

**KAMARAJ**

**COLLEGE OF ENGINEERING & TECHNOLOGY**



(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

S.P.G.Chidambara Nadar - C.Nagammal Campus

S.P.G.C. Nagar, K.Vellakulam - 625 701 (Near VIRUDHUNAGAR).

**DEPARTMENT OF ARTIFICIAL  
INTELLIGENCE AND DATA SCIENCE**

**INTELLIX**



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## VISION OF THE INSTITUTION

To make this Institution the unique of its kind in the field of Research and Development activities in this part of world.



## MISSION OF THE INSTITUTION

To impart highly innovative and technical knowledge to the urban and unreachable rural student folks through "Total Quality Education".

## QUALITY POLICY

Committed to impart Quality Technical Education imbued with proficiency, human values and continual improvement.



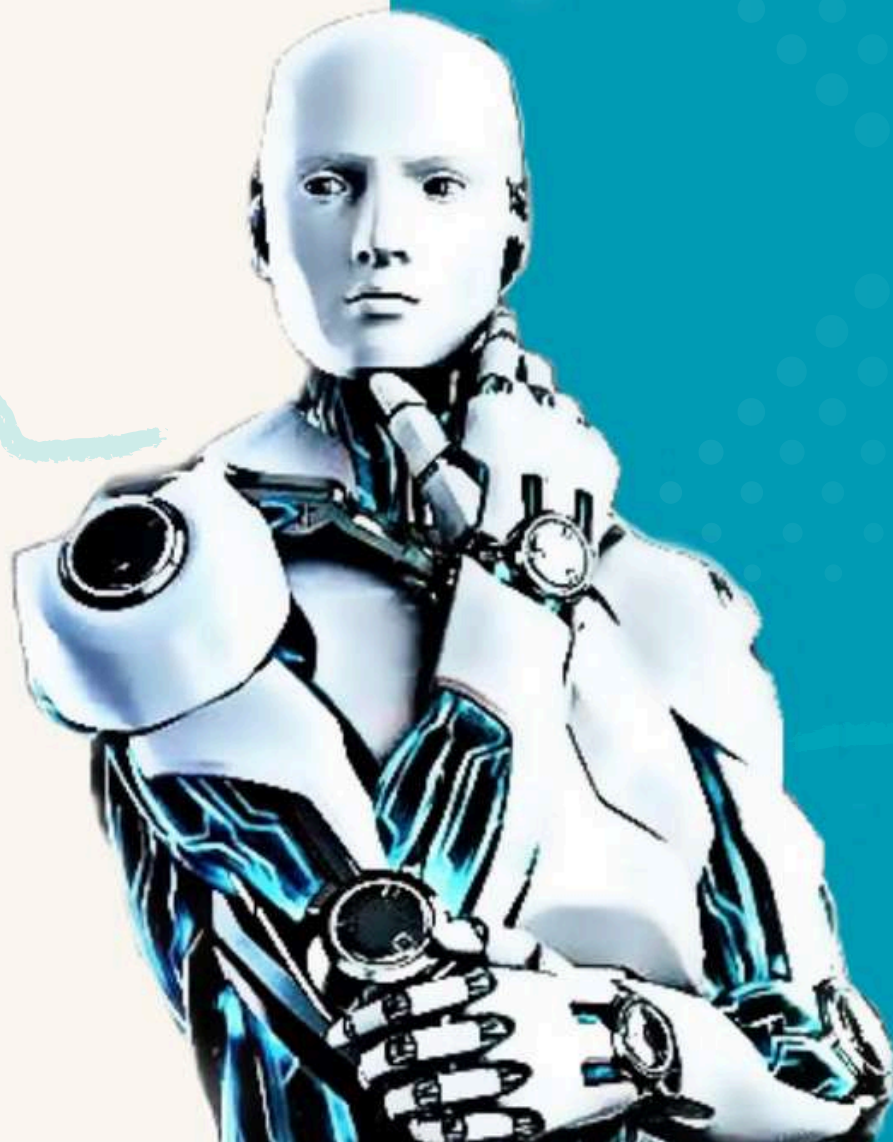
# VISION & MISSION OF THE DEPARTMENT

## VISION

To Make the Department of Artificial Intelligence and Data Science the unique of its kind in the field of Research and Development activities in this part of world.

## Mission

To impart highly innovative and technical knowledge to the urban and unreachable rural student folks in Artificial Intelligence and Data Science through "Total Quality Education".



## PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- PEO -1** Apply the basic engineering skills and domain knowledge for developing effective computing solutions to address various social issues.
- PEO -2** Able to have successful career in technical / managerial roles in multi-disciplinary environment.
- PEO -3** To confront the evolving technical challenges and problems in the areas of computing.

## PROGRAM SPECIFIC OUTCOME (PSOs)

- PEO -1 Professional Skills:** To apply learned skills to build optimized solutions pertaining to Data Processing, Artificial Intelligence and Machine Learning
- PEO -2 Problem - Solving Skills:** To analyze data using domain knowledge to get insights and develop appropriate solutions

# PROGRAM OUTCOMES(POS)

Engineering graduates will be able to

**PO -1 Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**PO -2 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.

**PO -3 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.

**PO -11** **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.

**PO -12** **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.

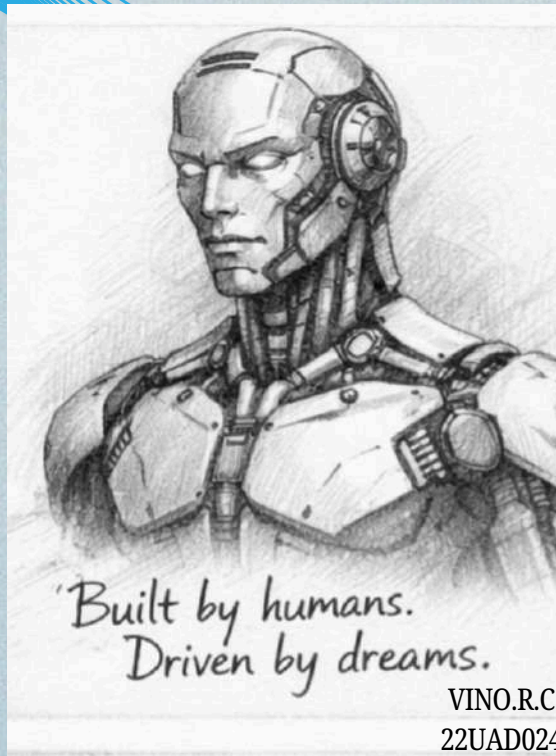


# *ABOUT THE DEPARTMENT*



The Department of **Artificial Intelligence and Data Science** (ADS) was established in the year 2020 with an intake of 60 students at Kamaraj College of Engineering and Technology with the goal of providing advanced education and research opportunities in the rapidly evolving fields of artificial intelligence (AI) and data science. The department provides a four-year B.Tech. programme in Artificial Intelligence and Data Science. Now with an revised intake of 120 students per year, our department remains a forerunner in imparting innovative and technical knowledge. This department is committed to delivering a comprehensive curriculum that includes both theoretical foundations and practical applications of AI and data science. It aims to foster an environment of innovation and excellence, supported by state-of-the-art infrastructure and experienced faculty.

# KNOWLEDGE ENRICHMENT



'Built by humans.  
Driven by dreams.'

VINO.R.C  
22UAD024

## AI and Robotics

AI unlocks new realms of creativity generating art, music, & stories.

It inspires and collaborates with us in imagining the unimaginable.



AKASH.R  
22UAD044

## The Ethics of AI

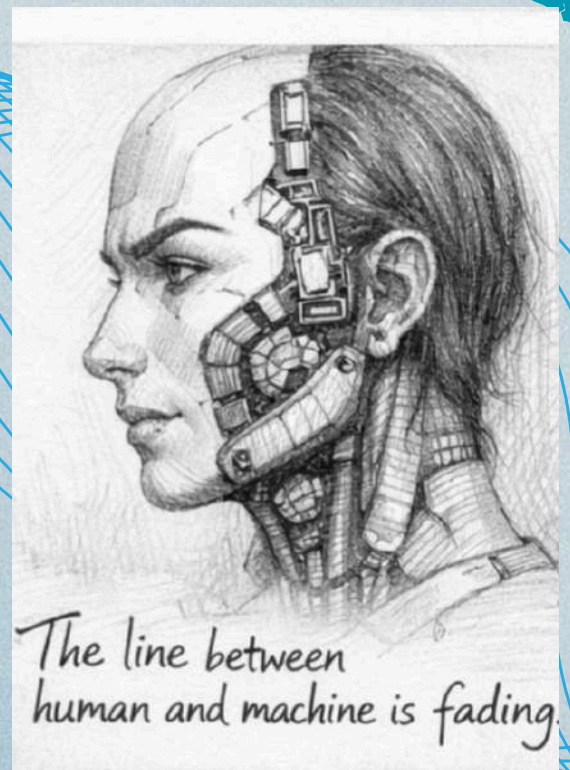
Navigating AI's impact, we consider bias, privacy, and accountability.

Balancing innovation with responsibility, we ask:

How do we ensure AI benefits all?



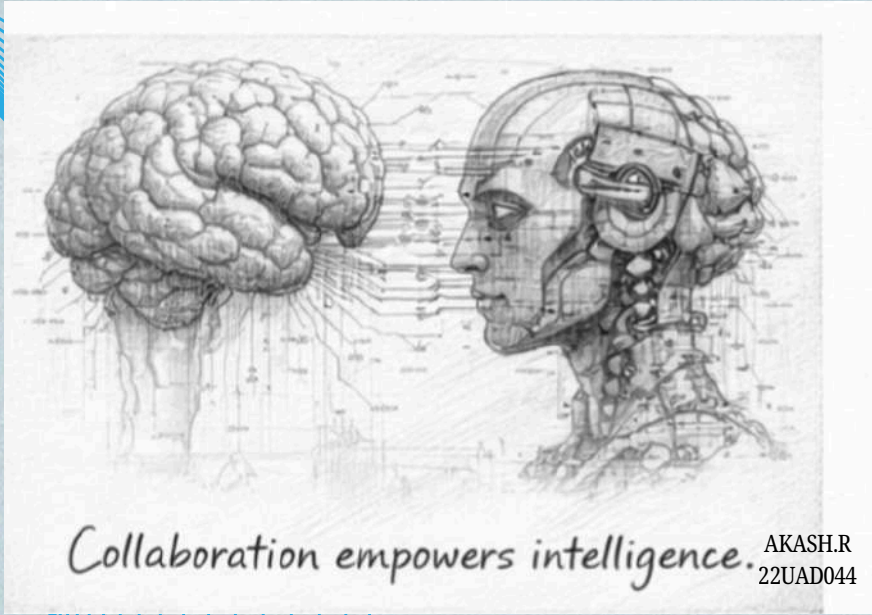
AKSHAYA.K.S  
22UAD027



The line between human and machine is fading.

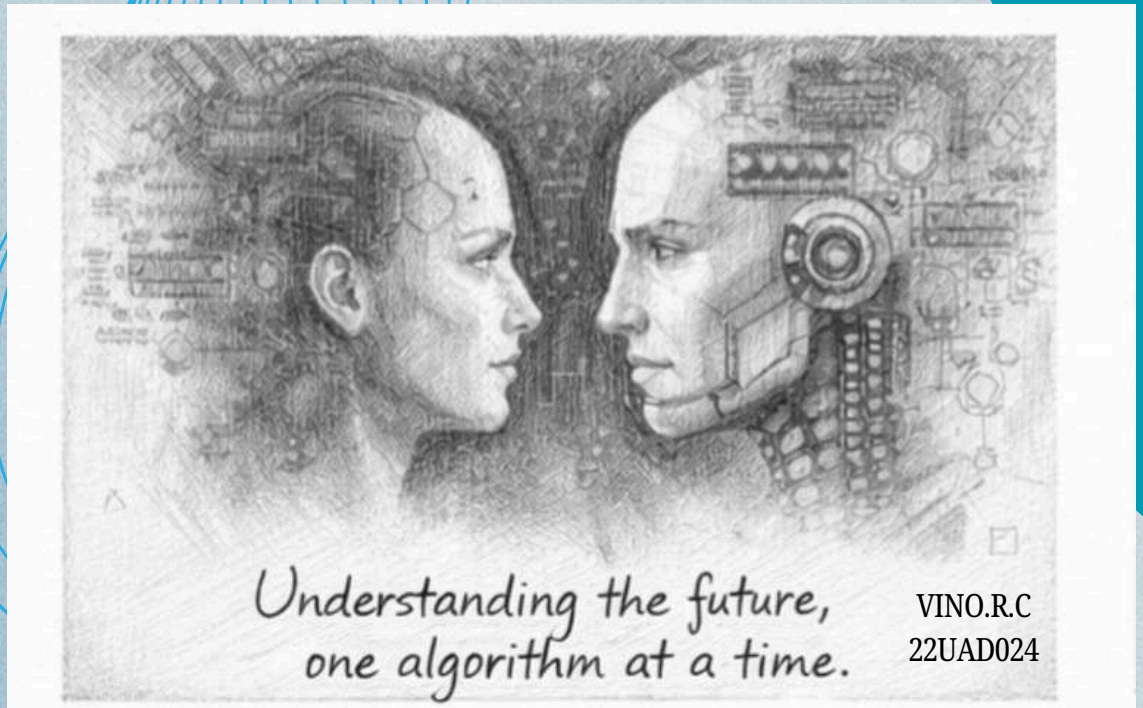
JAI AKASH.R  
22UAD022

# KNOWLEDGE ENRICHMENT



Collaboration empowers intelligence.

AKASH.R  
22UAD044



Understanding the future,  
one algorithm at a time.

VINO.R.C  
22UAD024

## AI for Accessibility

AI breaks down barriers, aiding those with disabilities through speech recognition, vision aids, and smart assistance, creating a more inclusive world.



GEETHAN.S  
22UAD032

## AI in Art & Design

AI generates new art, assists in design, and fuels creative inspiration. It collaborates with artists, blending technology with imagination.



VAISHNAVI.S  
22UAD037

# EVENTS ORGANIZED

## ASSOCIATION DETAILS

S.NO	DATE	EVENT DETAILS	NAME OF THE RESOURCE PERSON	NO OF STUDENTS PARTICIPATED
1	30.07.2025	A seminar titled "From Campus to Career: Making Smart Choices After Graduation"	Mr. K. Ashok Kumar, B.Tech., alumnus of the 2020-2024 batch	58
2	02.08.2025	The Role of AI in Shaping Tomorrow's Technology	Mr. M.K. Nhiranjan from Clustrex.	58
3	01.08.2025	External Academic Audit	Dr. S. Manoj Kumar, Professor and Head (C&D), Department of CSE, KPR Institute of Engineering and Technology	58
4	28.08.2025	Organized the event "Empowering Organizations with Business Intelligence Solutions"	Mr. R. Saravanakumar, Managing Director of Sentersoft Technologies, as the resource person.	170
5	09-09-2025	Organized a Skill Development Course Webinar on "Prompt Engineering"	Prof. Dr. S G Srivani Iyengar Professor & HOD Department of Electrical & Electronics RV College of Engineering India	58
6	24-09-2025	From Raw Data to Smart Algorithms: Fundamentals of Machine Learning	Dr. Golden Julie, Assistant Professor, Department of CSE , Anna University, Tirunelveli Region	127
7	10-09-2025 To 11-09-2025	National Level Hackathon "INNOVANZA 2K25"	Mr. Harish, Senior Application Developer And Mr. Cibi Hariharan, Co-Founder of Jungaroo Learning, Bangalore	71

# FACULTY ACHIVEMENTS RESEARCH DATA

## JOURNAL REVIEWED BY FACULTY MEMBERS

S.NO	Date	Name of the faculty	Organizing Institution	Name of the Programme
1	28-10-2025	Dr.R.Aghila	Springer Nature	Springer Journal
2	08-09-2025	Dr.R.Aghila	Springer Nature	Springer Nature – Signal, Image and Video Processing.

## PATENT & COPYRIGHT PUBLISHED / FILED

S.NO	Name of the faculty	Project title	Project proposal/copyright	Date
1	Mr.P.Praveen Kumar , Mrs. J. Mary Varsha, Mrs. S. Saraswathi, Mrs. N.Gajalakshmi, Mrs. S. Maria Sobana	AI-Powered Real-Time Diagnostic System for UPI Payment Failures	Patent Filled	29-09-2025

## FACULTY PRESENTED AS A KEYNOTE SPEAKER

S.NO	Name of the faculty	Conference title	Acted as	Month & Year
1	Dr.P.Praveen Kumar Associate Professor-ADS	4th International Conference on Advances in Science, Engineering and Technology (ICASET-2025), New Delhi on July 2025	Keynote Speaker	July 2025
2	Dr.R.Aghila Professor -ADS	4th International Conference on Advances in Science, Engineering and Technology (ICASET-2025), New Delhi on July 2025	Keynote Speaker	July 2025
3	Mrs.J.Mary Varsha Assistant Professor -ADS	4th International Conference on Advances in Science, Engineering and Technology (ICASET-2025) New Delhi on July 2025	National Advisory Committee	July 2025
4	Mrs.S.Mohana Priya Assistant Professor ADS	4th International Conference on Advances in Science, Engineering and Technology (ICASET-2025) New Delhi on July 2025	National Advisory Committee	July 2025
5	Mrs.S.Nithya Assistant Professor -ADS	4th International Conference on Advances in Science, Engineering and Technology (ICASET-2025) New Delhi on July 2025	Keynote Speaker	July 2025

## FACULTY ACTED AS A RESOURCE PERSON

S.No	Name of the faculty	Name of the Programme	Organizing Institution	Date
1	Dr.P.Praveen Kumar	one-day workshop on "Smart Data Handling"	Vivekananda College, Tiruvedakam	29-09-2025

# PATENT GRANTED BY FACULTY MEMBERS

S.No	Name of the Applicant	Name of the Inventor(s)	Title of the IPR	Application no
1	Dr.S.Balaji	Dr.S.Balaji, Dr.S.Joe Patrick Gnanaraj	IOT-ENABLED ELECTRIC- VEHICLE CHARGING STATION WITH SOLAR INTEGRATION	457271-001
2	Dr.P. Praveen Kumar	Dr. Solaimuthu Chandrakasan, Dr. Pappaiah Jesu Antony Alphonse, Dr. Nedunchezhian Natarajan, Dr. Murugesan Ramasamy, Dr. Yeddula Venkatrmana Reddy, Dr. Praveen Kumar Premkamal, Mr. Tamal Sarkar, Mrs. Nivedita Sudhanva Desai	Advanced Dashboard Touchscreen Device for Vehicles	6460407
			AI-Powered Real-Time Diagnostic System for UPI Payment Failures	20254109 3300
3	Ms.K.Rajalakshmi	K.Sudhaa Shree, K. Madhu Bala, K.Sakthi Shivani,Ms.P.Mahalakshmi, Dr.E.Vakaimalar,Ms.R.Saranya Priyadharshini,Ms.K.Rajalakshmi Ms.G.Nivetha,Ms.K.Kartheeswar	Agricultural Macinery using IoT	202541057 902 A
4	Mrs.Mohanappriya	Dr.Golden Julie Eanoch, Dr.Indra Navaraj Gnanaprakasam, Dr.Kavitha Margret Mansingh , Mohanappriya Sankaran , Ram prasath Selvamani , Dr.Harold Robinson Yesudha	Machine Learning based security device for cloud computing	6473977
5	Mrs.J.Mary Varsha	Mrs.J.Mary Varsha,Mr.Noor Mohammed. S,Krishnaveni,A,Abisha .G,Sherin Princy. J,Dr.S.Ponmani Raj,S,	Framework for Real TimePatient Risk Stratification Using EHR and IOT Data	202541085 868

# FACULTY DEVELOPMENT PROGRAM

## FDP & STTP Attended by Faculty members

S.NO	Name of the Faculty as Resource Person	Name of the Programme	Date	Organizing Institution	Location
1	Mrs.J.Mary Varsha	Recent Trends in Next-Gen AI Automation	08-12-2025 To 12-12-2025	St.Joseph's College of Engineering and Technology	Chennai
		Generative AI in Academia: Foundation to Frontiers	16-06-2025 To 20-06-2025	Sathyabama Institute of Science and Technology	Chennai
2	Mrs.N.Gajalakshmi	Keynote speaker in Multi-Disciplinary Research studies and Education	22-05-2025 to 23-05-2025	SEGI-University	Malaysia
		Empowering Educators with Generative AI and DL	07-04-2025 To 09-04-2025	K.L.N College of Engineering, Madurai	Sivagangai
		Next-Gen Sustainability: Exploring Industry 5.0's Potential	08-12-2025 To 13-12-2025	AICTE Training and Learning Academy	India
		Defensive AI: Deep Learning in Cyber Security	18-08-2025 To 23-08-2025	AICTE Training and Learning Academy	India
		AI Enhanced Educational Technologies	22-12-2025	SreeSowdambika college of Engineering	Aruppukotai

3	Mrs.S.Nithya	Generative AI & Foundation Modules: Beyond Traditional Deep Learning	19-02-2026	Bharath Niketan Engineering College	Theni
		Quantum Computing & Advanced Technologies-Session Speaker	15-11-2025	ICASET	Delhi
		Secure and Explainable Generative AI for Medical IoT Data Analytics	25-08-2025 To 30-08-2025	AICTE Training and Learning Academy	India
4	Dr.P.Praveen Kumar	Smart Data Handling	29-09-2025	Vivekananda College	Virudhunagar
		Emerging Trends in Data Science and Cloud Computing	24-02-2025 to 25-02-2025	St.Thomas College	Thrissur
		Applications Of Large Language Models(LLMS) and Retrieval Augmented Generation(RAG)	28-10-2025	Kongunadu College Of Engineering and Technology	Trichy
5	Ms. Rajalakshmi. K	Bridging Circuits and Intelligence: Why ECE needs AI for the Future	13-10-2025	Solamalai College of Engineering and Technology	Madurai

## Faculty ACTED as a Resource person

S.No	Name of the faculty	Name of the Programme	Organizing Institution	Date
1	Mrs.Nithya. S	Quantum Computing & amp; Advanced Technologies-Session Speaker	ICASET	15-11-2025
2	Ms. Rajalakshmi. K	Bridging Circuits and Intelligence: Why ECE needs AI for the Future	Solamalai College of Engineering and Technology	13-10-2025

# FACULTY ACHIEVEMENTS RESEARCH DATA

## Journal Publications by Faculty members

S.NO	Name of the faculty with Co-Authors	Title of the Paper	Title of the Journal	Vol. No., Issue No., Page No., Month & Year
1	Dr.R.Aghila -Prof/ADS Dr.S.Rathnamala,Dr.Aghila Rajagopal,M.Arunachalam,V. Dhanasekaran	GI Bleeding in WCE Images Using E-ORB and ME-Deep CAPSNET	International Journal of Environmental Science	Vol.11 No.7s,2025
2	Dr.S. Balaji Dr.S. Balaji,K. Perachi	IoT-driven smart grid monitoring with enhanced energy routing and advanced encryption techniques	Ain Shams Engineering Journal	103656
3	Mrs.K.Rajalakshmi Rajalakshmi K, Palanivel Rajan S	An Enhanced Measurement of Epicardial Fat Segmentation and Severity Classification using Modified U-Net and FOA-guided XGBoost	Measurement Science Review	93-99
4	Dr.P.Praveen Kumar Vakaimalar Elamaran, Ramya R, Anandh A, Praveen Kumar Prem Kamal, Deepa Priya V	An Enhanced Edge Preserving Technique for Multifocus Image Fusion	Journal of Theoretical and Applied Information Technology	9006 -9017

# MEMBERSHIP IN PROFESSIONAL BODIES

S.NO	Name of the faculty member	Name of the Professional Society /Body at National and International Level	Name of the Grade/ Level/Position	Month & Year
1	Dr.R.Aghila –Prof	Institute for Educational Research and Publication	Professional Member-1606379	17th July 2025
2	Dr.P.Praveen Kumar-ASP	Indian Society for Technical Education	Life Member-LM59518	July 2025
3	Mrs.N.Gajalakshmi-AP	Institute for Educational Research and Publication	Professional Member-45112553	July 2025
4	Mr.K.Muthulakshmi-AP	Indian Society for Technical Education	Life Member-LM80118	16th August 2025
5	Mrs.S.Nithya	Institute for Educational Research and Publication	Professional Member-16195770	8th July 2025
6	Mrs.K.Rajalakshmi.-AP	Indian Society for Technical Education	Life Member-LM132166	September 2025

## Seed Money Project Proposal

S.NO	Name of the faculty mentor	Names of the students	Title of the Proposal	Proposed Budget
1	Dr.P.Praveen Kumar ASP/ADS, Mr.P.G.Siva Sharma Karthick AP/ADS	R.C.Vino , R.Jai Akash , K.Naga Harish Kumar	Evaluation and grading of text-based assessments by using AI model	Rs,5,00,000/-

## INAE CEE Mentorship Program

S.NO	PI name	Project title	Name of the Funding agency	Duration of the project	Proposed Budget
1	Mrs.S.Nithya	INAE Infosys Program	CEEE Mentorship Program	15-06-2025 To 27-06-2025	Rs.50,000/-

# EXTRA & CO-CURRICULAR ACTIVITIES

S.NO	YEAR	DATE	NAME OF THE STUDENTS	EVENT NAME	COLLEGE NAME	PRIZE
1		27/07/2025	S.H. RUJUTHA VEMANTHANI	SILAMBAM		OVERALL TROPHY
2		14/08/2025	R. VINESH	PAINTING EVENT		THIRD PRIZE
3		12/09/2025	PAVITHRAN S	LEADERS MAZE		FIRST PRIZE
4		12/09/2025	A. HARIVISHNU	PITCHER PERFECT		SECOND PRIZE
5		12/09/2025	V. BALA YOGHI	PITCHER PERFECT		SECOND PRIZE
6		14/09/2025	VIGNESH R	JAYCEE CARNIVAL		FIRST PRIZE
7	II ND YEAR	21/09/2025	SURJITH P	HOCKEY TOURNAMENT	KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY	THIRD PRIZE
8		25/09/2025	A. HARIVISHNU	PITCHER PERFECT		FIRST PRIZE
9		12/09/2025	K. RAM KUMAR K. MAHEETHARAN	LEADERS MAZE		SECOND PRIZE

# Placement Corner

S.NO	Student Name	Company Placed
1	JEFFREY BENSON.S	SOLARTIS, BYTS
2	BOOPALAN.G.D	DPA FASHION TECHNOLOGY PVT LTD
3	ASHIKA.T	FACE PREP
4	LISHIGA.T	FACE PREP
5	KAAVIYAA.G	FACE PREP
6	PREETHIGA.V	INFOSYS LTD
7	OORMILA.C	FACE PREP
8	SHARON.P	SOLARTIS
9	SYED NAZMUDEEN.S	FACE PREP
10	HARISHMI.R	FACE PREP
11	RASHA AFRIN ASHRAF ALI KHAN	LINAS & DINAS
12	NAGA HARISH KUMAR.K	KAAR TECHNOLOGY
13	VISHNU PRITHVI.C	D3 MINDS
14	MOHAMMAD AHSAN.J	A&T VIDEO NETWORK
15	SURIYA NANDHINI.M	TECHVOLT SOFTWARES, NEEYAMO
16	SOLAIPRAKASH.V	TECHVOLT SOFTWARES

# Editorial Team



## Chief Editor

Dr.R.AGHILA, HoD/ADS

## Magazine In-charge

Mrs.J.Mary Varsha, AP/ADS

## Student Member

Ms.Nithya Priya - 24UAD114 II ADS

Mr.Yogeshwaran - 24UAD021 II ADS