

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



NEWS LETTER

JULY 2024 & AUGUST 2024

Volume 3, Issue 1



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VISION OF THE INSTITUTION

To make this Institution the unique in its field of research and development activities in this part of the world.

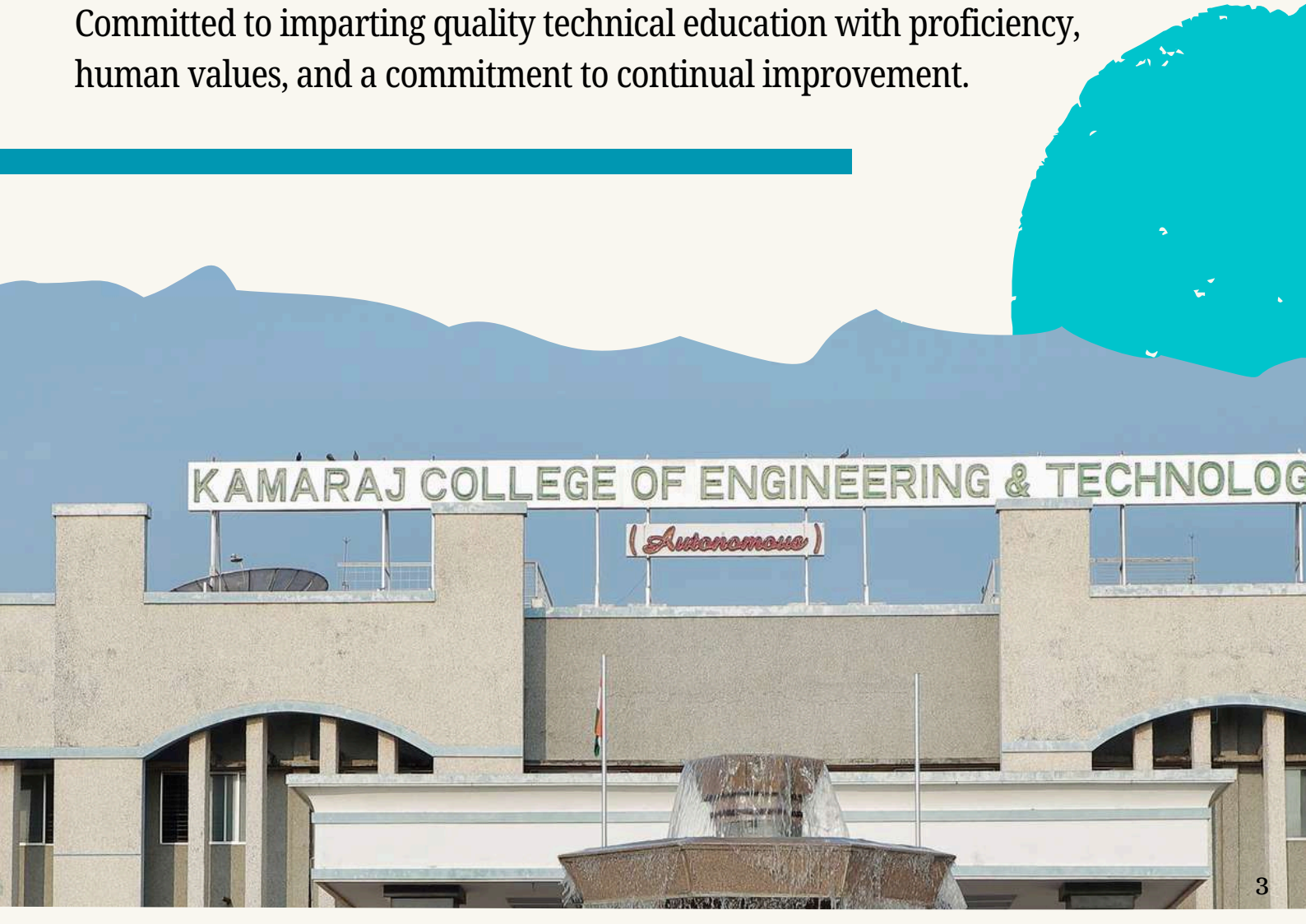


MISSION OF THE INSTITUTION

To impart highly innovative and technical knowledge to the urban and undeserved rural students through "Total Quality Education".

QUALITY POLICY

Committed to imparting quality technical education with proficiency, human values, and a commitment to continual improvement.



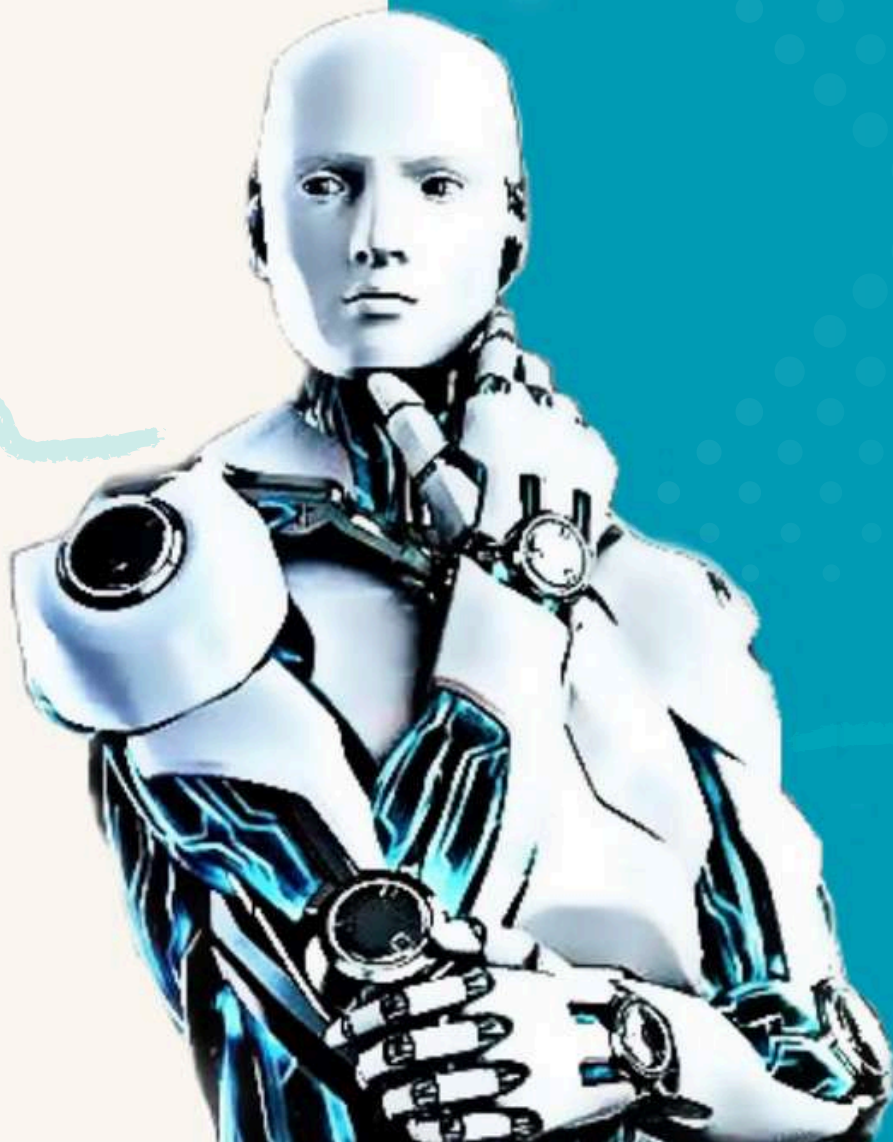
VISION & MISSION OF THE DEPARTMENT

VISION

To make the Department of Artificial Intelligence and Data Science the unique in its field of research and development activities in this part of the world.

Mission

To impart highly innovative and technical knowledge to the urban and underserved rural students 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** To have a successful career in technical / managerial roles in multi-disciplinary environment.
- PEO -3** To address evolving technical challenges and problems in the areas of computing.

PROGRAM SPECIFIC OUTCOME (PSOs)

- PSO -1 Professional Skills:** To apply learned skills to build optimized solutions pertaining to Data Processing, Artificial Intelligence and Machine Learning
- PSO -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 recognizing their limitations to solve complex engineering Problems.

PO -6

The engineer and society: 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.

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 a 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.

DEPARTMENT MONTHLY REPORT

MONTH : JULY 2024 - AUGUST 2024

EVENTS

ORGANIZED

ASSOCIATION DETAILS

S. N O	DATE	EVENT DETAILS	NAME OF THE RESOURCE PERSON	NO OF STUDENTS PARTICIPATED
1	30-08-2024	Inauguration of the Department Association	Er.Sadheesh Radhakrishnan, Vice President, Service Reliability Engineering, Planet Payments, London, UK	178 STUDENTS (II ,III & IV YEAR)
2	30-08-2024	Guest lecture on The AI Revolution - Opportunities , Challenges & Future	Er.Sadheesh Radhakrishnan, Vice President, Service Reliability Engineering, Planet Payments, London, Uk	178 STUDENTS (II ,III & IV YEAR)

INDIAN SOCIETY OF TECHNICAL EDUCATION

S. N O	DATE	EVENT DETAILS	NAME OF THE RESOURCE PERSON	NO OF STUDENTS PARTICIPATED
1	27-08-2024	Catalysts For Career Success: Seizing Key Opportunities	Mr.VIGNESHWARAN.R.K Trainee Software Engineer Relevantz Technology Services Virudhunagar	61

EVENTS ORGANIZED

COMPUTER SOCIETY OF INDIA

S.NO	DATE	EVENT DETAILS	NAME OF THE RESOURCE PERSON	NO OF STUDENTS PARTICIPATED
1	14.08.24	Resume Preparation: The Key to Unlocking your Dream Job (CSI)	R S. Dharshini , AI Programmer trainee, Research and Development Team, Novacis Digital - IITM Research Park, Chennai	59

VALUE ADDED COURSES

S.NO	DATE	NAME OF THE EVENT	NAME OF THE RESOURCE PERSON	NO OF STUDENTS PARTICIPATED
1	05-08-2024 to 09-08-2024	VAC Course - "Ethical Hacking Mastery: Defend and Protect"	Mr.Josan George, Security Analyst & Technical Trainer, Mr.Nandhan, SOC Analyst, HDLC Technologies, Chennai.	III Year ADS 28 students
2	05-08-2024 to 09-08-2024	VAC Course: Django Magic Building Elegant web solutions	Mr.Mukesh Sai Kumar, Security Researcher & Technical Trainer, HDLC Technologies, Chennai	III Year ADS 31 students

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.P.Praveen Kumar, ASP/ADS along with R. Ramya, A. Anandh, and Vakaimalar Elamaran	Deep Learning-Based Algorithm for Prediction of Heart Disease using Electrocardiogram	INFOCOMP Journal of Computer Science (UGC journal)	July 2024
2	D Roja Ramani, R Suganya, Senthil Pandi S, Aghila Rajagopal, B Ben Sujitha, P Chinnnasamy	Explore the Cutting-edge Intrusion Detection System for Smart Grids Based on Radial Basis Function Networks	Computer Integrated Manufacturing Systems	Vol 30, No.8,Page No 81-91,

Book /Chapter Published by Faculty members

S.NO	Name of the faculty with Co-Authors	Title of the Paper	Title of the Book	Volume No. & Page No.
1	Aghila Rajagopal Saranya Priyadharshini P.Mahalakshmi S.Arul Jothi	Fundamentals of Data Science and Analytics	The Charulatha Publications	ISBN: 978-81-973697-9-7

PATENT & COPYRIGHT PUBLISHED /FILED

S.NO	Name of the faculty member	Details of the Award	Awarded by	Month & Year
1	Dr.P.Praveen Kumar, ASP/ADS	Patent published " NEXT-GEN CAMPUS COMMUTES TRANSFORMING COLLEGE TRANSPORTATION WITH REAL-TIME BUS TRACKING TECHNOLOGY "	Intellectual Property, India	17th July 2024
2	Mrs.K.Indumathi, AP/ADS Mrs.R.Indhuja,AP/ADS	Published a patent on the title " AUTOMATION SYSTEM FOR SOLID WASTE SEGREGATION USING DEEP LEARNING	Intellectual Property, India	July 2024
3	Mrs.K.Indumathi,AP/ADS Mrs.R.Indhuja,AP/ADS	Filed the copyright on the title " Image analytics in Computer vision"	Copyrights, India	July 2024
4	Mrs.K.Indumathi,AP/ADS, Dr.R.Aghila,Prof/ADS Mrs.R.R.Indhuja,AP/ADS, Dr.P.Praveen Kumar,ASP/ADS	Filed the Copyright on the Title of " AI Based Head Counting System"	Copyrights, India	16th August 2024
5	Mrs.S.Nithya ,AP/ADS	Filed the Copyright on the Title of "Quantum Key Distribution: Shaping the Future of Secure Communication"	Copyrights, India	8th July 2024

FDP Attended by Faculty members

S.NO	Name of the faculty member	Name of the Programme	Date	Organizing Institution	Participated/ Presented
1	Mrs.V.Sangeetha, AP/ADS	FDP on "Generative AI	01.07.2024 to 06.07.2024	Thiagarajar College of Engineering	Participated
		UHV – I	17.07.2024 – 21.07.2024	AICTE	Participated
2	Mrs.N.Gajalakshmi, AP/ADS	Five day Faculty Development Programme on "Web Development using DJANGO"	05.08.2024	Kamaraj College of Engineering and Technology	Participated
		Five day Faculty Development Programme in "Application of AL-ML in Emerging Fields"	29.07.2024 to 02.08.2024	Guru Tegh Bahadur 4th Centenary Engineering College.	Participated
		5-day Online FDP on the theme "Inculcating Universal Human Values in Technical Education"	05.08.2024 -09.08.2024	All India Council for Technical Education	Participated
		Three-Day Faculty Development Programme(FDP) on "AWS Cloud Practioner"	12.08.2024 To 14.08.2024	Kamaraj College of Engineering and Technology	Participated

3	Mrs.S.Nithya , AP/ADS	Three-Day Faculty Development Programme(FDP) on “AWS Cloud Practitioner”	12.08.2024 To 14.08.2024	Kamaraj College of Engineering and Technology	Participated
4	Dr.P.Praveen Kumar , ASP/ADS	UHV – II	19.08.2024 – 24.08.2024	AICTE	Participated
5	A.Nagalakshmi, AP/ADS	Five Days Faculty Development program on Artificial Intelligence	20.08.2024 To 24.08.2024	AICTE ATAL Techsaksham	Participated

Webinar/Workshop Attended by Faculty Members

S.NO	Name of the faculty	Name of the Programme	Date	Organizing Institution	Participated/ Presented
1	Mrs.V.Sangeetha, AP/ADS	Attended Webinar on “Identifying Influential Nodes in Complex Networks Using Hypergraph Methods and Its Applications”	29.08.2024	SRM University	Participated
2	Mrs.R.Indhuja, AP/ADS	Attended Webinar on “Identifying Influential Nodes in Complex Networks Using Hypergraph Methods and Its Applications”	29.08.2024	SRM University	Participated

Membership in Professional Bodies

S.NO	Name of the faculty	Professional Body/Society	Category/Grade of Membership	Membership No., if any
1	Mrs.N.Gaja Lakshmi, AP/ADS	ISTE	Lifetime	LM81540
2	Mrs.S.Nithya , AP/ADS	ISTE	Applied	-

Guest Lecture Delivered/Acted as Resource Persons in Symposium/ Seminar/ Conference /FDP/Workshop by Faculty members

S.NO	Name of the faculty	Name of the Programme	Date	Organizing Institution	Sponsored by	Resource Person/Chair Person/ Guest Speaker, etc
1	Mrs.K.Indumathi, AP/ADS	Computer Vision using OpenCV	25.07.2024	SBK College, Aruppukottai		Resource Person
2	Dr.P.Praveen Kumar, ASP/ADS	IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems 2024 (IEEE SPICES 2024)		IIT Kottayam	IEEE Kerela Section	Reviewer
		SGADS-Block Chain Based smart Grid security Sharing		Springer Journal World Wide Web		Reviewer

STUDENTS ACHIEVEMENTS



TNSCST Project Proposal Submitted

S.NO	TNSCST Reference Number	Name of the faculty mentor	Names of the students	Title of the Proposal	Proposed Budget
1	CSE-1014	Mrs.S.Nithya ,AP/ADS	Mohamed Fasidh.M Tarun.B	Automated Resume Screening System	10,000
2	CSE-1042	Mrs.S.Nithya ,AP/ADS	Makima Satthi.N Sivaranjani.R Adlin Wiseley.I	Mental Health and well-being surveillance among children	9,000
3	CSE-1042	Mrs.S.Nithya,AP/ADS	Akash.R Vaedanth.B Madeshwaran.P	Emotion Detection through Voice	9,000
4	CSE- 223	Mrs.K.Indumathi ,AP/ADS	Ahamed Sahil A Kishore Kumar L Siva Saarathi S	IoT-Based SMART FOOD POISONING DETECTOR FOR CONSUMER SAFETY	16,528
5	CSE- 220	Mrs.K.Indumathi ,AP/ADS	SRINITHI S MARIUMBEI S JAYASUDHA S	Eco – Friendly Techniques for Capturing Fog Water Using IoT	13,575
6	CSE 567	Dr R Aghila,Prof/ADS	Hema T Sivani R shweathy aarthy R	Revolutionizing Education with AR and VR	9,500
7	CSE-1237	Mrs.N.Gajalakshmi,AP/ADS	Kathirohn.A.M Nhiranjan.M.K	AI-Driven Crop Disease Prediction and Management System	9,500
8	CSE-1791	Mrs.N.Gajalakshmi,AP/ADS	Raja Lakshmi.K Nuttrenai.V Andalpriya.C	FITAI:PERSONALIZED DIET AND FITNESS PLANNER WITH 3D WORKOUT	10,000
9	CSE-725	Mrs.V.Sangeetha ,AP/ADS	Deepika Shri Sri shivanuja	Solution for detection of Face swap based fake videos	10,000
10	CSE-1587	Mr.P.G.Siva Sharma Karthick , AP/ADS	Karuppasamy V Raampranav R Manikkavasakar T	Street Light Monitoring and Fault Detection System	10,000

Seed Money Project Proposal

S.NO	Name of the faculty mentor	Names of the students	Title of the Proposal	Proposed Budget
1	Dr.R.Aghila, Prof/HoD-ADS, Mrs.V.Sangeetha AP/ADS, Mrs.N.Gaja Lakshmi,AP/ADS	Jano Kodesh, Solai prakash, Haihara sundaram, Rafiq Ahamed, Vishnu prithvi, Deepanrajacob, Suriya nandhini, sumithra and Medhana	Enhanced Campus Security through Unified Face Identification: Leveraging Hybrid Datasets for Improved Accuracy	Rs,5,00,000/-
2	Dr.R.Aghila, Prof/HoD-ADS, Mrs.S.Nithya,AP/ADS Mrs.N.Gaja Lakshmi ,AP/ADS	Ponmani Boopathy.P, Ganesa Moorthy.M, Mithun kumar G.S Lakshman Hari.C, Kanagarincy, Vijay Chidambaranathan.A, Gokulavasan J, Dharani Prasanna.G, Asmiya.T , Sumaiya.H	Harnessing FarmFlux and Drip Irrigation	Rs,4,94,051
3	Dr.P.Praveen Kumar ASP/ADS, Mr.P.G.Siva Sharma Karthick AP/ADS	B.Tarun ,S.Santhosh Kumar. S.Srinithi ,N.Niveditha I.Fathima ,J.Jeya Sowmiya R.C.Vino ,T.Lishiga R.Harishmi ,R.Jai Akash K.Naga Harish Kumar	Evaluation and grading of text-based assessments by using AI model	Rs 5,00,000

SIH Project Proposal

S.NO	SIH Reference Number	Name of the faculty mentor	Title of the Proposal	Proposed Budget
1	949	Mrs.S.Nithya ,AP/ADS	Ponmani Boopathy.P, Mithun kumar G.S, Lakshman Hari.C, Dharani Prasanna.G, Asmiya.T , Sumaiya.H	Agribot- Autonomous Robot for Drip Irrigation

EXTRA & CO-CURRICULAR ACTIVITIES

S.NO	YEAR	DATE	NAME OF THE STUDENTS	EVENT NAME	COLLEGE NAME	PRIZE
1	II YEAR	12.7.2024	MANASHADEVI.A	DRAWING	KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY	THIRD PRIZE
2		18.07.2024	DIVYADHARSHINI.M	MEHANDI		SECOND PRIZE
3		22.07.2024	D. NAVEENA	PHOTOGRAPHY		THIRD PRIZE
4		24.07.2024	M.S.GOPIKA & S.Divya lakshmi	RANGOLI		SECOND PRIZE
5		20.07.2024	M.S.GOPIKA & V.geethamani	ART FROM WASTE		FIRST PRIZE
6		24.07.2024	K.SREE DHARSHINI, KEERTHANA J	RANGOLI		THIRD PRIZE
7		18.07.2024	S.DIVYALAKSHMI, K.AKSHAYA	MEHANDI		FIRST PRIZE
8		18.07.2024	AGALYA.K, DIVYADHARSHINI	MEHANDI		SECOND PRIZE
9		3.8.2024	SAKTHI SINGHA MANI.R , PRAVEEN HARISH.K.G , HARIHARAN.V , GOKULA , VIGNESH.R	WESTERN DANCE		FIRST PRIZE
10		30.08.2024	V.K.KARTHIKESWARI, V.MADHU NISHA , B.HARISH GOWTHAM	INTERNAL HACKATHON		FIRST PRIZE
11		7.8.2024	K.SREE DHARSHINI , J.KEERTHANA	DUMB C		FIRST PRIZE
12		6.8.2024	SUBIKSHA S , AGALYA	THINK OUT OF THE BOX		THIRD PRIZE
13		10.7.2024	C.ASHWINI	ZONAL VOLLEYBALL TOURNAMENT	AAA COLLEGE	THIRD PRIZE

EXTRA & CO-CURRICULAR ACTIVITIES

S.NO	YEAR	DATE	NAME OF THE STUDENTS	EVENT NAME	COLLEGE NAME	PRIZE
1	III YEAR	15.07.2024	R.Jai Akash	Essay writing	KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY	SECOND PRIZE
2		15.07.2024	K.S.Akshaya	Essay writing		THIRD PRIZE
3		3.8.2024	AKASH.R , SYED NAZMUDEEN.S , HAREN GURU.V , Rohith.T , PARANI DHARSHAN.B , GOKULAVASAN.J ,Geethan.S, VIJAY CHIDAMBARANATHAN , MOHAMMAD AHSAN.J	SKIT		FIRST PRIZE
4		3.8.2024	R.Jai Akash, BOOPALAN.G.D	WESTERN DANCE		FIRST PRIZE
5		3/8/2024	SAM SALVIUS.S	SINGING		FIRST PRIZE
6		3.8.2024	JEYA REEMASRI A.S, AKSHAYAK.S , OORMILA.C	FOLKDANCE		THIRD PRIZE
7		3.8.2024	A Rasha Afrin , Ishwarya Lakshmi M	Hairdo		THIRD PRIZE
8		3.8.2024	SURIYA NANDHINI M	Creative writing english		SECOND PRIZE
9		30.08.2024	AKASH.R , HAREN GURU.V , SYED NAZMUDEEN S	SHORT FILM	MADURAI DIGITAL AWARDS ,MADURAI	FIRST PRIZE

S.NO	YEAR	DATE	NAME OF THE STUDENTS	EVENT NAME	COLLEGE NAME	PRIZE
1	IV YEAR	19.8.2024	Ganesa Moorthy M	Dance	Mepco Schlenk Engineering College	THIRD PRIZE
2		20.8.2024	Sivaprakash S , Yuva Sri R , Harini R , Jeyadheesh N	Hackathon	KCG College of Technology, Chennai	2000 cash prize

Editorial Team



Chief Editor

Dr.R.AGHILA, HoD/ADS

Newsletter In-charge

MS.S.Nithya, AP/ADS

Student Member

Ms.V.Nuttrenai,IV ADS

Mr.A.M.Kathiron,IV ADS

Mr.R.AKASH - IV ADS

Mr.A.Syed Nazumudeen -IV ADS

Mr.V.Hariharan-III ADS

Mr.V.R.S.Selva Kumar-III ADS