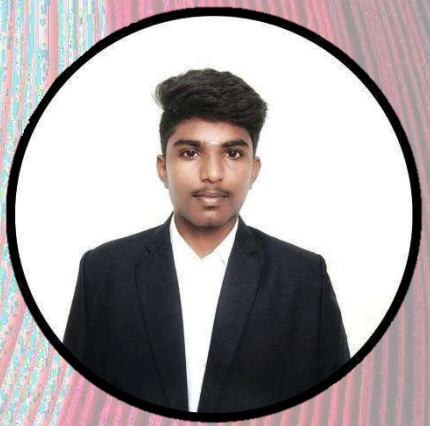


Dr.K.Mohana Sundaram,
HOD/EEE



Dr.B.Lalitha,
AP II/EEE

Student Coordinator



KAVIN V
IV EEE



DARSHINI SHREE T
III EEE



KANISHKAA R
III EEE

KPR Institute of Engineering and Technology
Learn Beyond (Autonomous, NAAC "A")
Avinashi Road, Arasur, Coimbatore.

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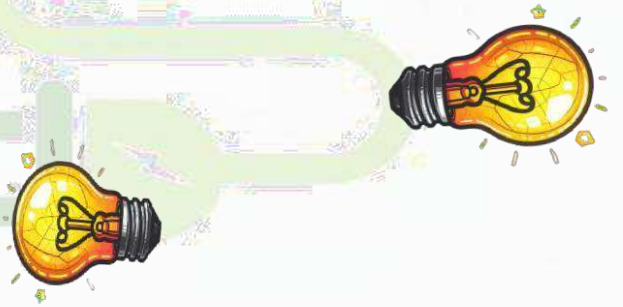
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ABOUT THE DEPARTMENT

Welcome to the Department of Electrical s Electronics Engineering (EEE) at KPR institute of engineering And Technology (KPRIET) in Coimbatore.

The department of Electrical and Electronics Engineering was started in the year 2009 as one of the core engineering disciplines of the institute. The department offers a UG programme with a sanctioned intake of 60 students. Students have the choice of opting Hons with Specialization and Minor Degree. Currently, the department has also established a research centre recognized by Anna University, Chennai to offer Ph.D. programme. The department has ten well-equipped laboratories and four Centre of Excellence, covering a wide range of areas in the field of EE. Some of the best teaching practices include peer to peer learning, use of ICT tools, flipped classroom and project-based learning. A total of 26 faculties serves the department including 16 Ph.D. holders. MoUs with leading industries such as ABB, Virtusa, EKKI are some of the highlights of the department. Some of our top recruiters are Schneider Electric, L&T, VVDN, Tech Mahindra and Ivymobility and TESSOLVE.

POWERING THE WORLD,ONE CIRCUIT AT A TIME



VISION



To be a premier centre for quality education, innovation and research in the field of Electrical and Electronics Engineering to meet the global challenges with professional ethics and social consciousness

MISSION

- Provide a holistic environment to students through knowledge-centric and skill-based education
- Collaborate with industries for effective research and innovation in Electrical Engineering and allied areas
- Enable students to serve the society through prolific ideas with professionalism and ethical values

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

The Graduates of Electrical and Electronics Engineering will

- **PEO 1:** Apply the acquired knowledge and skills to meet the emerging needs of the society and also excel in their chosen profession
- **PEO 2:** Adapt to emerging technologies and continuously upskill through active research in Electrical Engineering and allied areas
- **PEO 3:** Demonstrate leadership skills and practice their profession conforming to ethical and human values

PROGRAMME OUTCOMES (POS) PROGRAMME SPECIFIC OUTCOMES (PSOS)

Graduates of Electrical and Electronics Engineering will be able to:

- **PO 1. Engineering knowledge:** Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems.

- **PO 2. Problem analysis:** Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4)

- **PO 3. Design/Development of Solutions:** Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5)

- **PO 4. Conduct Investigations of Complex Problems:** Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions. (WK8)

- **PO 5. Engineering tool usage:** Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems. (WK2 and WK6)

- **PO 6. The engineer and the world:** Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and WK7).

- **PO 7. Ethics:** Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws. (WK9)

PROGRAMME OUTCOMES (POS) PROGRAMME SPECIFIC OUTCOMES (PSOS)

- **PO 8. Individual and collaborative team work:** Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.

- **PO 9. Communication:** Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences

- **PO 10. Project management and finance:** Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments

- **PO 11. Life-Long learning:** Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8)

PROGRAMME SPECIFIC OUTCOMES (PSOS)

Graduates of Electrical and Electronics Engineering will be able to:

- **PSO 1:** Analyse, design and test power electronic components integrated with computer-based systems to meet industrial and societal needs
- **PSO 2:** Deploy modern engineering tools to model, simulate, fabricate and integrate electrical systems with renewable energy to enhance sustainability

EVENTS

WORKSHOP ON EMBEDDED SYSTEM DESIGN USING STM32

The Department of EEE organized one day workshop on “Embedded System Design using STM32 Microcontroller” on 09.10.2025 for the benefit of third year EEE students. The objective of the workshop was to provide participants with hands-on exposure to embedded system concepts and programming using the STM32 microcontroller platform, which is widely used in modern industrial and academic applications. Dr. K. Mohanasundaram, Prof & Head of the Department / EEE, delivered the welcome address, highlighting the importance of bridging theoretical knowledge with practical implementation skills.





EVENTS

EXPERT LECTURE ON APLLICATIONS OF MAXWELLS EQUATIONS ON ELECTRICAL ENGINEERING

The Department of EEE organized a technical session on “Applications of Maxwell’s Equations for ElectricaL Engineering” on 07.10.2025. The session was delivered by Mr. Sriram Krishna V S, Assistant Professor II, Department of IT, KPR Institute of Engineering and Technology, Coimbatore. The event was conducted for II year EEE students to strengthen their understanding of electromagnetic principles.





EVENTS

WORKSHOP ON SIMULATION AND DESIGN OF ELECTRICAL VECHICLES

The Department of EEE organized an workshop on simulation and design of electrical vehicles on 10.10.2025. Designing and simulating a hybrid vehicle involves creating a virtual model with components like an internal combustion engine (ICE), electric motor, generator, battery, and transmission, often using software like MATLAB Simulink. The simulation process then tests the performance of different hybrid architectures (series, parallel, series-parallel) and control strategies to optimize for fuel efficiency, emissions, and performance metrics like acceleration.





EVENTS

FLUID HACKATHON

The EKKI KPRIET International Water Technology Centre and the Department of EEE jointly organised a Fluid Hackathon on 10.10.2025. The problem statements are, Sustainable water recycling system, IoT based ground water monitoring system, Smart app for water management Smart automation in irrigation system water conservation in well. The event was successful and the various college students participated and gained knowledge.





EVENTS

WORKSHOP ON "DESIGN AND DEVELOPMENT OF PUMP COMPONENTS USING FUSION 360

The EKKI KPRIET International Water Technology Centre and the Department of EEE jointly organized an one day workshop "Design and Development of Pump Components using Fusion 360" for external participants on 11.10.2025.

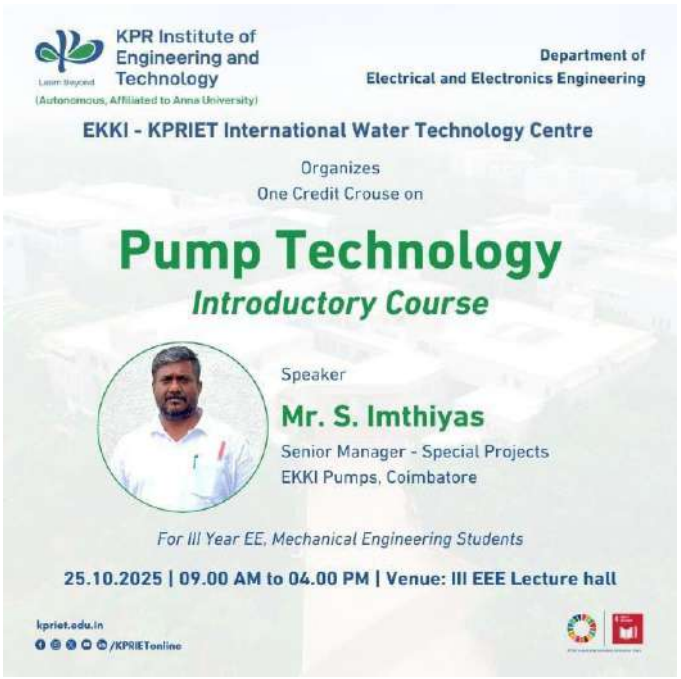




EVENTS

ONE CREDIT COURSE ON PUMP TECHNOLOGY

The EKKI KPRIET International Water Technology Centre and The Department of EEE jointly organised an one credit course on Pump Technology on 25.10.2025. Through this course, students gained a strong foundational understanding of pump technology, including the basic construction and working principles of pumps. The sessions helped students clearly understand the role of impellers, their design aspects, and how impeller geometry affects pump performance.





EVENTS

ALUMINI SERIES ON BRIDGING CAMPUS TO CORPORATE

The Department of EEE organized an Alumimi Interaction series on Bridging campus to corporate on 25.10.2025. The session was conducted by Mr. Kiruthic P, an alumnus of the 2018–2022 batch of EEE, who is currently working as a Member Technical Staff at Zoho Corporation. The event was specially arranged for the First Year IT students to provide valuable insights into the transition from academic life to corporate culture. During the session, Mr. Kiruthic shared his professional journey and discussed the essential skills required to succeed in the corporate environment.





EVENTS

EXPERT TALK ON POWER SYSTEM ANALYSIS USING DIGISILENT POWER FACTORY

The Department of EEE organized an expert talk on Power system analysis using Digisilent software on 29.10.2025. The session was delivered by Dr. T. Magesh, M.E., Ph.D., Professor, RMK Engineering College, an eminent academician and expert in the domain of power systems. The primary objective of this expert discussion was to enhance students' understanding of power system modelling, load flow analysis, short-circuit studies, and stability assessment using the industry-standard simulation software.



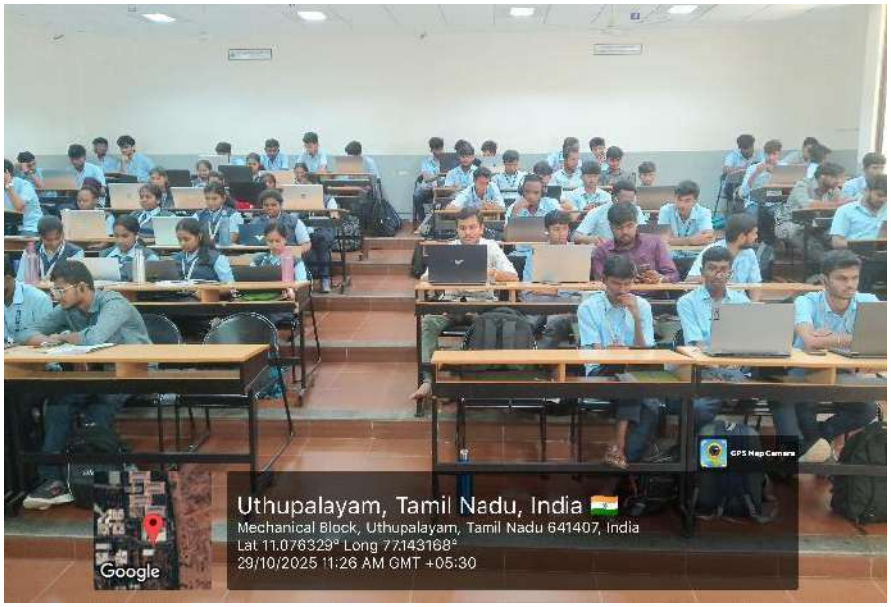


EVENTS

WORKSHOP ON PROTEUS VSM

The Department of EEE organised a workshop on Proteus VSM on 29.10.2025. Participants designed and simulate embedded circuits using Proteus VSM. Participants learned to upload, run, and test microcontroller code within the virtual environment. Participants learned to troubleshoot and debug embedded systems using Proteus VSM tools and virtual instruments.





EVENTS

MoU CEREMONY WITH GARUDA AEROSPACE

The Department of EEE organised MoU signing ceremony with Garuda Aerospace on 29.10.2025. This collaboration aims to strengthen academic–industry interaction and promote joint initiatives in research, training, and technology development. The Memorandum of Understanding (MoU) will facilitate student internships, industrial visits, collaborative research projects, technical workshops, and knowledge exchange programs in areas related to aerospace systems, embedded technology, and advanced electrical applications.



EVENTS

EXPERT LECTURE ON DECODE THE WORLD WITH DATA SCIENCE

The Department EEE organized an expert lecture on Decode the World with Data Science on 01.11.2025. The event “Decode the World with Data Science” enabled students to understand the fundamentals and real-world impact of data science, inspiring analytical thinking and curiosity toward emerging technologies. It fostered awareness of how data-driven insights shape innovation and everyday decision-making

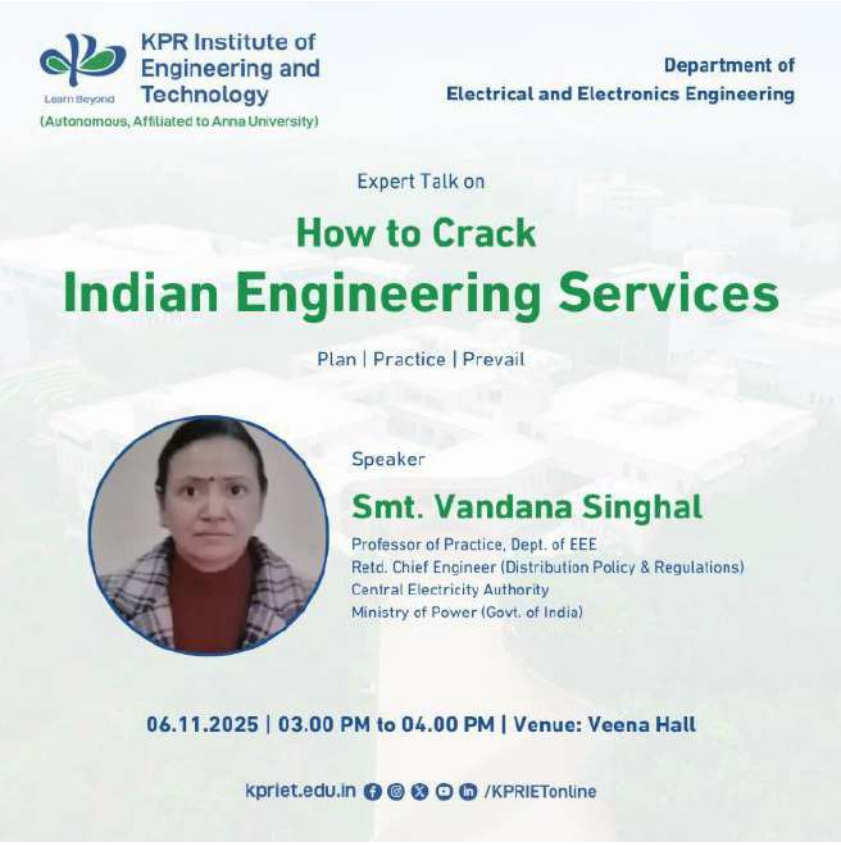




EVENTS

EXPERT TALK ON HOW TO CRACK INDIAN ENGINEERING SERVICES

The Department of EEE organized an invited talk on How to crack Indian Engineering Services 06.11.2025.The session was delivered by Ms. Vandana Singhal, an eminent professional with vast experience at the Central Electricity Authority, New Delhi. She provided a comprehensive overview of the IES examination structure, highlighting the importance of a systematic study plan, conceptual clarity, and consistency in preparation. She emphasized focusing on core engineering subjects, effective time management, and regular practice through mock tests and previous year papers.



EVENTS

ROADSHOW FOR ENERGY CONSERVATION DAY AWARNESS

The Department of EEE organized a Roadshow for Energy Conservation Day Awareness on 18.12.2025. The active participation of 63 students and 2 faculty members, along with EB officials, enabled effective dissemination of energy conservation messages to the public through pamphlet distribution and direct interaction. The rally created significant awareness among local residents, commuters, and students from other colleges on the importance of saving electricity and adopting energy-efficient practices. The program fostered strong industry–academia–utility collaboration and enhanced students' social responsibility and leadership skills. Overall, the event achieved its objective of sensitizing the community towards sustainable energy usage and concluded successfully at the Somanur Power House with positive public engagement.





EVENTS

ENERGY CONSERVATION CELEBRATION WEEK

The Department of EEE organized an Energy Conservaton Week Celebration on 20.12.2025. The programme is organized to create awareness on energy conservation, promote sustainable practices, and encourage active student participation in green initiatives. All students are encouraged to actively participate in this meaningful initiative and contribute towards building a sustainable and energy-efficient future





PUBLICATION DETAILS

K Mohana Sundaram, "Radio Frequency Identification Based Real Time Access Control System Using With User Logging and Database Management", Scopus
DOI: 10.1109/ICCES67310.2025.11336906



RFID-Enabled Access Control with Integrated User Database Logging

Publisher: IEEE | Cite This | PDF

Carol Masvisvi ; Ravi Samikannu ; R. Rohini ; G. Kanimozhi ; R. Kavitha ; K.Mohana Sundaram All Authors

8 Full Text Views

Abstract

Document Sections

I. Introduction

II. Background

III. Literature Review

IV. Problem Statement and Objectives

Methodology and

Abstract:
This paper focuses on the research, development, and simulation of an RFID-based access control system for applications to enhance security for restricted areas and systems. The system authenticates users by reading RFID tags and verifying data contained within them against a preconfigured database. Access is granted or denied based on these credentials. The system integrates a PIC16 microcontroller, a regulated power supply, relays, and motors for controlling entry and exit points, LED indicators, and an LCD for visual feedback. Upon successful validation, the system triggers a motor to manage the locking mechanism, while failed attempts are met with no mechanical action. To enhance functionality, the system logs each access attempt with details such as time, date, and user credentials for security and administrative analysis.

Published in: 2025 10th International Conference on Communication and Electronics Systems (ICCES)

S Ravindran , "IoT and AI-Enhanced Autonomous Fire-Fighting Robot with real-time Hazard monitoring", Scopus
DOI: 10.1109/CSITSS67709.2025.11294288



IoT and AI-Enhanced Autonomous Fire-Fighting Robot with Real-Time Hazard Monitoring

Publisher: IEEE | Cite This | PDF

Akila P ; S. Ravindran ; S.Shunmuga Sundaram ; Faiz Mohammad Karobari ; Kavitha E ; Mahesh K All Authors

30 Full Text Views

Abstract

Document Sections

I. Introduction

II. Literature Review

III. Methodology

IV. Functional Analysis of the System

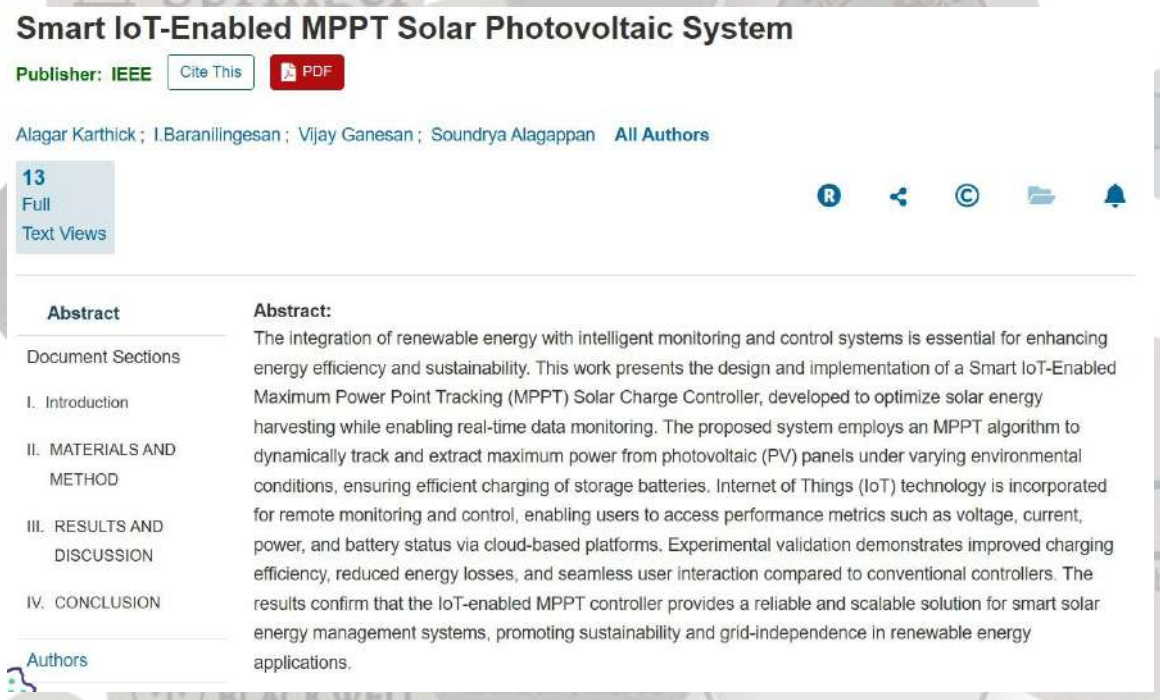
V. Results & Discussion

Show Full Outline

Abstract:
Fire incidents pose severe threats to human life, property, and the environment, demanding rapid and efficient intervention. Traditional firefighting methods expose personnel to extreme hazards, including high temperatures, toxic gases, and structural collapses. This paper presents an IoT and AI-enhanced autonomous fire-fighting robot, designed to detect, navigate, and extinguish fires with minimal human involvement. The proposed system integrates flame, temperature, and gas sensors with an Arduino-based control unit and an AI-assisted flame classification model to minimize false alarms. Real-time environmental data is transmitted via IoT to a remote monitoring station, enabling both autonomous and manual override modes. The navigation system employs ultrasonic sensors and obstacle avoidance algorithms, while the fire suppression mechanism uses a servo-controlled water or CO2-based extinguisher. Experimental results demonstrate a detection accuracy of 96.5% and a fire extinguishing time under 25 seconds in controlled environments. The proposed solution significantly enhances firefighting efficiency, reduces human risk, and offers scalable applications for industrial, commercial, and residential safety systems.

PUBLICATION DETAILS

I Baranilingesan,"Smart IoT Enabled MPPT Solar Photovoltaic System", Scopus.
DOI: 10.1109/ICICNIS66685.2025.11315717



Smart IoT-Enabled MPPT Solar Photovoltaic System

Publisher: IEEE | Cite This | PDF

Alagar Karthick ; I.Baranilingesan ; Vijay Ganesan ; Soundrya Alagappan All Authors

13 Full Text Views

Abstract

Document Sections

I. Introduction

II. MATERIALS AND METHOD

III. RESULTS AND DISCUSSION

IV. CONCLUSION

Authors

Abstract:
The integration of renewable energy with intelligent monitoring and control systems is essential for enhancing energy efficiency and sustainability. This work presents the design and implementation of a Smart IoT-Enabled Maximum Power Point Tracking (MPPT) Solar Charge Controller, developed to optimize solar energy harvesting while enabling real-time data monitoring. The proposed system employs an MPPT algorithm to dynamically track and extract maximum power from photovoltaic (PV) panels under varying environmental conditions, ensuring efficient charging of storage batteries. Internet of Things (IoT) technology is incorporated for remote monitoring and control, enabling users to access performance metrics such as voltage, current, power, and battery status via cloud-based platforms. Experimental validation demonstrates improved charging efficiency, reduced energy losses, and seamless user interaction compared to conventional controllers. The results confirm that the IoT-enabled MPPT controller provides a reliable and scalable solution for smart solar energy management systems, promoting sustainability and grid-independence in renewable energy applications.

R Revathi , "Multi-objective optimization framework for enhancing efficiency and sustainability in smart grids" Volume 341, 120079



ELSEVIER

Energy Conversion and Management

Volume 341, 1 October 2025, 120079

Multi-objective optimization framework for enhancing efficiency and sustainability in smart grids

R. Revathi [a], N. Senthilnathan [b], V. Kumar Chinnaiyan [c], J. Sevugan Rajesh [d]

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https://doi.org/10.1016/j.enconman.2025.120079 | Get rights and content

PUBLICATION DETAILS

V Kamalkumar , ”Pioneering Solar-to-Fuel Innovations: Harnessing Artificial Photosynthesis”Scopus Vol. 31, No 5, 878–889



Scientific Bulgarian Communications

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PIONEERING SOLAR-TO-FUEL INNOVATIONS: HARNESSING ARTIFICIAL PHOTOSYNTHESIS

Journal: Journal of the Balkan Tribological Association 31(5) (2025) Pages: 878 - 889

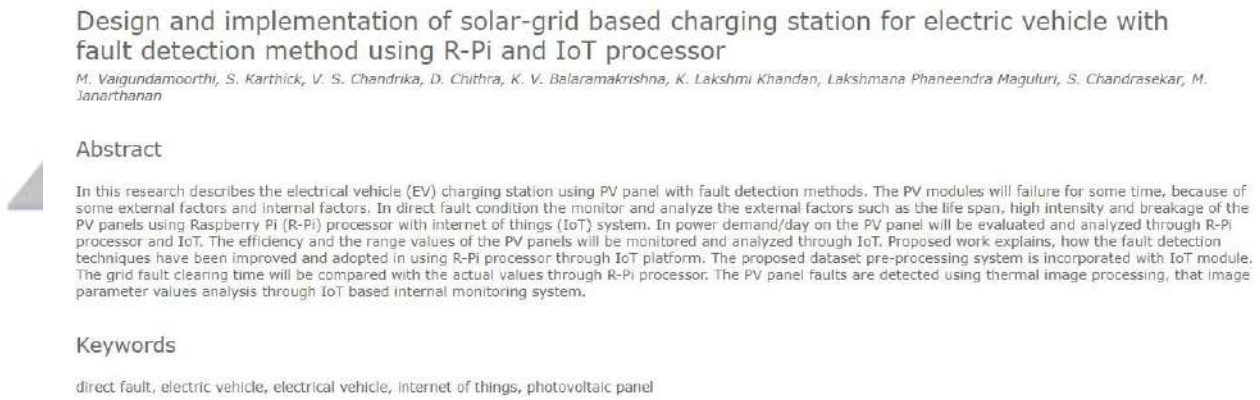
▼ Authors

BABU, B. H.; BABU, K. S.; PRATHEEP, V. G.; KAMALKUMAR, V.; JEYAPRAKASH, N.; KALAIYARASI, D.; GUPTA, S.; PHILIP, J. M.; RAJARAM, A.

▼ Abstract

el systems have been observed due to enhancements in materials and catalytic systems. The most promising systems integrate multiple junction semiconductors combined by enhanced catalysts for electrochemical reduction of CO2 and water splitting. These systems are developed to allow for better light absorption throughout the range of spectrum and better charge separation and transfer hence better conversion efficiency. Newer materials like MOFs and hybrid nano materials are found to be highly active in converting CO2 to HC under milder conditions, resulting in a benefit in terms of energy. In addition, integration with new technologies like artificial intelligence and machine learning has simplified the optimization of system parts and reaction conditions, thereby shortening development time and leading to more efficient designs. Still, their implementation poses a challenge in developing these technologies for commercial realization, maintaining order, and cutting costs, which makes them more stable for the markets. In this abstract, the author summarizes the current development of artificial photosynthesis, as well as the technology and challenges present in the area. More advancement in this field could lead to the creation of new forms of renewable energy sources that could significantly reduce global warming by offering carbonless fuel options.This is one of the great techniques where the artificial process replicates Mother Nature's method, known as photosynthesis, to store the sun's power in chemical compounds as a type of fuel. This process mainly concentrates on the utilization of sunlight to cause the reduction of carbon dioxide (CO2) and water (H2O) to store energy-dense species, including hydrogen (H2), methanol and hydrocarbons. Over the past few years, improvements in the performance and durability of solar-to-fu

V S Chandrika , “Design and implementation of solar-grid based charging station for electric vehicle with fault detection method using R-Pi and IoT processor”, Scopus Vol 14, No 4



Design and implementation of solar-grid based charging station for electric vehicle with fault detection method using R-Pi and IoT processor

M. Vaigundamoorthi, S. Karthick, V. S. Chandrika, D. Chithra, K. V. Balaramakrishna, K. Lakshmi Khandan, Lakshmana Phaneendra Maguluri, S. Chandrasekar, M. Janarthanan

Abstract

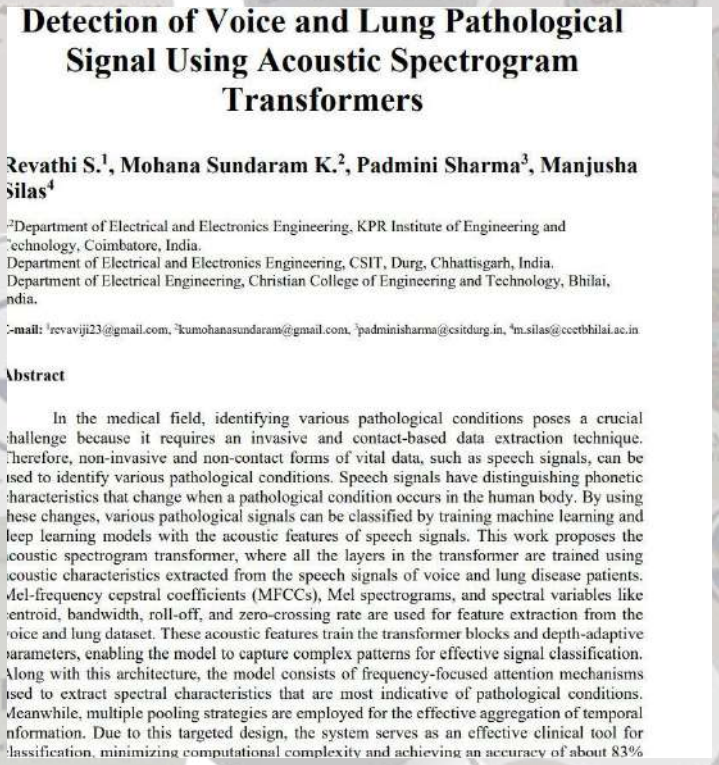
In this research describes the electrical vehicle (EV) charging station using PV panel with fault detection methods. The PV modules will failure for some time, because of some external factors and internal factors. In direct fault condition the monitor and analyze the external factors such as the life span, high intensity and breakage of the PV panels using Raspberry Pi (R-Pi) processor with internet of things (IoT) system. In power demand/day on the PV panel will be evaluated and analyzed through R-Pi processor and IoT. The efficiency and the range values of the PV panels will be monitored and analyzed through IoT. Proposed work explains, how the fault detection techniques have been improved and adopted in using R-Pi processor through IoT platform. The proposed dataset pre-processing system is incorporated with IoT module. The grid fault clearing time will be compared with the actual values through R-Pi processor. The PV panel faults are detected using thermal image processing, that image parameter values analysis through IoT based internal monitoring system.

Keywords

direct fault, electric vehicle, electrical vehicle, internet of things, photovoltaic panel

PUBLICATION DETAILS

K Mohana Sundaram,"Detection of voice and lung pathological signal using Acoustic spectrogram transformers" Scopus - Volume – 7, Issue - 4



Detection of Voice and Lung Pathological Signal Using Acoustic Spectrogram Transformers

Revathi S.[1], Mohana Sundaram K.[2], Padmini Sharma[3], Manjusha Silas[4]

[2]Department of Electrical and Electronics Engineering, KPR Institute of Engineering and Technology, Coimbatore, India.
Department of Electrical and Electronics Engineering, CSIT, Durg, Chhattisgarh, India.
Department of Electrical Engineering, Christian College of Engineering and Technology, Bhilai, India.

E-mail: [1]revaviji23@gmail.com, [2]kumohanasundaram@gmail.com, [3]padminisharma@csitdurg.in, [4]m.silas@ccetbhilai.ac.in

Abstract

In the medical field, identifying various pathological conditions poses a crucial challenge because it requires an invasive and contact-based data extraction technique. Therefore, non-invasive and non-contact forms of vital data, such as speech signals, can be used to identify various pathological conditions. Speech signals have distinguishing phonetic characteristics that change when a pathological condition occurs in the human body. By using these changes, various pathological signals can be classified by training machine learning and deep learning models with the acoustic features of speech signals. This work proposes the acoustic spectrogram transformer, where all the layers in the transformer are trained using acoustic characteristics extracted from the speech signals of voice and lung disease patients. Mel-frequency cepstral coefficients (MFCCs), Mel spectrograms, and spectral variables like centroid, bandwidth, roll-off, and zero-crossing rate are used for feature extraction from the voice and lung dataset. These acoustic features train the transformer blocks and depth-adaptive parameters, enabling the model to capture complex patterns for effective signal classification. Along with this architecture, the model consists of frequency-focused attention mechanisms used to extract spectral characteristics that are most indicative of pathological conditions. Meanwhile, multiple pooling strategies are employed for the effective aggregation of temporal information. Due to this targeted design, the system serves as an effective clinical tool for classification, minimizing computational complexity and achieving an accuracy of about 83%

M Mohana Sundaram , "The AI-powered soft skills renaissance: cultivating human abilities in the digital era" Scopus Volume 6, article number 42 (2026).



Home > AI and Ethics > Article

The AI-powered soft skills renaissance: cultivating human abilities in the digital era

Review | Published: 05 December 2025

Volume 6, article number 42, (2026) Cite this article

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AI and Ethics

AI and Ethics

Aims and scope →

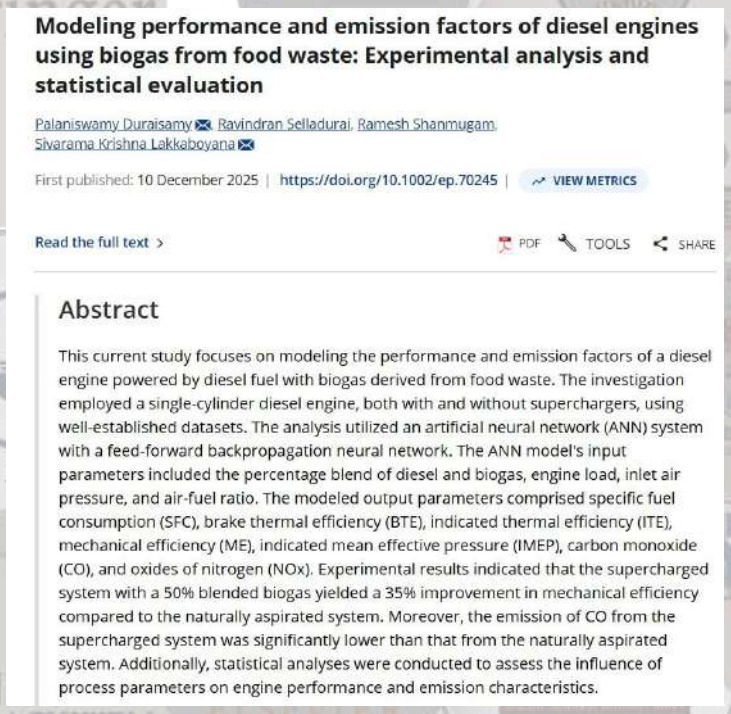
Submit manuscript →

M. Muthukumar, Ajithkumar Sitharaj, M. Mohana Sundaram & B. Dhananjeiyan

Access this article

PUBLICATION DETAILS

S Ravindran , "Modeling performance and emission factors of diesel engines using biogas from food waste: Experimental analysis and statistical evaluation"



Modeling performance and emission factors of diesel engines using biogas from food waste: Experimental analysis and statistical evaluation

Palaniswamy Duraisamy, Ravindran Selladurai, Ramesh Shanmugam, Sivarama Krishna Lakkaboyana

First published: 10 December 2025 | https://doi.org/10.1002/ep.70245 | VIEW METRICS

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Abstract

This current study focuses on modeling the performance and emission factors of a diesel engine powered by diesel fuel with biogas derived from food waste. The investigation employed a single-cylinder diesel engine, both with and without superchargers, using well-established datasets. The analysis utilized an artificial neural network (ANN) system with a feed-forward backpropagation neural network. The ANN model's input parameters included the percentage blend of diesel and biogas, engine load, inlet air pressure, and air-fuel ratio. The modeled output parameters comprised specific fuel consumption (SFC), brake thermal efficiency (BTE), indicated thermal efficiency (ITE), mechanical efficiency (ME), indicated mean effective pressure (IMEP), carbon monoxide (CO), and oxides of nitrogen (NOx). Experimental results indicated that the supercharged system with a 50% blended biogas yielded a 35% improvement in mechanical efficiency compared to the naturally aspirated system. Moreover, the emission of CO from the supercharged system was significantly lower than that from the naturally aspirated system. Additionally, statistical analyses were conducted to assess the influence of process parameters on engine performance and emission characteristics.

P Ravi Kumar, "AI-Powered Teaching Support Tools for Workload Optimization and Pedagogical Improvement", Scopus.



Peer Reviewed Chapter

Chapter Name : AI-Powered Teaching Support Tools for Workload Optimization and Pedagogical Improvement

Author Name : Sarah Leah Dsouza, P. Ravi Kumar

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DOI: 10.71443/9789349552258-10 Cite

Received: XX Accepted: XX Published: XX

View Sample PDF

Abstract

The integration of artificial intelligence (AI) in education has emerged as a transformative approach for enhancing instructional efficiency and pedagogical quality. AI-powered teaching support tools streamline administrative tasks such as grading, attendance management, and lesson planning, enabling educators to allocate more time to high-value instructional activities. Predictive and prescriptive analytics provide actionable insights into student performance, facilitating personalized learning pathways and targeted interventions. Adaptive learning platforms and intelligent tutoring systems support curriculum optimization by identifying knowledge gaps and recommending tailored instructional strategies. Challenges related to data privacy, algorithmic bias, and institutional policy frameworks are addressed through responsible AI governance, ensuring ethical and scalable deployment. Comparative analyses highlight the advantages of AI-supported methods over traditional practices in terms of workload reduction, pedagogical effectiveness, and learner engagement. The findings underscore the potential of AI technologies to create data-driven, learner-centric educational ecosystems that balance operational efficiency with instructional innovation, establishing a foundation for future research and practical implementation in diverse educational contexts.

STUDENT ACHIEVEMENTS DETAILS

S.No	Name	Event	Date	ORGANISATION
01	Izash Ahamed M	Science Techfest	09-10-2025	Dhanalakshmi Srinivasan University
02	Nadish K R	Science Tech Fest 2025	10-10-2025	Dhanalakshmi Srinivasan university
03	Aakash S	Science Techfest	10-10-2025	Dhanalakshmi Srinivasan university
04	Md Saddab Ansari	Robotica'25 (Sky Dash)	15-10-2025	Geethanjali College of Engineering and Technology
05	Md Saddab Ansari	CONSCIENTIA'2025' (DRONETRIX)	17-10-2025	Indian Institute of Space Science and Technology
06	Immanuel Shijo M	Eternix 2025	24-10-2025	Sri Sairam Engineering College
07	Rajasekar S	Tathva'25	24-10-2025	National Institute of Technology
08	Yazhini K	Eternix 2k25	24-10-2025	Sri Sairam engineering college
09	Nethra V	Eternix 2025	24-10-2025	Sri Sairam Engineering College
10	Thirumalai A	National Programme on Technology enhancement Learning	02-11-2025	KPRIET
11	Sanjith Ragul B	Anna University inter zone	07-11-2025	Adhiyamaan College Of Engineering
12	Raja Nanthika K V	REpower 2 Competition	07-12-2025	KPRIET
13	Raja Nanthika K V	Best IEEE PES Student branch chapter awards 2025	20-12-2025	IEEE Power and Energy Society Madras
14	Nandana A	Best IEEE PES Student branch chapter awards 2025	20-12-2025	IEEE Power and Energy Society Madras

STUDENT PARTICIPATION DETAILS

S.No	Name	Event	Date	ORGANISATION
01	Tarun K S	Paper Presentation	9/10/2025	KPRIET
03	Manoranjan G	PLC Programming with Virtual Simulation Software	9/10/2025	SRM Institute of Science and Technology
04	Kavineshan K S	PLC Programming with Virtual Simulation Software	9/10/2025	SRM Institute of Science and Technology
05	Aariya U S	IGNITRA'25	10/10/2025	Nandha College of Technology
06	Arjith J	Science Tech fest	10/10/2025	Nandha College of Technology
07	Deepika P	IGNITRA'25 | QUIZ	10/10/2025	Nandha College of Technology
08	Janani S D	IGNITRA'25	10/10/2025	Nandha College of Technology
09	Kavinila M	National Level Technical Symposium IGNITRA '25'	10/10/2025	Nandha College of Technology
10	Nyikavaranda Happymore R	Internship at Premeasure controls pvt	14/10/2025	Premeasure controls Pvt Ltd
11	Aariya U S	SriShti2k25	14/10/2025	PSG College of Technology
12	Abishek M	BARNSTROMZ	15/10/2025	Hindustan Institute of Technology
13	Nandana A	BARNSTROMZ - 2K25	15/10/2025	Hindustan Institute of Technology

STUDENT PARTICIPATION DETAILS

SL. NO	NAME	EVENT	DATE	ORGANISATION
14	Nethra V	Nasa Space Apps Challenge 2025	16/10/2025	NASA
15	Nethra V	Srishti 2k25	16/10/2025	PSG College of Technology
16	Vimal Carlo S	Data Analytics Training	16/10/2025	KPRIET
17	Aakash S	Agrotechfest	16/10/2025	Nehru Institute of technology
18	Arjith J	AICTE - Vibrant Advocacy for Advancement and	16-10-2025	Nehru Institute of technology
19	Deepika P	Srishti2k25	11/10/2025	PSG College of Technology
20	Kamalesh S	National Conference by AICTE	16/10/2025	Nehru Institute of technology
21	Kamalesh S	Science Techfest	16/10/2025	Nehru Institute of technology
22	Nadish K R	Conference For AICTE	16-10-2025	Nehru Institute of technology
23	Gowtham J	Tathva'25	24-10-2025	National Institute of Technology
24	Rajasekar S	Tathva'25	25-10-2025	National Institute of Technology
25	Pranav A	Ideas To Impact Challenge	25-10-2025	National Institute of Technology
26	Divya C S	Cm Trophy	26-10-2025	PSNA College Of Engineering and Technology

STUDENT PARTICIPATION DETAILS

SL. NO	NAME	EVENT	DATE	ORGANISATION
27	Jeevarathinam T	NPTEL	25-10-2025	KPRIET
28	Jithesh Kumar A	Ideas To Impact Challenge	25-10-2025	National Institute of Technology
29	Md Sahil Babu Ansari	Inter Zone Tournament	27-10-2025	KSR institute of engineering and technology
30	Thanvanth R S	Anna university Inter Zonal 2025-2026	27-10-2025	KSR institute of engineering and technology
31	Raja Nanthika K V	Monty Quiz 7.0	29-10-2025	KPRIET
32	Nivethaa E	Monty Quiz 7.0	29-10-2025	KPRIET
33	Nandana A	Monty Quiz 7.0	29-10-2025	KPRIET
34	Sesamwa Tatenda	Internship	30-10-2025	SS Systems
35	Kavya K	NPTEL	31-10-2025	KPRIET
36	Nandana A	Introduction To Industry 4.0 And Industrial Internet of Things	31-10-2025	KPRIET
37	Abishek M	Introduction To Industry 4.0 And Internet of Things	31-10-2025	KPRIET
38	Akhil Murugan P S	NPTEL	31-10-2025	KPRIET
39	Dharun S	NPTEL	1/11/2025	KPRIET

STUDENT PARTICIPATION DETAILS

SL. NO	NAME	EVENT	DATE	ORGANISATION
40	Hemanth Kumar R	NPTEL	1/11/2025	IIT Kharagpur
41	Kavinkumar G	NPTEL	1/11/2025	IIT Kharagpur
42	Lakshanya R	Fundamentals Of Artificial Intelligence	2/11/2025	KPRIET
43	Vinoth Venkatesh V	Console Based Application Using Java	10/11/2025	Kongu Engineering College
44	Rajasekar S	Techzone Nationals 2025	10/11/2025	Jawaharlal Nehru New College of Engineering
45	Sesamwa Tatenda	NPTEL Course 2	20/11/2025	KPRIET
46	Raj Koutham M	Matlab Onramp	26/11/2025	KPRIET
47	Nandana A	Hack4us	27/11/2025	Maharaja Surajmal Institute (MSI)
48	Hemant M	Innovatex	27/11/2025	Coimbatore Institute Of Technology
49	Sesamwa Tatenda	NPTEL	27/11/2025	KPRIET
50	Nandana A	Hack4us	29/11/2025	Maharaja Surajmal Institute (MSI)
51	Nandana A	Tata Crucible Campus Quiz 2025	30/11/2025	TATA GROUPS
52	Rajasekar S	Sensehack 2025	6/12/2025	Vellore Institute Of Technology

STUDENT PARTICIPATION DETAILS

SL. NO	NAME	EVENT	DATE	ORGANISATION
53	Nagaravi D	Internships	10/12/2025	KPRIET
54	Thirumalai A	Implant Training	10/12/2025	National Institute of Technology.
55	Nishanth M	Implant training	12/12/2025	National Institute of Technology
56	Aakash S	Internship to AJANTHA INDUSTRIES	25-12-2025	Ajantha industry
57	Pradeep V C	Implant training	29-12-2025	NIRT Renewable Energy Private Limited
58	Dhanu Shri T J	Winter Internship (Sem: 3)	31-12-2025	TITAN Engineering & Automation
59	Nandana A	ETAP Training	17/09/25	KPRIET
60	Sandhiya S	ETAP Training	18/09/25	KPRIET
61	Sashtika B	Master Class On ETAP Training	19/09/25	KPRIET
62	Sri Varshini R	Master Class For ETAP	19/09/25	KPRIET
63	Abhiraami S P	Spark 2025	19/09/25	KPRIET
64	Janani R	International Conference On Smart Systems, Power Electronics, Artificial Intelligence, Robotics	19/09/25	KPRIET