



PANIMALAR ENGINEERING COLLEGE

An Autonomous Institution - (JAISAKTHI EDUCATIONAL TRUST)

Affiliated to Anna University, Chennai
Approved by AICTE, UGC FOR 2(f) & 12(B) STATUS
ACCREDITED BY NATIONAL BOARD OF ACCREDITATION(NBA)

CAMPUS CONNECTOR



2022 - 2023

DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE



IEEE



**IEEE
COMPUTER
SOCIETY**



**INSTITUTION'S
INNOVATION
COUNCIL**
(Ministry of Education Initiative)

ABOUT

The department of artificial intelligence and data science showcases its commitment to excellence through faculty upskilling, student achievements, impactful research, industry collaborations, and outreach initiatives aligned with emerging technologies and global sustainable development goals.



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DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

Issue 2

March 2023

EDITOR'S NOTE

Dear Readers,

We are excited to present this edition of the newsletter from the Department of Artificial Intelligence and Data Science, Panimalar Engineering College, highlighting the semester's key milestones and achievements of our students and faculty. We sincerely thank Dr. S. Malathi, Head of the Department, for her continuous support and guidance.

INSTITUTE VISION

To transform the budding engineers into academically excellent, highly intellectual and self-disciplined engineering graduates to mould them as good citizens with the spirit of integrity and morality that would cater to the needs of our nation.

INSTITUTE MISSION

- To impart quality education with high standards of excellence in engineering and technology.
- To provide an excellent infrastructure in a serene and conducive atmosphere that would motivate the students in their pursuit of knowledge in the field of engineering and technology.

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DEPARTMENT VISION

To produce high quality creators and ethical engineers for innovative technology in the field of Artificial Intelligence and Data Science.

DEPARTMENT MISSION

- M1:** To develop the department as a center of Artificial Intelligence for significant breakthroughs in advancing the promise of human-machine systems that can address complex cognitive tasks.
- M2:** To impart quality and value-based education and contribute towards the innovation of computing Data Science for the translation of data into information to support and improve decision making.
- M3:** To produce ethical engineers and researchers by inculcate the values of humanity and courage in producing relevant solutions to address business and societal challenges.

PROGRAMME EDUCATIONAL OBJECTIVES(PEOs)

PEO 1: Mastering AI and Data Science for Human Machine Synergy

To enrich knowledge to the engineering students with cutting-edge technologies like Artificial Intelligence and Data science and enable them to develop innovative solutions to solve complex problems in various sectors and to enhance the synergy between humans and intelligent systems for optimal performance.

PEO 2: Fostering Interdisciplinary Research Innovation and Ethics

To engage the students in advanced research with special focus on AI and cultivate a deep knowledge of ethical frameworks that will contribute to the development of fair and accountable systems that prioritize societal well-being.

PEO 3: Pathways to Professional Excellence

To enable the students to secure successful careers through strong technical expertise and skill sets and drive them to pursue lifelong learning with integrity- driven mindset and become successful entrepreneurs.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

PSO 1 : AI Driven Innovation

Graduates should be able to evolve AI based efficient domain specific processes for effective decision making in several domains such as business and governance domains.

PSO 2 : Data-Driven Decision Making Insight

Graduates should be able to arrive at actionable fore sight, insight, hind sight from data for solving business and engineering problems.

PSO 3 : Societal Intelligence Solutions

Graduates should be able to create, select and apply the theoretical knowledge of AI and Data Analytics along with practical industrial tools and techniques to manage and solve wicked societal problems.

Programme Outcomes (POs)**PO1: Engineering knowledge:**

Apply the knowledge of Mathematics, Science, Engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis:

Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/development of solutions:

Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO 4: Conduct investigations of complex problems:

Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO 5: Modern tool usage:

Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO 6: The engineer and society:

Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO 7: Environment and sustainability:

Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO 8: Ethics:

Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO 9: Individual and team work:

Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO 10: Communication:

Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project management and finance:

Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long learning:

Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

EDITORIAL BOARD**Chief Editor:****Dr. S. MALATHI****Faculty Editor:****Prof. S. VIMALA****Student Representative:****ASIYA MARIYAM AMEENUDEEN II Yr. - A**

Professional Society Activities

"Seminar on Innovation in Data Science Startups"

Panimalar Engineering College, Department of Artificial Intelligence & Data Science in association with IEEE Computer Society and IEEE Student Branch has Conducted Seminar titled "Innovation in Data Science Startups" on 08.02.2023. The resource person was Mr.M.U. Balaji, Field Co-ordinator, TN EDII, MIT Hub. The programme ended with the feedback, discussions and valedictory function. Nearly 51 students and 3 Faculty members of IEEE members and non-IEEE members of all the societies have participated in the event. The event was co-ordinated by Dr.K.Jayashree, Professor of Panimalar Engineering College, Chennai.



"Guest Lecture on IoT-Arduino"

Panimalar Engineering College, Department of Artificial Intelligence & Data Science in association with IEEE Computer Society and IEEE Student Branch has Conducted Guest Lecture titled "IoT-Arduino" on 10.02.2023. The resource person was Dr. M.Senthil Kumar, Dean, Bharath Institute of Higher Education & Research. The programme ended with the discussions and valedictory function. Nearly 60 students of IEEE members and non-IEEE members of all the societies have participated in the contest. The event was coordinated by Mr.C.Vivek, Assistant Professor of Panimalar Engineering College, Chennai.

"Ideathon Presentation"

Panimalar Engineering College, Department of Artificial Intelligence & Data Science in association with IEEE Computer Society and IEEE Student Branch has Conducted "Ideation Presentation(Phase-II)" on 27.01.2023. The programme ended with the discussions and valedictory function. Nearly 19 students of IEEE members and non-IEEE members of all the societies have participated in the event. Certificates has been distributed for all the winners and participants. The event was coordinated by Mrs.V.Sathya, Assistant Professor of Panimalar Engineering College, Chennai.



- The Department organized a **six-day Faculty Development Programme (FDP) on Business Analytics** from **26.12.2022 to 31.12.2022**, bringing together experienced academicians and industry professionals as resource persons which was attended by 50 faculty members.
- A **six-day FDP on Computer Vision** was conducted from **15.05.2023 to 20.05.2023**, featuring an expert session by Prof.Dr.Ambeth Kumar from **Mizoram University**. The programme was attended by **55 faculty members** and focused on recent advancements and research trends in computer vision.

Professional Society Activities



A webinar on “**IEEE and its Benefits**” was organized by the Department of Information Technology in association with the IEEE Students Society at Panimalar Engineering College. The session was delivered by **Mr. M. Arun**, Chairman of **IEEE Madras Young Professionals**, IEEE Student Branch Counselor, and Assistant Professor (ECE), who elaborated on the significance of IEEE membership, professional development opportunities, and student engagement in technical and research activities.

Research Forum

- Two new students have newly registered for doctoral research under the guidance of Prof. Dr. K. Jayasree.
- During the academic year 2022–2023, the department recorded successful completion of PhD viva examinations by its research scholars. Ms. M. Sangeetha, Ms. P. Rajeswari, and Ms. V. S. Saranya completed their vivas under the guidance of their respective supervisors from reputed universities, reflecting the department’s strong research culture and commitment to academic excellence.

Conference Publications Summary (AY 2022–23):

Faculty-wise contribution:

- **Dr. K. Jayashree** – 1 publication
- **Dr. S. Chakravarthi** – 3 publications
- **Ms. R. Priya** – 3 publications

International Conference



6th INTERNATIONAL CONFERENCE ON INTELLIGENT COMPUTING (ICONIC 2K23)



Organized by

Phoenixes on Emerging Current Trends in Engineering And Management (PECTEAM 2K23)

Venue: Panimalar Engineering College
Bangalore Trunk Road, Poonamallee, Chennai

28th & 29th
April
2023

CALL FOR PAPERS

www.pecteam.in

EVOLUTION OF COMPUTING INTELLIGENCE

Image Processing
Machine Learning and Data Science
Deep Learning
Intelligent Computing System
Natural Language Processing
Soft Computing Approach

Cyber Intelligence and security
Intelligent Transportation
Biomedical computing
Intelligent Complex Systems
Embedded Computing
Genetic and Evolutionary Computation

Smart Sensors and MEMS
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Network Security
Wireless Communications
Machine to Machine/Device Communications
Network Design and Architecture

COMPUTING AND COMMUNICATION

Personal Communication Systems
Micro and Nano Electronics
Process Control and Instrumentation
Adaptive and Learning Control System
Cloud Computing
Recent Trends in Computer Networks
High Speed Networks

Contact us
pecteam@panimalar.ac.in

All Registered Papers will be Published in *Advances in Computer Science Research & Data Engineering for Future Prospects using Deep Learning and IoT in Healthcare Applications - IET Book Series*

IMPORTANT DATES

Call for Papers	Sep 10, 2022
Last Date for Submission	Mar 08, 2023
Date of Notification of Accepted Papers	Mar 20, 2023
Last Date for Registration (Early Bird)	April 03, 2023
Date of Conference	April 28 & 29, 2023

REGISTRATION FEE

CATEGORY	INDIAN AUTHOR/ STUDENT/ RESEARCH SCHOLAR/ INDUSTRIALIST		CONFERENCE MEMBER/ REGULAR		FOREIGN AUTHOR	
	REG.	NON-REG.	REG.	NON-REG.	REG.	NON-REG.
AUTHOR	2000	2500	10000	10000	100USD	1100USD
DELEGATE	2500	3000	10000	10000	120 USD	130 USD
DELEGATE	1000	1500	10000	10000	100USD	110 USD
DELEGATE	1000	1500	10000	10000	100USD	110 USD

POSTER / PROJECT

POSTER / PROJECT DEMO	
Last Date for Submission	Mar 03, 2023
Last Date for Registration	Mar 20, 2023

CONVENER

Dr.S.MALATHI,ME.,PhD.,

CO-PATRON

Dr.K.MANI,ME.,PhD.,

PATRONS

Mrs.C.VIJAYARAJESWARI,
Dr.C.SAKTHI KUMAR,ME.,PhD.,
Dr.SARANYASREE SAKTHIKUMAR,MBA.,PhD.,

CHIEF PATRON

Dr.P.CHINNADURAI,MA.,PhD



The 6th International Conference on Intelligent Computing (ICONIC 2K23), themed “Phoenixes on Emerging Current Trends in Engineering and Management (PECTEAM 2K23)”, was organized to provide a global platform for researchers, academicians, and industry professionals. The conference focused on emerging areas such as artificial intelligence, machine learning, data science, IoT, intelligent systems, and advanced computing technologies, fostering knowledge exchange and interdisciplinary research collaboration.

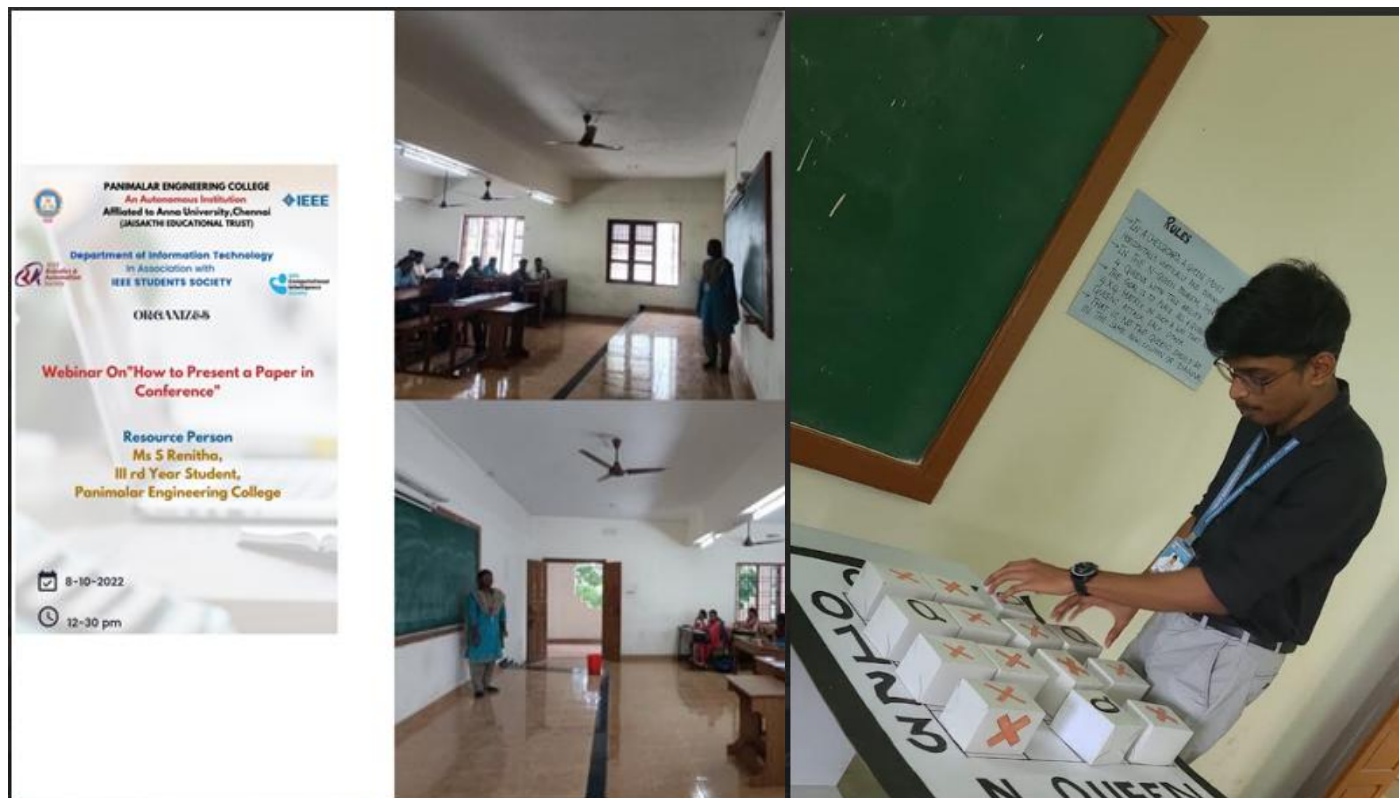
APPRECIATION EXCELLENCE AWARD

Appreciation Excellence Award is to recognize and honor individuals, teams, or organizations that have demonstrated exceptional performance, dedication, and achievements towards technology development.



- ✓ Achieved the Highest No. of Copyrights, totaling an impressive 13 copyrights
- ✓ Achievement of publishing a total of 6 conference papers and articles and secured a design Patent
- ✓ Has done consultancy projects
- ✓ Actively organized IEEE events & volunteered in IEEE - XTREME 17.0
- ✓ Trained staffs & students in the workshop conducted for “3D PRINTING TECHNOLOGY”

Anush Kumar.V of III Yr., received appreciation excellence award and cash prize for his publication works and involvement in consultancy projects.



SPECTRA'22, celebrated as part of **IEEE Day** at Panimalar Engineering College, was organized by the **Department of Artificial Intelligence & Data Science** in association with the **IEEE Madras Section, IEEE Computer Society, and IEEE Student Branch** on **11.10.2022**. The event featured a series of engaging technical contests and sessions on **Game Intelligence**, including the *N-Queen Problem, Puzzle, Water Jug Problem, and Travelling Salesman Problem*, along with a *Logo Contest*. Eminent academicians from reputed institutions served as resource persons, and the events witnessed enthusiastic participation from a large number of IEEE student members across societies. Coordinated by **Dr. P. Kavitha**, SPECTRA'22 successfully fostered problem-solving skills, innovation, and technical awareness among students.

Student's Corner:

Future Technologies: A Student's Perspective

As students stepping into a rapidly evolving digital era, future technologies hold immense importance in shaping our academic and professional journeys. Innovations such as Artificial Intelligence, Machine Learning, Data Science, Internet of Things, and Automation are transforming industries and redefining the way problems are solved. These technologies are no longer limited to research labs; they are becoming part of everyday life, influencing healthcare, education, transportation, and communication.

Understanding future technologies motivates us to think beyond textbooks and develop practical skills that align with industry needs. It encourages creativity, innovation, and continuous learning, which are essential to stay relevant in a competitive world. By exploring and adapting to these emerging technologies, we prepare ourselves to contribute meaningfully to society and build solutions that address real-world challenges.

- By **HARSHA VARDHINI K – II A**

Stay tuned for more updates on our forthcoming editions. -

Prof.Dr.S.Malathi, Prof. S.Vimala