



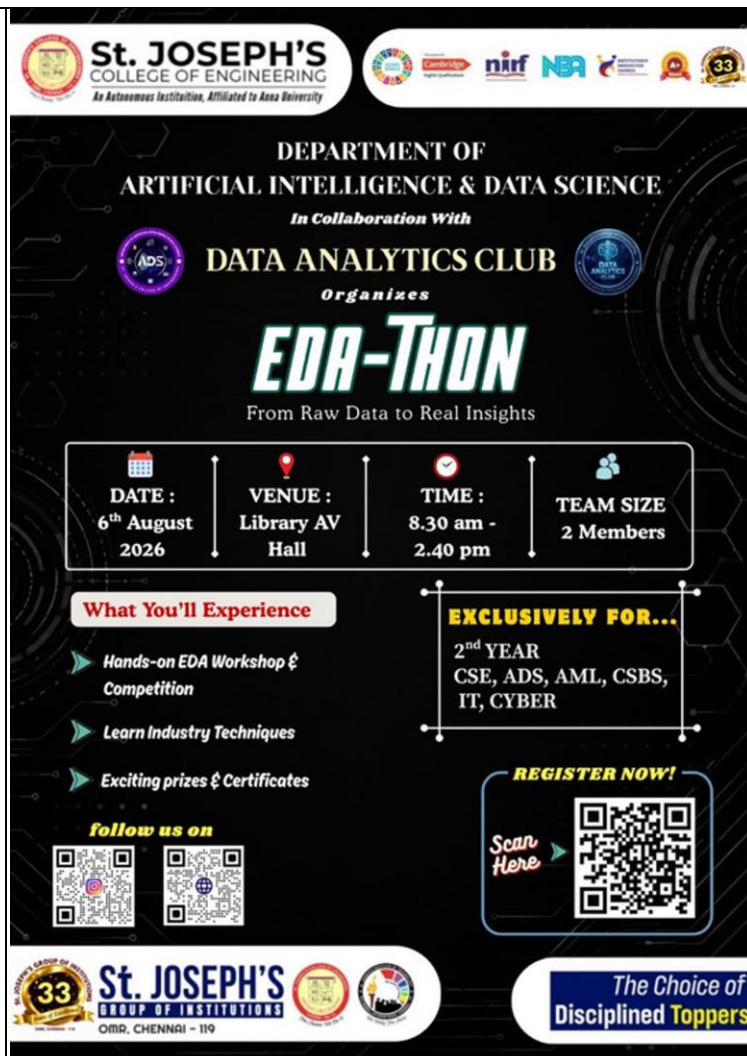
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St. JOSEPH'S COLLEGE OF ENGINEERING
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St. Joseph's Group of Institutions
 OMR, CHENNAI - 119



AUGUST 2026

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

S.No.	Title of the Events and Photographs	Details of the Event
1.	<p>FDP/WORKSHOP/CONFERENCE/HACKATHON (ATTENDED /ORGANIZED)</p> 	<p>Abirami Prabahar, III Year ADS, along with Siva Rama Guru Athithan, IV Year IT, and Surya Prasanth T, III Year IT, secured the Second Prize in NEUROBOTS'2026 – 24 Hours Software Hackathon, organized by IES College of Engineering, Chittilappilly, Thrissur, held from 7th to 8th August 2026. The team, “NUMNIX,” received a cash prize of ₹10,000 for their outstanding performance and innovative solution. Their achievement reflects their strong technical skills, teamwork, creativity, and dedication in developing an effective solution within the challenging 24-hour hackathon. The team was mentored by Ms. Aswini E (ADS), whose guidance and support contributed significantly to their success.</p>



St. JOSEPH'S
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An Autonomous Institution, Affiliated to Anna University

DEPARTMENT OF
ARTIFICIAL INTELLIGENCE & DATA SCIENCE
In Collaboration With
DATA ANALYTICS CLUB
Organizes
EDA-Thon
From Raw Data to Real Insights

DATE : 6 th August 2026	VENUE : Library AV Hall	TIME : 8.30 am - 2.40 pm	TEAM SIZE 2 Members
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What You'll Experience

- Hands-on EDA Workshop & Competition
- Learn Industry Techniques
- Exciting prizes & Certificates

EXCLUSIVELY FOR...
2nd YEAR
CSE, ADS, AML, CSBS,
IT, CYBER

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The Choice of
Disciplined Toppers

The Department of Artificial Intelligence and Data Science, in collaboration with the Data Analytics Club, successfully organized EDA-Thon 2026 – From Raw Data to Real Insights on 6th August 2026 at the Library AV Hall, St. Joseph's College of Engineering. The event featured a hands-on Exploratory Data Analysis (EDA) workshop followed by a competition exclusively for second-year students from CSE, ADS, AIML, CSBS, IT, and Cyber Security departments. Around 240 students enthusiastically participated in the event, gaining valuable experience in data preprocessing, visualization, analytical thinking, teamwork, and problem-solving. Team Unix Echo, comprising Naresh Kumar N and Roshan Kumar S from ADS, secured the Winner position, while Team RDX, comprising Kesin S and Inba Kumana U from ADS, secured the First Runner-Up position. Team Alpha Coders, comprising Haresh B and Hari Vignesh G N from IT, secured the Second Runner-Up position.

STUDENT ACHIEVEMENTS/COMPETITION ATTENDED BY STUDENTS

2.



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DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE

HEARTIEST CONGRATULATIONS!

OUR PROUD ACHEIVER



S SANJAY KUMAR DUBEDI
IInd YEAR ADS

SUCCESSFULLY SELECTED AS
**CAMPUS AMBASSADOR
 MARKETING INTERN**

at



CORIZO
Empowering Tomorrow's Leaders

PAYOUT SCHEDULE

Fortnightly payouts on the 5th and 20th of every month.

INCENTIVES

Performance based incentives and handsome stipend up to INR 15k - 20k

KEY HIGHLIGHTS

Task Based Internship and certification on successful Completion



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The Choice of Disciplined Toppers

S. Sanjay Kumar Dubedi, II Year ADS, has been successfully selected as a Campus Ambassador Marketing Intern at Corizo. As part of this internship, he will be involved in a task-based internship designed to provide practical exposure to marketing and professional skills, with certification upon successful completion. The internship offers fortnightly payouts on the 5th and 20th of every month, along with performance-based incentives and a stipend of up to ₹15,000–₹20,000.



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**DEPARTMENT OF ARTIFICIAL INTELLIGENCE
&
DATA SCIENCE**

**HEARTIEST
CONGRATULATIONS!**

OUR PROUD ACHEIVER



DEVESHWAR E
IInd YEAR ADS

**SUCCESSFULLY SELECTED AS
CAMPUS AMBASSADOR
TATA IMAGINATION
CHALLENGE 2026**

REWARD OPPORTUNITY
 Chance to win vouchers
 worth 2 Lakhs

CAMPUS IMPACT

- Represent TIC 2026
- Promote the challenge
- Encourage peer participation

WHAT'S NEXT

- Use your unique referral link
- Follow TAS LinkedIn & Youtube
- Watch for tasks and rewards

TAS OPPORTUNITY

- 10 winners: one-time PPI
- Some finalists may get Pre-Placement Opportunity



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*The Choice of
Disciplined Toppers*

Deveshwar E, IV Year ADS, has been successfully selected as a Campus Ambassador for the Tata Imagination Challenge 2026. As a Campus Ambassador, he will represent TIC 2026 at the institution, promote the challenge, and encourage fellow students to participate. This opportunity also provides him with a chance to engage with the Tata Imagination Challenge community through a unique referral link and participate in upcoming tasks and rewards. Selected participants have the opportunity to win vouchers worth ₹2 lakhs, while the 10 winners will receive a one-time Pre-Placement Interview (PPI) opportunity, with some finalists also having the possibility of receiving a pre-placement opportunity.

3. JOURNAL PUBLICATIONS(ONLY PUBLISHED) DETAILS



FHOO: feature weighting and PCNN for big data classification using MapReduce framework medical data

G. Keerthana¹ · L. Sherly Puspha Annabel²

Received: 17 June 2025 / Revised: 23 March 2026 / Accepted: 12 June 2026
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Abstract

Big data classification categorizes unstructured or structured data depending on file contents, types, and other metadata. The issues faced by big data classification are poor generalization, inaccurate predictions, security vulnerabilities, and a lack of big data scientists and data specialists. Hence, an effective fractional hunter osprey optimization-based parallel convolutional neural network (FHOO_PCNN) is proposed for big data classification. The process begins with collecting the input big data and partitioning it using deep embedded clustering (DEC) for efficient structuring. Then, big data classification is implemented using the MapReduce framework, involving mapper and reducer stages. Data normalization using logarithmic scaling is executed in the mapper stage to standardize the dataset. Then, normalized data is passed to feature weighting utilizing the proposed hunter osprey optimization (HOO), which incorporates the honey badger algorithm (HBA) and osprey optimization algorithm (OOA). The reducer phase merges the weighted features, after which classification is achieved using a PCNN optimized through FHOO, formulated by integrating fractional calculus and HOO. Moreover, FHOO_PCNN yields 91.765% accuracy, 94.765% true positive rate (TPR), 93.368% F1-score, and 90.766% true negative rate (TNR).

Dr. L. Sherly Pushpa Annabel, Professor, Department of Artificial Intelligence and Data Science, St. Joseph's College of Engineering, has co-authored a research paper titled "FHOO: Feature Weighting and PCNN for Big Data Classification Using MapReduce Framework Medical Data." The paper is published in Knowledge and Information Systems, Springer, Volume 68, Article 235 (2026), with DOI 10.1007/s10115-026-02839-6. The journal is indexed in both Web of Science Core Collection (SCIE) and Scopus, making this publication a significant contribution to high-quality indexed research. The research proposes an FHOO-PCNN framework for big data classification using the MapReduce framework and demonstrates strong performance in medical big data classification.

STAFF CONFERENCE PRESENTATION and PATENT PUBLISHED

Conferences > 2026 International Conference...

Weighted RSSI -Based Distance Estimation of node in LoRa Tracking Systems

Publisher: IEEE

Cite This

PDF

[Sambathkumar. R](#); [Baghia Laxmi. R](#); [M. Kamaeshwaran](#); [R. Sofia](#) All Authors

14

Full

Text Views



Abstract

Abstract:

Document
Sections

I. Introduction



Weighted RSSI-

Indoor localization of IoT devices with LoRabased system using ten anchor nodes and one mobile tracker deployed in a 20 m × 15 m laboratory environment. The tracker periodically transmits packets, and anchors record RSSI (dBm) and SNR (dB) measurements. A calibrated log-distance route loss model with log-normal shadowing is used to estimate distance. Adaptive weights are applied to RSSI observations using a Weighted RSSI- Based Distance Estimation (WREDE) approach, which maintains

Dr. Baghia Laxmi R. has achieved another significant academic milestone with her conference paper titled “Weighted RSSI-Based Distance Estimation of Node in LoRa Tracking Systems” being successfully indexed in Scopus. The paper was presented at the 2026 International Conference on System, Computation, Automation and Networking (ICSCAN) and published by IEEE. The research focuses on weighted RSSI-based distance estimation techniques for nodes in LoRa tracking systems.

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2026
(21) Application No.202641082546 A
(43) Publication Date : 10/07/2026

(54) Title of the invention : INTEGRATED ARTIFICIAL INTELLIGENCE AND NANOPARTICLE PLATFORM FOR PERSONALIZED BREAST CANCER TREATMENT

(51) International classification	G16H 50/20 G06N 20/00 G16H 10/60 G16H 50/70 G16H 20/10	(71) Name of Applicant : 1) Arocckia Raj A Address of Applicant : Assistant Professor, Department of Computer Science and Engineering (Data Science), Madanapalle Institute of Technology & Science (MTS), Deemed to be University, Madanapalle, Annamaya, Andhra Pradesh, 517325, India 2) Dr. N. Vijayalakshmi 3) Sivaprabha T 4) B. Jyothi 5) Dr. G. Anandhakumari 6) Dr. Neha Khanam 7) Mr. Rathod Shubham Shrikant 8) P. Subhash Chandra Bose 9) Dr. P. Srikanth Reddy 10) Vishwanath Patil 11) Dr. I. D. Soubache 12) VishnuPriya. K
(31) Priority Document No	: NA	(72) Name of Inventor :
(32) Priority Date	: NA	1) Arocckia Raj A
(33) Name of priority country	: NA	2) Dr. N. Vijayalakshmi
(36) International Application No	:	3) Sivaprabha T
Filing Date	: 01/01/1900	4) B. Jyothi
(87) International Publication No	: NA	5) Dr. G. Anandhakumari
(61) Patent of Addition to Application Number	: NA	6) Dr. Neha Khanam
Filing Date	: NA	7) Mr. Rathod Shubham Shrikant
(62) Division to Application Number	: NA	8) P. Subhash Chandra Bose
Filing Date	: NA	9) Dr. P. Srikanth Reddy
		10) Vishwanath Patil
		11) Dr. I. D. Soubache
		12) VishnuPriya. K

(S7) Abstract :
INTEGRATED ARTIFICIAL INTELLIGENCE AND NANOPARTICLE PLATFORM FOR PERSONALIZED BREAST CANCER TREATMENT This invention presents an Integrated Artificial Intelligence and Nanoparticle Platform for Personalised Breast Cancer Treatment, integrating artificial intelligence (AI), machine learning, nanotechnology, and precision medicine to improve the diagnosis, treatment, and monitoring of breast cancer. The platform gathers multidimensional patient data, encompassing medical images, histopathology reports, genomic information, biomarker profiles, laboratory results, and electronic health records, and analyses the data with sophisticated AI algorithms to identify breast cancer subtypes, predict cancer subtypes, forecast cancer progression, and assess individual treatment responses. The AI-generated analysis recommends personalized treatment strategies and optimizes nanoparticle-based targeted drug delivery by selecting appropriate nanoparticle formulations, drug dosages, particle sizes, surface functionalization, and controlled release properties for the efficient delivery of anticancer drugs directly to tumour cells. The invention includes real time patient monitoring via wearable devices, follow-up imaging, laboratory tests, and clinical evaluations, facilitating ongoing assessment of treatment efficacy and the dynamic adjustment of therapy strategies through adaptive learning models. A secure cloud architecture and privacy decision support dashboard offer explainable AI recommendations, predictive analytics, and thorough patient care while maintaining data privacy and regulatory compliance. The invention enhances treatment precision, minimizes systemic toxicity and adverse effects, improves patient outcomes, facilitates personalised medicine, and contributes to better survival rates and quality of life for breast cancer patients by integrating artificial clinical decision support with targeted nanoparticle drug delivery. FIG.1

no. of Pages : 13 , **no. of Claims : 10**

Ms. Sivaprabha T. has published a patent titled “Integrated Artificial Intelligence and Nanoparticle Platform for Personalized Breast Cancer Treatment.” The patent was published by the Indian Patent Office under Application No. 202641082546 A, with the publication dated 10 July 2026. The invention integrates Artificial Intelligence (AI), machine learning, nanotechnology, and precision medicine to support personalized breast cancer diagnosis, treatment, monitoring, and drug delivery. The Department of Artificial Intelligence and Data Science extends its heartfelt congratulations to Ms. Sivaprabha T. on this achievement and

(12) PATENT APPLICATION PUBLICATION		(21) Application No.202631086392 A
(19) INDIA		
(22) Date of filing of Application :15/07/2026		(43) Publication Date : 31/07/2026
(54) Title of the invention : AI-DRIVEN CONTEXT-AWARE INTELLIGENT DATA PROCESSING AND DECISION SUPPORT SYSTEM		
		(71)Name of Applicant :
		1)Dr. Nita Nath
		Address of Applicant :Associate Professor, Royal School of Law and Administration, Royal Global University, Gawahati, Kamrup, Assam, 781035, India, Assam India
		2)Dr. Parag Rastogi
		3)Dr. Rameet Saha
		4)Abhijeet Gajanan Chimankar
		5)Ms. S. Kasthuri
		6)G. Kavitha
		7)Vishwanil Suman
		8)M. Sarthish Kumar
		9)Bandaru Satya Lakshmi
		10)Dr. Gopaldas H Waghmare
		11)Mr. J. Senthil Kumar
		12)Dr. L. Karthick
		(72)Name of Inventor :
		1)Dr. Nita Nath
		2)Dr. Parag Rastogi
		3)Dr. Rameet Saha
		4)Abhijeet Gajanan Chimankar
		5)Ms. S. Kasthuri
		6)G. Kavitha
		7)Vishwanil Suman
		8)M. Sarthish Kumar
		9)Bandaru Satya Lakshmi
		10)Dr. Gopaldas H Waghmare
		11)Mr. J. Senthil Kumar
		12)Dr. L. Karthick
(57) Abstract :		
The present invention discloses a method for the development of an AI-enabled context-aware intelligent system for data processing and decision making that will be able to extract valuable insights from heterogeneous data to help make decisions in real time. This system will combine multichannel data collection, context-awareness, AI-based analytics, and adaptive decision-making capabilities in one computerized framework. Machine learning and deep learning algorithms are going to constantly analyze both structured and unstructured data, whereas a context inference engine is going to identify contextual, temporal, operational, and personal factors to increase the accuracy of the analysis. A dynamic knowledge base and a feedback learning algorithm are going to constantly update the algorithms for more accurate and personalized recommendations. Other features include anomaly detection, predictive analytics, explainable AI, and automatic alerts for greater transparency and efficiency. The system will provide context-aware, data-driven recommendations in real time, thus increasing the accuracy and efficiency of decision making. FIG.1		
No. of Pages : 13 No. of Claims : 6		

Smart Cities.” The invention presents an IoT-enabled predictive machine learning model designed to automate and optimize intelligent streetlight systems in smart cities. It integrates IoT, machine learning, edge computing, cloud computing, and wireless communication technologies to enable efficient and intelligent streetlight management. The system uses predictive analytics and machine learning algorithms to monitor traffic, meteorological factors, and electrical parameters, supporting automated streetlight control, fault detection, energy optimization, and predictive maintenance. ting, improved customer engagement, and data-driven sales optimization.

(12) PATENT APPLICATION PUBLICATION	(21) Application No.202641086816 A
(19) INDIA	
(22) Date of filing of Application :15/07/2026	(83) Publication Date : 24/07/2026
(54) Title of the invention : MACHINE LEARNING-BASED CONTEXT-AWARE CONSUMER PURCHASE INTENTION PREDICTION AND SALES OPTIMIZATION SYSTEM	
(51) International classification G06Q 30/02 G06Q 30/00 G06Q 30/06 G06F 17/30 G06Q 20/12	<p>(71)Name of Applicant :</p> <p>1)Dr. M. Jagannathan Address of Applicant :Associate Professor, Department of CSE (Cyber Security), Madanapalle Institute of Technology and Science (Deemed to be University), Andhra Pradesh, India Andhra Pradesh India</p> <p>2)G Santhoshi 3)Dr. Vijayalakshmi J 4)Dr. Shailendra Yadav 5)Dr. Sandip Subrao Kanase 6)Dr. A. Jaferadhiq 7)Dr. Pendurthy Anthony Sunny Dayal 8)Marydayana A 9)Dr. Joydeep Banerjee 10)Mr. Ajay Kumar Baghel 11)S. Swarnalatha 12)Goli Kiranmai</p> <p>(72)Name of Inventor :</p> <p>1)Dr. M. Jagannathan 2)G Santhoshi 3)Dr. Vijayalakshmi J 4)Dr. Shailendra Yadav 5)Dr. Sandip Subrao Kanase 6)Dr. A. Jaferadhiq 7)Dr. Pendurthy Anthony Sunny Dayal 8)Marydayana A 9)Dr. Joydeep Banerjee 10)Mr. Ajay Kumar Baghel 11)S. Swarnalatha 12)Goli Kiranmai</p>
(31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date	-NA -NA -NA : :(01/01/1900) : NA -NA -NA -NA -NA
<p>(57) Abstract :</p> <p>The unprecedented boom of e-commerce, m-commerce, and digital market spaces has altered the manner in which consumers learn about products and decide to make purchases. Every business now has huge customer data from websites, mobile applications, loyalty programs & digital payment systems to analyze the shopping behavior. Though many consumer analytics and recommendation systems exist, most current solutions are primarily built on purchase history, demographic data or only direct browsing statistics. Such methods often ignore the bigger picture in which customers make decisions, including browsing patterns, product comparisons, levels of engagement, session behavior and devices used to access a site, which can change customer behaviours. Consequently, enterprises might get limited visibility on data hence may predict poor purchase decisions, unsuccessful marketing campaigns, lost sales and ineffective inventory planning. How other systems require manual updates over and over again to stay relevant as consumers' behaviour move over time. The present invention relates to a Machine Learning-Based Context-Aware Consumer Purchase Intention Prediction and Sales Optimization System that integrates intelligent data collection, behavioural feature engineering, machine learning, and business decision support into a cohesive framework. It continuously collects the customer interactions from various retail channels and converts them into actionable indices like Customer Purchase Intention Score (CPIS) for all customers, Customer Engagement Index (CEI) for selected customers, Product Interest Level PIL across future products, Shopping Behavior Consistency Factor (SBFCF) as an indicator of brand loyalty and Dynamic Purchase Probability Index DPPI which indicates the likelihood of purchasing a product against a defined target. By means of a machine learning prediction engine, these signals are scanned to find out purchase intention, identify changing buying behavior and develop personalized recommendations and sales optimization tactics. It also adds cloud-based monitoring, enables business intelligence dashboards and has a self-learning process that builds on past interactions from customers and improves prediction accuracy over time. The current invention would allow companies to have a better understanding of the customer intention & help them carry out better marketing campaigns, sustained sales conversion, optimal inventory planning, note down the nature of customer engagement and support sound business decision across modern retail and e-commerce scenarios.</p> <p>No. of Pages : 22 No. of Claims : 9</p>	

		<p>Ms. Evangeline Nesa Priya D, faculty member of the Department of Artificial Intelligence and Data Science, St. Joseph's College of Engineering, has successfully published a patent titled "Foundation Model-Driven Remote Sensing Framework for Aircraft and Ship Analytics using Multimodal Satellite Imagery." The patent presents an innovative framework that utilizes foundation models and multimodal</p>
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		<p>innovative system that integrates machine learning and mathematical modelling to predict soil fertility and recommend suitable crops. The proposed device analyses soil parameters, environmental conditions, and nutritional factors to support efficient agricultural decision-making. The system aims to enhance precision agriculture by improving resource utilisation, increasing crop productivity, and reducing cultivation costs. This patent publication highlights.</p>
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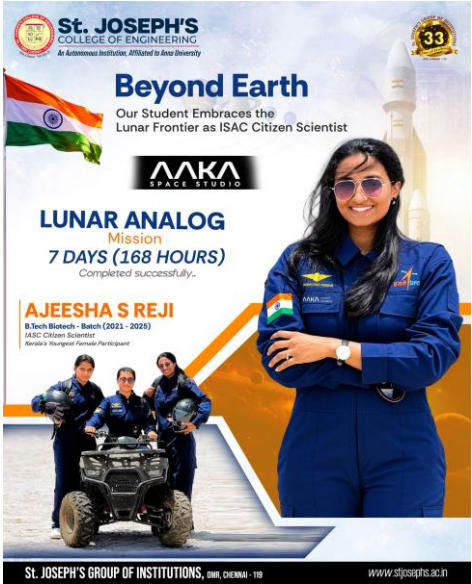
DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Sl. No .	Photographs Captured During Event	Corresponding remarks in regarding the status of activity execution
1.	<p>Ms. Thiraviaselvi G Certificate Awarded</p> 	<p>Title of Certification : Digital Skills Readiness Program Wipro Certified Faculty. Course Completed: Data Science with Python.</p>
2.	<p>Dr. Ancy Award Photo</p>	<p>Presenting Authorities: The Institution of Engineers (India), Kancheepuram Local Centre. Title of Award : Faculty Advisor Award Academic Year : 2025 - 2026</p>

		
3.	<p>Ms. Quba Jaslin C</p> <p>Published Patent</p> 	<p>Title of Innovation : A Smart Predictive Resource Allocation System Using Artificial Intelligence for Cloud Environments.</p>
4.	<p>Mr. Nirmalkumar V</p> <p>Published Patent</p>	

		<p>Title of Innovation : An Intelligent Smart Grid Framework using Predictive Machine Learning for Real-Time Renewable Energy Balancing.</p>
5.	<p>Ms. Nithya K</p> <p>Published Patent</p> 	<p>Title of Innovation : System and Method for Interactive Three-Dimensional Visualization and Intelligent Analysis of Complex Network Data.</p>

DEPARTMENT OF BIOTECHNOLOGY

S.No.	Title of the Events and Photographs	Details of the Event
1.	<p style="text-align: center;">ALUMNI ACHIEVEMENTS</p>  <p style="text-align: center;">A copy of proof</p>	<p>Ayesha S. Reji, a 2025 B.Tech Biotechnology alumna successfully completed a 7-day (168-hour) Lunar Analog Mission as an ISAC Citizen Scientist with AAKA Space Studio. Her remarkable achievement as Kerala's youngest female participant reflects the spirit of innovation, exploration, and excellence nurtured by the institution.</p>
2.	<p style="text-align: center;">STUDENTS ACHIEVEMENTS</p> 	

Our Department proudly congratulates Ms. S. Abirami (Batch 2023–2027) on securing a placement offer. He has been selected as a Business Development Associate at Tech Vedhu Pvt Ltd, Bangalore with CTC of Rs 7 LPA.

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Our Department proudly congratulates Ms. S. Sanjay Kumar (Batch 2023–2027) on securing a placement offer. He has been selected as a Trainee Chemist at SNJ Breweries Pvt Ltd, Chennai with CTC of Rs 3.5 LPA.

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SIH SELECTION



A copy of proof

Our final year Students and third year students along with Mechatronics department students was selected among 167 teams for Smart India Hackathon - Internal hackathon.

GUEST LECTURE

3.

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Department of Biotechnology
GUEST LECTURE
ON
Transforming Modern Microbiology and Biotechnology through Next-Generation Sequencing (NGS), Artificial Intelligence (AI), and Machine Learning (ML)

Dr. Anuraj Nayariseri
Principal Scientist & Director
Eminent Biosciences
Founder & CEO
LeGene Biosciences Pvt. Ltd.
Indore

DATE: 06-08-2026, Thursday
TIME: 10.00 am to 12.00 pm
VENUE: Placement Block, Hazel Hall



The Department of Biotechnology organized a Guest Lecture on 6th August 2026. The session was conducted by Dr. Anuraj Nayariseri, Principal Scientist & Director, Eminent Biosciences. The event was organized by Dr. S.

	<p>A copy of proof</p>	Justin Packia Jacob and Dr.M.Chamundeeswari.
	<div></div> <p>A copy of proof</p>	<p>The Department of Biotechnology organized an Industry Connect Program with the expertise from Cognizant on 7th August 2026. The session was headed by Mr. Girish Ramachandran, SBU Head, Life Sciences R&D, Ms.</p>



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Sujatha Cherukura Gopalakrishnan and Ms. Anuradha Sridharan.



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The Department of Biotechnology organized an Industry Interaction on 6th August 2026. The session was conducted by Dr. Anuraj Nayariseri, Principal Scientist & Director, Eminent Biosciences. The event was organized by Dr. M. Chamundeeswari.



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	<div data-bbox="382 479 751 1015"><p>St. JOSEPH'S COLLEGE OF ENGINEERING (An Autonomous Institution) St. Joseph's Group of Institutions OMR, CHENNAI - 119</p><p>Department of Biotechnology</p><p>INDUSTRIAL INTERACTION ON Exploring Research Opportunities in Biotechnology: Using NGS Technology</p><p>Mr. Jaikrishna Ganesh Founder Zillion Applied Biosciences Contract Research Organization (CRO) USA based CRO - Chennai</p><p>DATE: 29-08-2026, Saturday TIME: 9.30 am to 11.00 am VENUE: Placement Block, Hazel Hall</p><p>St. JOSEPH'S GROUP OF INSTITUTIONS OMR, CHENNAI - 119</p><p>The Choice of Disciplined Toppers</p></div> <div data-bbox="777 490 1260 725"></div> <div data-bbox="785 745 1264 1016"></div> <p data-bbox="718 1036 932 1071">A copy of proof</p>	<p data-bbox="1289 272 2007 464">The Department of Biotechnology organized an Industry interaction on 29th August 2026. The session was headed by Mr. Jaikrishna Ganesh, Founder, Zillion Applied Biosciences, US-Based Contract Research Organization. The event was organized by Dr. B. Sangeetha.</p>
<p data-bbox="273 1256 302 1289">4.</p>	<p data-bbox="357 1149 852 1179">TEACHERS DAY CELEBRATION</p> <div data-bbox="407 1227 684 1578"></div> <div data-bbox="714 1218 995 1588"></div> <div data-bbox="999 1218 1276 1594"></div>	

	<div data-bbox="653 409 993 678" data-label="Image"> </div> <div data-bbox="701 678 928 716" data-label="Caption"> <p>A copy of proof</p> </div>	<p>Our Students from the Department of Biotechnology celebrated Teachers Day on 22nd of August 2026 with great enthusiasm, expressing their gratitude and appreciation through vibrant dance performances, melodious music, and heartfelt poetry.</p>
<p>5.</p>	<p>SCHOOL CONNECT PROGRAM</p> <div data-bbox="443 820 1236 1219" data-label="Image"> </div> <div data-bbox="466 1232 1146 1604" data-label="Image"> </div>	<p>Our Students and staff from the Department of Biotechnology visited 2 schools namely Blessing International School, Kalpakkam and Aarupadaiveedu Matric Hr. Sec School, Thiruporur as a part School Connect program on 10.08.2026 and 18.08.2026.</p>

	<div>A copy of proof</div>	
6.	<div><div>STAFF ACHIEVEMENTS</div><div><div></div><div><div></div><div>A copy of proof</div></div></div><div><div>PAPER PUBLICATION</div><div><div></div><div><div></div><div><p>AI-driven Ecoblog optimizer: Machine learning ranking of feedback oils for biotechnical sustainability</p><p>R. Gurusankaran, R. Gurusankaran, P. V. Gopikrishnan, Gurunathan Baskar</p></div><div></div></div></div></div></div>	<div><p>Dr. G. Baskar, Professor, Department of Biotechnology, attended the Industrial Training on “Quantum Computing with Machine Learning” organized by Esoir Business Solution LLP in association with Mechanica IIT Madras from 3rd to 15th of August 2026.</p><p>Dr. G. Baskar, Department of Biotechnology,</p></div>

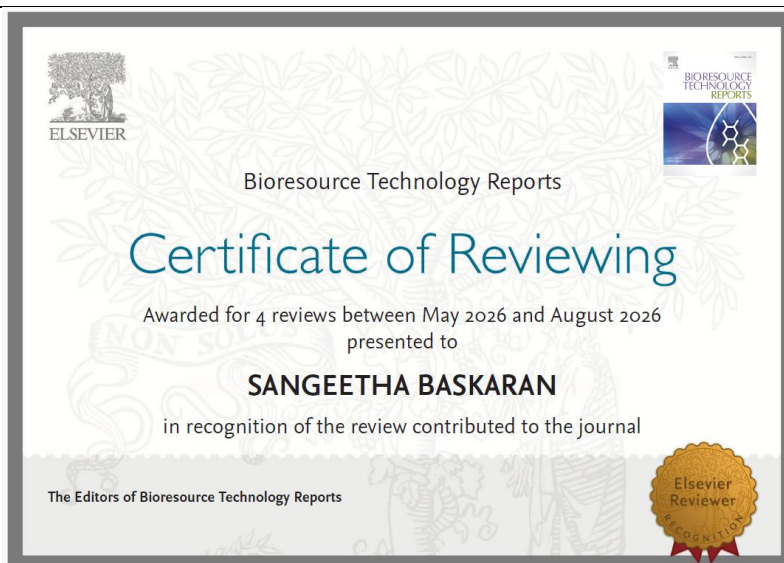
		<p>published research paper entitled “AI-driven Eco-Blend optimiser: Machine learning ranking of feedstock oils for biodiesel suitability” in the journal Bioresource Technology Reports.</p>
	<p>A copy of proof</p>	
7.	<p>REVIEWER CERTIFICATE BY FACULTY</p>  <p>A copy of proof</p>	<p>Dr. G. Baskar from Department of Biotechnology has served as a reviewer for a research manuscript in the journal The Editors of Biomass & Bioenergy. In recognition of his valuable contribution to the peer-review process, a reviewer certificate was awarded on August 2026.</p>



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Dr. G. Baskar from Department of Biotechnology has served as a reviewer for a research manuscript in the The Editors of International Journal of Pharmaceutics. In recognition of his valuable contribution to the peer-review process, a reviewer certificate was awarded on August 2026.

Dr. B.Sangeetha from Department of Biotechnology has served as a reviewer for a research manuscript for the journal 'Bioresource Technology Reports'. In recognition of her valuable contribution to the peer-review process in the consecutive months, a reviewer certificate was awarded for the month of August 2026.



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Dr. B.Sangeetha from Department of Biotechnology has served as a reviewer for a research manuscript for the journal 'Chemical Engineering Journal Advances'. In recognition of her valuable contribution to the peer-review process in the consecutive months, a reviewer certificate was awarded for the month of August 2026.

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8.	<p style="text-align: center;">TRAINING PROGRAM ATTENDED BY FACULTY</p> <div style="text-align: center;">  </div> 	<p>Dr. G. Baskar from Department of Biotechnology has participated in the National IP Awareness Training Program , conducted by NIPAM on 17th August 2026.</p>

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Dr. M. Chamundeeswari from Department of Biotechnology has participated in the National IP Awareness Training Program , conducted by NIPAM on 17th August 2026.

9.

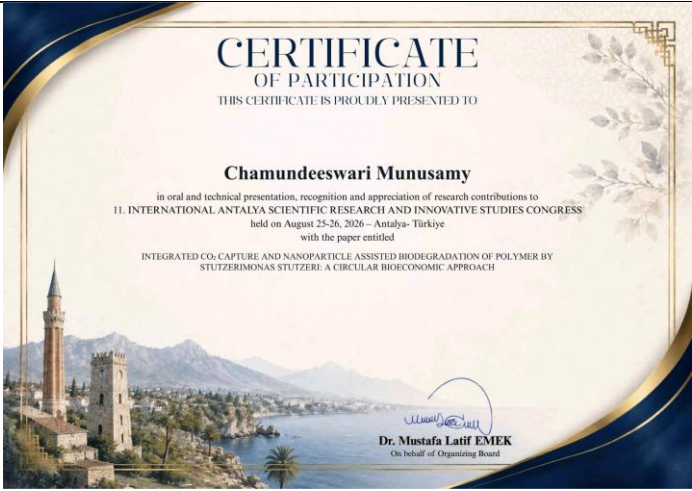
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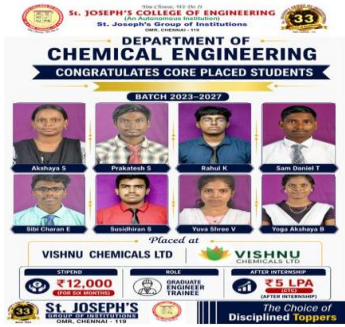
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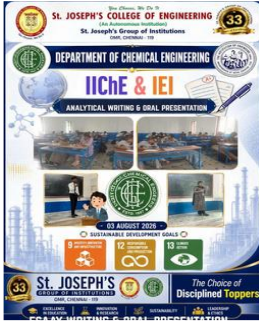
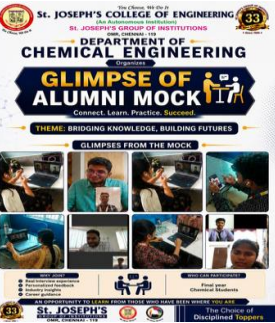
Ms. P. Mohana Priya, guided by Dr. M. Chamundeeswari, Department of Biotechnology, has been selected as a recipient of the Prestigious Young Scientist Awards 2026 from SCHOLICS ACADEMIC AWARDS conducted on 21st and 22nd August 2026.

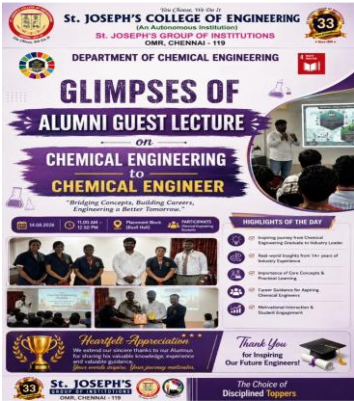
Dr. M. Chamundeeswari from Department of Biotechnology has presented a paper in the “International Conference Analyta Scientific Research and Innovative Studies Congress”, held on 25th and 26th August.

	 <p style="text-align: center;">A copy of proof</p>	
10.	<p>INDUSTRY INTERACTION</p> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: center;">   </div> </div>	<p>Ms. J. Jenstina visited Azidus Pharma Pvt Ltd and Careeo Healthcare, Chennai, on 25th August 2026 as part of the department's initiative to strengthen industry-academia collaboration. The visit provided valuable insights into industry practices, career opportunities, and potential avenues for internships and collaborative engagement.</p>

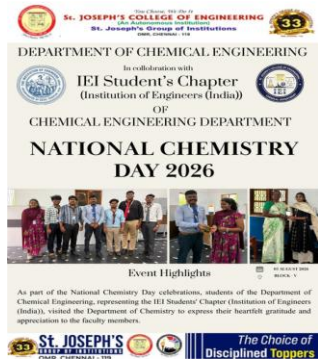
DEPARTMENT OF CHEMICAL ENGINEERING

S.No.	Title of the Events and Photographs	Details of the Event
1	PLACEMENTS	<p>We proudly congratulate eight students of the 2023–2027 batch for securing core industry opportunities at Vishnu Chemicals Ltd. The selected students are Akshaya S, Prakatesh S, Rahul K, Sam Daniel T, Sibi Charan E, Susidhiran S, Yuva Shree V, and Yoga Akshaya B. They have been selected for the role of Graduate Engineer Trainee (GET) and will undergo a six-month internship with a monthly stipend of ₹12,000. Upon successful completion of the internship, they will be offered a CTC of ₹5 LPA.</p> 
2	STUDENT ACHIEVEMENT – HACKATHON	<p>Student participation and achievements in hackathon activities during August 2026. As part of the Internal Edition Hackathon held from 28–29 August 2026, four student teams emerged as winners under the mentorship of Dr. S. Vinod Kumar and Dr. T. Amudha. The winning teams included students from Chemical Engineering, Computer Science Engineering, and Mechanical Engineering, highlighting interdisciplinary collaboration.</p> <p>The department also secured Runners-up position in Hacktronix 2.0, a 24-hour National Level Hackathon conducted by Sri Sairam Engineering College. The team comprised Lakshmitha C, Kalaiyaran D, Sreemayee R, and Santhosh R, mentored by Dr. S. Vinod Kumar, and received a cash prize of ₹12,000. These achievements demonstrate the department's strong focus on innovation-driven learning, practical problem-solving, teamwork, and application-oriented learning.</p>

		  
3	PROFESSIONAL SOCIETY ACTIVITIES	<p>The Department of Chemical Engineering actively engaged students in academic and professional development activities during August 2026. Poster Hackathon 2026 was conducted on 03 August 2026 for III Year Chemical Engineering students on the theme “Innovating Chemical Engineering for a Sustainable Future.” The activity encouraged creative thinking, teamwork, technical presentation, and sustainability-oriented problem solving. As part of the IIChe & IEI activities, an Analytical Writing and Oral Presentation programme was conducted on 03 August 2026 to strengthen analytical thinking, technical writing, communication, and presentation skill. An Alumni Mock Interview initiative under the theme “Bridging Knowledge, Building Futures” was also organized to provide final-year students with practical interview exposure, personalized feedback, industry insights, and career guidance.</p>   
4	MOCK INTERVIEW PROGRAMME WITH INDUSTRIAL EXPERTS	<p>The Department of Chemical Engineering organized a Mock Interview Programme for final-year Chemical Engineering students on 17 August 2026 at the Placement Block. The programme was conducted with the support of experienced industrial experts R. Sriram, Manager, Pioneer Asia Groups, and R. Sridharan, Senior Process Safety Engineer, Bechtel India Pvt. Ltd. The programme provided students with real-time industry interview experience, personalized feedback, and valuable insights into professional expectations. The interaction helped students improve their communication skills, confidence, technical presentation, and interview performance while familiarizing them with the recruitment process.</p>

		
5	ALUMNI GUEST LECTURE	<p>The Department of Chemical Engineering organized an Alumni Guest Lecture on 14 August 2026 at the Placement Block (Basil Hall). The session was titled “Chemical Engineering to Chemical Engineer” with the theme “Bridging Concepts, Building Careers, Engineering a Better Tomorrow”. Shri Ashwin Kumar Arumugam (Batch 2008–2012), currently serving as Senior Manager at GAIL (India) Limited, delivered the guest lecture. He shared insights into the transition from academic learning to a successful career in the chemical engineering sector, focusing on real-world industrial experiences, strong core concepts, practical learning, career opportunities, and professional growth.</p> 
6	SCHOOL OUTREACH PROGRAMME	<p>The Department of Chemical Engineering conducted a School Outreach Programme in August 2026 with the objective of creating awareness, inspiring young minds, and providing students with guidance on future educational and career opportunities.</p> <p>The department visited Revoor Padmanabha Chetty Matriculation Higher Secondary</p>

		<p>School, Thiruvotriyur, on 17 August 2026. The programme was coordinated by Mrs. Lavanya R, Assistant Professor, along with student coordinators Dakshin Kiran K, Harirajan N, Shyam Krithik, Pothi Karthikeyan, and Mohammad Aasif.</p> <p>The programme benefited approximately 250 school students. Another outreach programme was conducted at Soundarapandi Subammal Higher Secondary School, Tondiarpet, on 15 August 2026, reaching approximately 256 students. The outreach initiatives reflected the department's commitment to social responsibility, educational awareness, and community engagement.</p> <div style="display: flex; justify-content: space-around;">   </div>
7	STUDENT SPORTS ACHIEVEMENT	<p>The Department of Chemical Engineering proudly celebrates the sporting achievements of its students during August 2026. In the Hexaware Premier League 2026, Prakadeesh, IV Year student, secured the Runner-up position. Vijay Sabarehwar, a III Year student, won Silver and Bronze medals at the State Level Swimming Competition.</p> <p>These accomplishments highlight the department's encouragement of holistic student development, where academic excellence is complemented by participation in sports and extracurricular activities.</p> <div style="display: flex; justify-content: space-around;">    </div>
8	NATIONAL CHEMISTRY DAY & TEACHERS' DAY CELEBRATIONS	<p>The Department of Chemical Engineering, in collaboration with the IEI Students' Chapter, observed National Chemistry Day 2026 on 03 August 2026 at Block V. Students representing the IEI Students' Chapter visited the Department of Chemistry to express their</p>

		<p>gratitude and appreciation to the faculty members.</p> 
9	STAFF ACHIEVEMENT	<p>The Department proudly acknowledges the noteworthy achievements of its faculty members during August 2026.</p> <p>Dr. V. Renuka, Professor, contributed to research through publications on “Artificial Intelligence in Environmental Management: Emerging Trends and Challenges” and “Chemical Upcycling of Pet Waste for Terephthalic Acid Recovery: A Sustainable Materials Processing.”</p> <p>Ms. R. Lavanya, Assistant Professor, published an article titled “Uptake of Levocetirizine, diclofenac sodium and rosuvastatin calcium by Spinacia oleracea from fortified and amended soils.”</p> <p>Dr. S. Sujatha, Assistant Professor, co-authored “Eco sustainable extraction of malachite green via emulsion liquid membrane using green solvent,” published in Discover Chemical Engineering (2026). The optimized process achieved 99.5% dye removal efficiency.</p> <p>Dr. R. Sivaranjane, Assistant Professor, published multiple Indian Patent Applications covering graphene-enhanced polymer composites for EMI shielding in 5G communication devices, federated learning-based decentralized control for smart grid stability, cognitive load-aware computing for adaptive human–AI collaboration, and a quantum-inspired analog signal processor for ultra-low-latency computing. She also attended a one-week Short-Term Training Programme on “AI Tools for Research Writing.”</p> <p>Dr. T. Amudha, Assistant Professor, attended an online Faculty Development Programme on “Emerging Trends in Chemical Sciences: Materials to Technologies.”</p>

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Sl. No.	Students Rewards	Description
1		<p>Date : 28.08.2026, 9:30 AM- 2:50 PM</p> <p>Venue : Auditorium</p> <p>Nature of Event : Teachers Day Celebration And Student Award</p> <p>Participants : II,III,IV Year students & All Faculties</p> <p>Objective :</p> <ul style="list-style-type: none"> • To recognize and appreciate students for their academic achievements, positive behavior, attendance, participation, and overall progress. • To motivate students to set goals and consistently improve their performance. • To encourage healthy competition, discipline, and active participation in school activities. <p>Outcome :</p> <ul style="list-style-type: none"> • Increased student motivation and engagement in learning. • Improved academic performance and classroom participation.

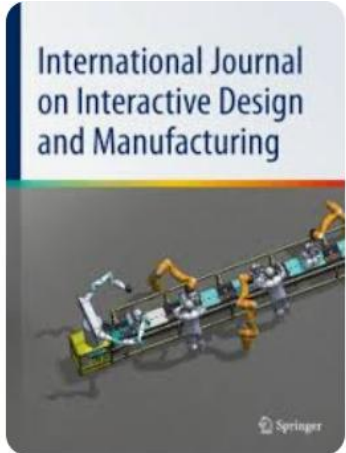
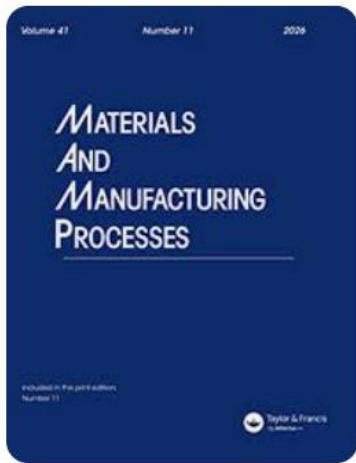
		<ul style="list-style-type: none">• Better attendance, discipline, and positive behavior.• Greater confidence and self-esteem among students.
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Sl. No.	Teachers Day Celebration	Description
2		<p>Date : 28.08.2026, 9:30 AM- 2:50 PM</p> <p>Venue : Auditorium</p> <p>Nature of Event : Teachers Day Celebration And Student Award</p> <p>Participants : II,III,IV Year students & All Faculties</p> <p>Objective :</p> <ul style="list-style-type: none"> • To recognize and appreciate the dedication, commitment, and contributions of teachers to students' academic and personal development. • Provide an opportunity for students to express their gratitude and appreciation to their teachers. • Inspire students to pursue further learning in AI. <p>Outcome :</p> <ul style="list-style-type: none"> • Students developed a greater sense of gratitude and respect towards teachers.

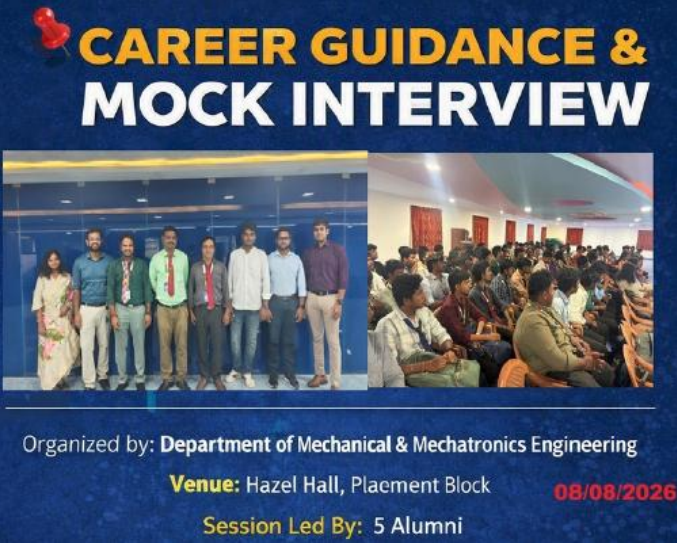
		<ul style="list-style-type: none">• Students gained confidence and teamwork skills through active participation in the celebration.• The celebration provided a memorable and meaningful platform to acknowledge the valuable role of teachers.
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Sl. No.	Career Guidance	Description
3		<p>Date : 29.8.26</p> <p>Venue : Loknayak Jaiprakash Narayan Vidyalaya CBSE school ,Guduvanchery.</p>
		<p>Nature of Event : Career Guidance</p> <p>Participants : School students; Faculty Coordinators – Ms. Kalingarani. Ms. Sangeetha.</p> <p>Objective :</p> <ul style="list-style-type: none"> Organized the Chapter to support school-level career awareness. Bridge the gap between school education and career readiness by exposing younger students to real-world opportunities. <p>Outcome :</p> <ul style="list-style-type: none"> School students learned the latest trends in Technology & AI and explored the fundamentals of Data Science. Enhanced logical thinking and problem-solving skills among participants. Students gained valuable career guidance and higher education insights, helping them make informed career choices

DEPARTMENT OF MECHANICAL ENGINEERING

Sl No	Name of the Activity	Remarks
1	<p>Faculty Publications:</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>	<ul style="list-style-type: none"> ➤ Dr Vaddi Seshagiri Rao - Professor & Principal, Dr. G. Ashwin Prabhu, Assistant Professor, Department of Mechanical Engineering, Dr. J. Vijayanad, Assistant Professor, Department of MBA has published an article "A hybrid lean design thinking framework for solving axis misalignment through fixture design" in International Journal on Interactive Design and Manufacturing (IJIDeM), Springer Nature Journal with a Journal Impact Factor 2.8. ➤ Mr. Subramanian M, Research Scholar and Dr. N. Arunkumar, Professor & Dean Industry Collaboration and IQAC from the Department of Mechanical Engineering have published an article titled "A supervised machine learning approach with dual GAN augmentation and Bayesian HPO for corrosion prediction of Mg-Li alloys" in Materials Degradation Journal (AU Annexure, Q1 Journal, IF: 7.5) ➤ Dr. N. Arunkumar, Professor & Dean Industry Collabratiion IQAC, Dr. M. Ganesh, Assistant Professor, Mr. R. Elakkiyadasan, Assistant Professor from the Department of Mechanical Engineering Published an article titled "An investigation of

		friction stir welding parameters on the weld strength of dissimilar alloys" in Materials and Manufacturing Processes, a Q1 Journal with an impact factor of 4.5
2	<p>Expert talk</p> 	<p>➤ The Department of Mechanical Engineering successfully organised an Expert Talk on Sustainable Engineering and the ESG Mandate. Mr. K. P. Murthy shared industry insights on ESG compliance and its growing impact on engineering careers, while Dr. N. Karuppaiah presented on Sustainability in Vehicle Engineering and Dynamics. The session concluded with an engaging interactive Q&A with College BAJA Team, witnessing enthusiastic participation from students and faculty.</p>
3	<p>Career Guidance Program and Mock Interview- by alumni</p> 	<p>➤ On 1st August 2026, the Alumni Mock Interview event organized by our Mechanical and Mechatronics Departments commenced with an engaging introductory session, which was attended by around 14 alumni from the Mechanical Departments of both colleges. The Department of Mechanical Engineering from both colleges successfully conducted 1:1 Interviews, Group Discussions and Feedback Interaction sessions for our Mechanical and Mechatronics students today, facilitated by our Alumni.</p>

		<ul style="list-style-type: none"> ➤ The Career Guidance Program and Mock Interview was successfully conducted today by the Department of Mechanical & Mechatronics Engineering at Hazel Hall, Placement Block, with 5 alumni leading the session. Our esteemed alumni shared their career journeys and challenges, and highlighted the wide range of opportunities available for Mechanical & Mechatronics Engineers in both Core and IT fields.
4	<p>Industrial Visit:</p> 	<ul style="list-style-type: none"> ➤ Industrial Visit to TAKASU SEIKI PRIVATE LIMITED 14 August 2026 - IV B – Mechanical Engineering The Department of Mechanical Engineering organized an industrial visit to Takasu Seiki Private Limited on 14 August 2026 for the IV B students, providing them with valuable exposure to advanced CNC machining and modern manufacturing technologies. The visit showcased the capabilities of precision machine tools, including Taiwan's TSL-20L Series CNC Lathe and India's versatile CNC Polygon Turning Machine. Students gained practical insights into CNC machining operations, precision engineering, automation, and contemporary manufacturing practices.
5	<p>Industry Interaction:</p>	<ul style="list-style-type: none"> ➤ Our Department of Mechanical Engineering Industry Interaction with Grundfos Pumps India Pvt. Ltd ON 13 august 2026. TH

6	<p>Student Achievements</p>	<ul style="list-style-type: none"> ➤ The Department of Mechanical Engineering is proud to congratulate Mr. V. V. Sharath Sanjeev, a Fourth-Year Mechanical Engineering student, for his outstanding achievement in the Open State-Level Intercollegiate Swimming Competition. ➤ Sharath Sanjeev secured the Gold Medal in the 100 m Freestyle Swimming event, bringing pride and recognition to the Department and the institution. In recognition of his remarkable sporting achievement, the student received appreciation and best wishes from the respected Chairman Sir, who congratulated him for his dedication, perseverance, and excellence in sports.
7	<p>IEI STUDENTS CHAPTER</p>	<ul style="list-style-type: none"> ➤ The Institution of Engineers (India) – Kancheepuram Local Centre



organized the Annual Award Function for the Best-Performing IEI Students' Chapters at our college on 29 August 2026, in association with the Department of Mechanical Engineering. The programme was graced by Dr. P. Raghavan, Retired IAS, as the Chief Guest. A significant highlight of the event was our college receiving the prestigious "Excellence in Higher Education 2026" Award, recognizing its commitment to academic excellence, innovation, and higher education.

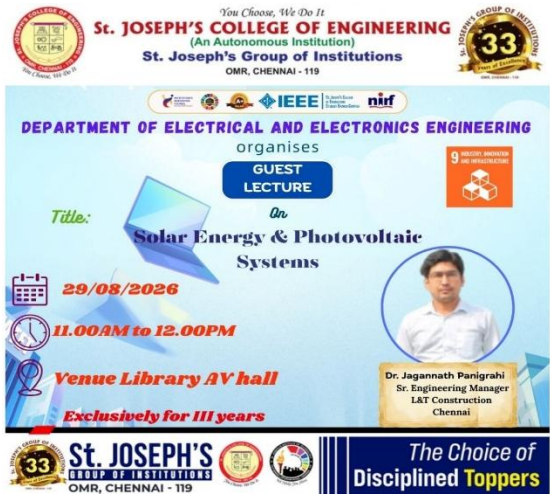
- The event brought together participants from more than 15 colleges, providing a platform to celebrate excellence in technical activities, research, and professional development. Awards were presented under various categories, including Best Student, Best Advisor, and Best Researcher, recognizing the dedicated efforts and achievements of students and faculty members. We are happy to inform you that our staff member, Dr. R. Sathish, has been conferred the "Chief Faculty Advisor Award of Excellence" by The Institution of Engineers (India) – Kanchipuram Local Centre, in the Department of Mechanical Engineering.
- Mr. Nandakumar, final-year student of our Mechanical Engineering Department, has been honoured with the Best Student Award at the IEI award ceremony held on 29/08/2026. The event served as an inspiring platform to encourage technical excellence,



innovation, research, leadership, and professional engagement among engineering students

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Sl. No.	Photographs Captured During Events	Corresponding remarks (Minimum 300 words)
1.	<p style="text-align: center;">Guest Lecture</p>  <p style="text-align: center;">PIC: EVENT PHOTO</p>	<p>The Department of Electrical and Electronics Engineering organized a guest lecture titled “IoT Applications and Solutions for Smart Cities” on 7 August 2026 at Placement Basil Hall. The session was delivered by Mr. ShriKrishna Chippalkatti, Joint Director/Scientist E, C-DAC, Bangalore. The speaker introduced the fundamentals of IoT and highlighted its significance in smart city development. He explained IoT applications in smart transportation, traffic management, waste management, and energy conservation, along with the role of sensors, cloud computing, and data analytics. Real-world IoT-enabled solutions for public safety, healthcare, and environmental monitoring were also discussed. The session provided students with insights into emerging IoT technologies, implementation challenges, and career opportunities for developing sustainable and intelligent cities. A total of 97 Second Year EEE students participated in the programme.</p>

2.	<p style="text-align: center;">Guest Lecture</p>  <p style="text-align: center;">PIC: EVENT POSTER</p>	<p>A guest lecture on “Solar Energy & Photovoltaic Systems” was organized on 29 August 2026 at the Library AV Hall. The session was exclusively conducted for III-year students, from 11:00 a.m. to 12:00 p.m. The lecture was delivered by Dr. Jagannath Panigrahi, Senior Engineering Manager, L&T Construction, Chennai. The session provided students with valuable insights into solar energy technologies and photovoltaic systems. Dr. Panigrahi highlighted the practical applications and significance of solar energy in modern power systems. The lecture enhanced students’ understanding of renewable energy solutions and their role in sustainable development. Overall, the session was informative and engaging, inspiring students to explore emerging opportunities in the field of solar energy and sustainable engineering.</p>
3.	<p style="text-align: center;">Workshop</p>	<p>A student workshop on “Trends and Application of Solar PV Technology” was conducted for the II Year students of Batch 2025–2029 on 13th and 14th August 2026, from 8:00 AM to 2:50 PM at the Machine Lab. The workshop was led by Dr. K. Pushpanathan, Director, IAS Energy Pvt. Ltd., who provided students with insights into the latest trends, applications, and technological developments in Solar Photovoltaic (PV) systems. The workshop included interactive and practical learning sessions that enhanced students’ understanding of solar PV technology and its real-world applications.</p>

	<p>TRENDS AND APPLICATION OF SOLAR PV TECHNOLOGY</p> <div data-bbox="357 243 1029 519">  <p>Dr.K.Pushpanathan, Director, TIAS Energy Pvt Ltd</p> <p>08.00 AM - 2.50 PM</p> <p>13/08/2026 - 14/08/2026</p> <p>MACHINE LAB</p> </div> <div data-bbox="357 552 1045 925"> <p>II YEAR / BATCH 2025 - 2029</p> <p>Glimpses of student workshop</p>  </div> <p>PIC: EVENT POSTER & PHOTO</p>	
4.	<p>Workshop</p>	<p>A Two-Day Hands-on Student Workshop was conducted for the III Year students of Batch 2024–2028 on 13th and 14th August 2026, from 8:00 AM to 2:50 PM, at the Electronic Circuits Lab and Placement Block. The workshop featured three technical tracks: IoT: From Sensors to Smart Solutions, handled by Dr. B. Ezhilavan, Founder & CEO, VEI Technodops Pvt. Ltd.; ECAD Essentials: Electrical Design from Concept to Circuit, handled by Er. Deepak Jain, BIM Consultant, Unique MEP Pvt. Ltd.; and End-to-End Machine Learning: Design, Integration and Deployment, handled by Ms. Vaishnavi, CEO, Toward Technology Pvt. Ltd. The hands-on sessions provided students</p>

	 <p style="text-align: center;">PIC: EVENT POSTER & PHOTO</p>	<p>with practical exposure to IoT, electrical circuit design, and machine learning applications, enhancing their technical skills and industry readiness.</p>
5.	<p style="text-align: center;">Mentor Meeting</p>	<p>Mentor Meeting II was conducted on 29 August 2026 from 12:10 p.m. to 12:50 p.m. for II, III, and IV-year students. The session focused on “NAVA 360° – Empowering Every Student Through Comprehensive Mentoring for Academic Success, Innovation, and Career Excellence.” The meeting emphasized the importance of effective mentoring in supporting students’ academic and personal development. Key areas discussed included higher studies, placements, research activities, competitions, project work, patent filing, and paper publications. Special attention was also given to mentoring active learners and slow learners based on their individual needs. The session encouraged students to actively engage with their mentors and make informed decisions regarding their academic and career goals. Overall, the meeting highlighted the vital role of comprehensive mentoring in fostering student</p>

	 <p>PIC: EVENT POSTER</p>	<p>success, innovation, and career excellence.</p>
<p>6.</p>	<p>Teacher's Day</p>	<p>The Department of Electrical and Electronics Engineering (EEE) celebrated Teachers' Day with great enthusiasm on 27/08/2026. The celebration was organized to honour the dedication and contributions of the faculty members and to recognize the academic and professional achievements of the students. As part of the celebrations, students who secured a CGPA of 9.0 and above were felicitated with appreciation certificates for their outstanding academic performance. Students were also recognized and rewarded for their achievements in patents, international certifications, and research publications.</p> <p>In recognition of these accomplishments, the students of the Department of EEE received a total reward amount of ₹4,10,683/- on the occasion of Teachers' Day. The</p>



PIC: EVENT PHOTO

celebration also featured vibrant dance and song performances by the students, adding joy and enthusiasm to the occasion.

7.

E-Cell Activity



PIC: EVENT PHOTO

The Entrepreneurship Cell (E-Cell) of St. Joseph's College of Engineering successfully organized EUREKA 3.0, Turning Vision into Venture, an entrepreneurial pitching competition that provided students with a platform to present innovative ideas and explore their potential as ventures. The event was conducted at the Hackathon and Training Center on 13 August 2026. The competition followed a structured five-minute pitching format.

The jury panel included Subathra Babu – HR, Merloam Estates, Hakash Sathyamoorthy – Patron Founder & CEO of Infinity, and Mallika Sankar Assistant Manager, Procurement, Bruhat Logistics. The jury evaluated the teams based on their ideas, innovation, feasibility, business potential, and overall pitching performance. The pitching

		<p>sessions provided participants with an opportunity to communicate their solutions and demonstrate their entrepreneurial thinking. Following the evaluation process, four winning teams were selected based on their overall performance. Each winning team was awarded a cash prize of ₹1,500, with a total prize distribution of ₹6,000.</p>
<p>8.</p>	<p style="text-align: center;">IEEE activities</p>  <p style="text-align: center;">PIC: EVENT POSTER</p>	<p>A webinar titled “IEEE Dielectric Dynamics: Dielectrics in Space! An Introduction to Spacecraft Charging” was successfully conducted on 14 August 2026 via Google Meet. The session was delivered by Dr. Allen Andersen, Physicist & Technologist, NASA Jet Propulsion Laboratory (JPL), USA, who provided insights into the fundamentals of spacecraft charging and the influence of the space environment on spacecraft systems. He explained real-world NASA applications and highlighted key spacecraft design challenges associated with charging phenomena. The session offered students and aspiring engineers valuable exposure to space technology and its practical applications in electrical and electronics engineering. Participants gained a better understanding of spacecraft charging mechanisms and their impact on spacecraft performance and reliability. Overall, the webinar served as an insightful learning platform, connecting theoretical concepts with practical challenges in advanced spacecraft systems.</p>

9.

IEEE activities

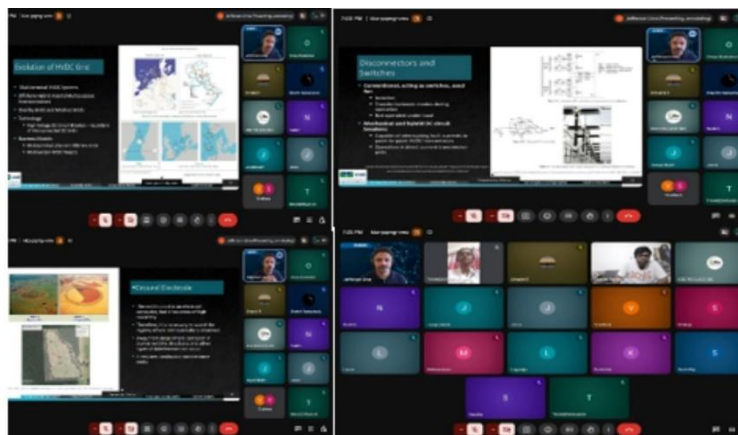


PIC: EVENT POSTER

A technical session titled “PowerChain 2026: Blockchain in Power and Energy Systems – Transforming the Future of Decentralized Energy” was successfully conducted on 19 August 2026 via Google Meet. The session was delivered by **Mr. Sai Prashanth Mallellu**, who shared valuable insights into the application of blockchain technology in modern power and energy systems. He explained the concepts of decentralized energy transactions, peer-to-peer energy trading, and the role of blockchain in enabling secure and transparent energy networks. The session also highlighted the integration of blockchain with smart grids and renewable energy systems. Participants gained an understanding of how decentralized technologies can transform the future of sustainable energy management. The interactive session encouraged students and researchers to explore emerging innovations at the intersection of blockchain and electrical engineering. Overall, the webinar provided valuable exposure to next-generation digital technologies shaping the future of the power and energy sector.

10

IEEE activities



A webinar titled “HVDC Unveiled: Fundamentals, Technologies and Future of Power Transmission” was organized on 25 August 2026. The session introduced participants to the fundamentals, working principles, major components, and different technologies of HVDC transmission. It highlighted the advantages of HVDC over conventional AC transmission for long-distance bulk power transfer. The webinar also explored HVDC applications in renewable energy integration and interconnected power grids. An interactive discussion addressed participants’ queries on applications, operational challenges, and future developments. The session enhanced students’ technical awareness of modern and emerging power transmission technologies.

	PIC: EVENT PHOTO	
11	Faculty recognition and patent	<ul style="list-style-type: none"> • Dr. V. Krishnakumar has been granted to the patentee for an invention entitled “COMPOSITE ELECTRODE AND ELECTROLYTE SYSTEM WITH SELF-HEALING BINDER, REDOX MEDIATOR ADDITIVES FOR ULTRA-FAST CHARGING BATTERIES”.
12	Faculty Publication	<ul style="list-style-type: none"> • Dr.Jayarama Pradeep published an article titled “Self-Powered Piezoelectric Nano-Polymer Networks with Embedded Wireless Nodes for Distributed IoT Sensor Platforms” in Journal of Polymer & Composites. • Dr.A.Jamna published an article titled “AI-Augmented Solid-State Batteries: Revolutionizing Power Management in Electric Mobility” in International Journal of Computer Information Systems and Industrial Management Applications. • Mr. T.Sriananda Ganesh published an article titled “Intelligent Speed Control of Electric Vehicle Drives Using Fenn-based Hybrid Pid-fopid Tuned by Igcr” in Journal of Vibration Engineering & Technologies.

13	<p align="center">PLACEMENT DETAILS FOR THE MONTH OF AUGUST 2026</p>	<p>2022-2026 Batch</p> <p>Total No of students placed = 130 Students</p> <p>Total No of Offers = 205 Offers</p> <p>Total No of Students (UG) = 171</p> <p>Total No of Eligible Students (UG) = 147 (All Clear)</p> <p>% of students Placed (UG) = $130/147 = 76.1 \%$</p> <p>No of students having single offers = 76</p> <p>No of students having Double offers = 39</p> <p>No of students having Triple offers = 09</p> <p>No of students having 4 offers = 06</p>
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DEPARTMENT OF MBA

GUEST LECTURE:



The Department of Management Studies, St. Joseph's College of Engineering (Autonomous), OMR, Chennai, Organised an Alumni Talk for the MBA – Integrated programme on the theme “From Campus to Corporate” on 7 August 2026 at 9:30 a.m. at the AV Hall, Central Library. The session will feature Ms. Ranjani S. P, an alumna of the MBA Batch 2020–2022, currently serving as HR Associate at Klentia India Private Limited. The alumni interaction is designed to provide students with practical insights into transitioning from academic life to the corporate environment, including workplace expectations, career development, professional skills, and industry practices

WORKSHOP:



Exposure on Cultus-CJR-Learning Management System Demo given for Final year MBA Students by Skillful Business Toys towards getting ready for Job on 10th August 2026. One day workshop on AI Based Finance, Marketing, HR, Operations and Business Analytics organized for final year MBA Students in Association with Skillful Business Toys, Bengaluru on 13th Aug 2026

GUEST LECTURE:



Topic : Financial Valuation and Fund Raising: Strategies for Business Growth

Expert Name:

Mr.B.Ramakrishnan,
MD & CEO-Corporate Clinic

Date : 18-08-2026

VENUE: AV HALL -LIB BLOCK

VALUE ADDED COURSE



St. JOSEPH'S COLLEGE OF ENGINEERING
You Choose, We Do It
(AN AUTONOMOUS INSTITUTION)
OMR, CHENNAI - 119



DEPARTMENT OF MANAGEMENT STUDIES
MBA-INTEGRATED

**Value Added Course
on
Managerial Communication
for
II- MBA Integrated Students**



Mr. Deepak Gaba
Founder- Corpversity

09.30.am. 11-08-2026 to 14-08-2026 MBA Studio 1

Value Added Course organized for II year MBA-Integrated Students on Managerial Communication by Mr. Deepak Gabba, Founder of Corpversity from 11th Aug 2026 to 14TH Aug 2026.

The course focused on enhancing students' verbal and non-verbal communication, professional presentation, interpersonal interaction, leadership communication, workplace etiquette, and corporate communication skills. The initiative aimed to strengthen the employability and managerial competencies of students by bridging classroom learning with industry-oriented communication practices, thereby preparing them to communicate confidently and effectively in diverse corporate and managerial environments.

ALUMNI TALK



You Choose, We Do It
St. JOSEPH'S COLLEGE OF ENGINEERING
 (An Autonomous Institution)
 St. Joseph's Group of Institutions
 OMR, CHENNAI - 119





DEPARTMENT OF MANAGEMENT STUDIES
MBA - INTEGRATED
ALUMNI INTERACTION AND MOCK INTERVIEW
FOR
FINAL YEAR MBA - INTEGRATED STUDENTS



Mr. SHRAVAN G
MBA BATCH(2020-2022)
 Business Development Manager,
 OOG Project logistics Ltd.

9.30 a.m. 12.08.2026 MB Studio - 2

The Department of Management Studies, St. Joseph's College of Engineering (Autonomous), OMR, Chennai, organized an Alumni Interaction and Mock Interview Programme for the Final Year MBA – Integrated students on 12 August 2026 at 9:30 a.m. at MB Studio–2. The session was led by Mr. Shravan G, an alumnus of the MBA Batch 2020–2022, currently serving as Business Development Manager at OOG Project Logistics Ltd. The programme was designed to provide students with valuable industry exposure through an interactive alumni session and realistic mock interview experience. The interaction helped students understand corporate expectations, improve their communication and interview skills, gain insights into business development and logistics careers, and build confidence for upcoming placement opportunities.

FACULTY PUBLICATION



BON SECOURS COLLEGE FOR WOMEN
 (AUTONOMOUS)
 Accredited with A++ Grade by NAAC in the Cycle II
 Affiliated to Bharathidasan University, Tiruchirappalli.
 Recognized by UGC under 2(f) and 12(B)
 An ISO 21001:2018 Certified Institution
 Vilar Bypass, Thanjavur - 613 006, Tamil Nadu, India.

CERTIFICATE
OF PARTICIPATION

This is to certify that **Mr.S.Aravinth**, Assistant Professor, Department of Management Studies, St.Joseph's College of Engineering, Chennai has participated in **FACULTY ENRICHMENT PROGRAMME ON "AI DRIVEN RESEARCH EXCELLENCE, INNOVATION, INTELLECTUAL PROPERTY, AND ENTREPRENEURSHIP"** organized by Institution's Innovation Cell and Research & Development Cell, Bon Secours College for Women (Autonomous), Thanjavur 613 006, from 20.07.2026 to 24.07.2026.

 Convenor IIC |  Coordinator R&D Cell |  Principal

Faculty Name: Mr. S. Aravinth

Lecture Title: AI Driven Research Excellence, Innovation, Intellectual property and Entrepreneurship.

College Name: Bon Secours College for Women (Autonomous), Thanjavur.

Dr.R.Satish, Professor G Head -MBA has published a paper titled ,” Strategic Social Media Marketing in Promoting Inclusion and Support for

Individuals with Intellectual Disabilities”, published in June 2026 in the Journal of Intellectual Disabilities and Offending Behaviour 17(2), WOS Indexed, DOI: [10.47059/jidob/V17/I2/1](https://doi.org/10.47059/jidob/V17/I2/1)

OUR ESTEEMED MEMBERS

Leaders in Education. Mentors in Excellence. Partners in Progress.



MP Gupta
CHAIRMAN

Director
Indian Institute of Management Lucknow (India)

MP Gupta is the Director of the Indian Institute of Management Lucknow (IIM Lucknow). He is a seasoned academic leader with rich experience in management education, institutional governance, and strategic leadership. His vision and expertise continue to shape IIM Lucknow as a next-generation management institution focused on excellence, innovation and impact.

KEY EXPERTISE

- Academic Leadership
- Management Education
- Strategic Management
- Governance & Policy
- Institutional Development
- Leadership & Mentoring



Prof. (Dr.) Karam Pal Narwal
MEMBER

Senior Professor of Business Management
(Former Dean and Director, Haryana School of Business)
Guru Jambheshwar University of Science and Technology, Hisar, Haryana

Prof. (Dr.) Karam Pal Narwal is an eminent academician and administrator with vast experience in business management education, research, and institutional leadership. As former Dean and Director, he has played a key role in building academic excellence, fostering research culture, and strengthening industry-academia linkage.

KEY EXPERTISE

- Business Management
- Quality Assurance
- Academic Administration
- Institutional Building
- Research & Publications
- Higher Education Leadership



Dr. Amarjeet Kaur
MEMBER

CMA | Corporate Trainer | Educationist |
Mentor & Researcher

Professor & Dean - Faculty of Commerce & Management, DSW, Director - Gender Studies Centre of Excellence, Gurugram University, India

Dr. Amarjeet Kaur is a distinguished educator, corporate trainer, mentor and researcher with expertise in management education, professional development, and gender studies. She is committed to mentoring students and professionals, advancing research, and promoting gender equality and inclusivity in higher education.

KEY EXPERTISE

- Management Education
- Gender Studies & Inclusivity
- Corporate Training
- Academic Leadership
- Research & Mentoring
- International Collaboration

St. Joseph's College of Engineering's MBA Department is undergoing a comprehensive three-day National Board of Accreditation (NBA) audit. The distinguished evaluation panel is chaired by **MP Gupta**, the current Director of the Indian Institute of Management (IIM) Lucknow. Serving as a panel member is **Prof. (Dr.) Karam Pal Narwal**, a Senior Professor of Business Management from Guru Jambheshwar University, Haryana. The team also includes **Dr. Amarjeet Kaur**, Professor & Dean of the Faculty of Commerce & Management at Gurugram University, as a member. Together, these experts bring extensive leadership, institutional governance, and research expertise to assess and guide the MBA program.

DEPARTMENT OF CHEMISTRY AND ENGLISH

Sl.No.	Events	Remarks
1	Collabarative Quality initiatives with other institutions	<ol style="list-style-type: none"> 1. Dr. U. Venkateswara, Dr. N.R. Rajagopalan, Dr. B. Subash, Dr. G. Arun had conducted a school outreach program on the concept of “Language and Chemistry: Gateways to Technology” at “Sree Ayyappa Matriculation Higher Secondary School, Sholinganallur” on 01.08.26. 2. Dr. K. Abinaya, Dr. K. Shriram, Mrs. A. Sathiya Jothi, Dr. S. Narendiran had conducted a school outreach program on the concept of “Mathematics & English: Foundations for future success” at “Ellen Sharma Memorial Matriculation Higher Secondary School, Sholinganallur” on 01.08.26. 3. Dr. V. Swarnalatha, Dr. G. Prabha, Dr. K. Nanthitha, Dr. Rachana S Pillai had conducted a school outreach program on the concept of “Hack the future with AI – Explore Career Beyond with Imagination” at “St. Mary’s Matriculation Higher Secondary School, East Tambaram” on 18.08.26. 4. Dr. P. Saravanan, has obtained association membership from Institute of Science, Engineering and Innovation (ISEI) on 19.08.26 5. Dr. A. Uma Devi, Dr. N.R. Rajagopalan, Dr. M. Vinothkumar, Dr. S. Maria Baptist had conducted a school outreach program on the concept of “Explore & Express – A Chemistry & English Enrichment Session” at “Dr. Sivanthi Adhithanar Girls Higher Secondary School, Manali” on 20.08.26. 6. Dr. G. Balaraman, Mrs. P. Angelin Kiruba, Dr. K. Shriram had conducted a school outreach program on the concept of “Mathematics to Machine – The Role of AI in Engineering” at “V.S. Stars Public Senior Secondary School, Thirukazhugukundram” on 20.08.26. 7. Dr. P. Saravanan, Dr. A. Uma Devi, Dr. N.R. Rajagopalan, Dr. M. Vinothkumar have obtained association membership from Institute of Green Engineers (IGEN) on 30.08.26
2	Industrial Visits, Inplant Training, Internships	<ol style="list-style-type: none"> 1. Dr. K. Abinaya, Mrs. A. Sathiya Jothi had attended an Industry Internship program on “Natural Language Processing NLP” at Tech Power Solutions, Chennai, from 10.08.26 to 17.08.26.
4	FDP/Workshop/Conference	Resource person:

		<p>1. Dr. K. Monika had acted as resource person and delivered a lecture on “Ecocritical perspectives in Postcolonial contexts”, at the National webinar” Organised by “Sacred Heart College, Tirupattur” held on 20.08.26</p> <p>Conference Chair:</p> <p>1. Dr. P. Saravanan had chaired a conference session at “International Conference on AI Innovations in Engineering, Science & Management”, Organized by “Radhakrishna Institute of Technology and Engineering, Bhubaneshwar, Odisha” held between 28.08.26 to 29.08.26</p> <p>Attended:</p> <p>1. Dr. P. Saravanan had attended an awareness program titled “Energython 2026 – IGEN Partners: Energy, Climate and SDG action Multilevel Activities”, organized by “Institute of Green Engineers (IGEN)” held on 08.08.26.</p> <p>2. Dr. S. Narendiran had attended a workshop on “AI for pedagogy and Assessment”, organized by “The English and Foreign Languages University, Hyderabad” held between 21.08.26 and 22.08.26.</p>
9	Awards/Prize won by students / Staff	<p>1. Dr. P. Saravanan had acted as Hackathon judge in the event “HackACE 2026 – International Level Online Hackathon” organized by “KPR Institute of Engineering and Technology, Coimbatore” on 22.08.26.</p>
11	Publications(only published) details	<p>Journal Publications:</p> <p>1. Dr. P. Saravanan published a research article titled “Gelatin-Aminoacid coordinated hydroxyapatite as an Organic-Inorganic hybrid polymer system for biomimetic bone applications” in the Journal “Journal of Polymer Science”.</p> <p>Doi: https://doi.org/10.1002/pola.70301</p> <p>2. Dr. K. Jayamoorthy published a research article titled “An efficient hetero structured SnO₂-Bi₂O₃ for azo dye Reactive Red 120 (RR120)</p>

		<p>degradation with solar light and dye-sensitized solar cell” in the journal “Phosphorous, Sulfur and Silicon and the related elements”</p> <p>Doi: https://doi.org/10.1080/10426507.2026.2726867</p> <p>3. Dr. B. Subash published a research article titled “Facile synthesis of alpha – MoO₃ /rGO nano hybrid with diverse application of detoxification of azo dyes, H₂ evolution and antimicrobial activity” in the journal “Next Material”.</p> <p>Doi: https://doi.org/10.1016/j.nxmte.2026.102932</p> <p>4. Dr. G. Balaraman published a research article titled “Hybrid Artificial Neural Network and Genetic Algorithm-Based Model for Energy Management in Solar Smart Lighting Systems” in the journal “IEEE Explore – International Conference on Circuit Power and Computing Technologies (ICCPCT)”</p> <p>Doi: 10.1109/ICCPCT70290.2026.11654759</p> <p>Journal Reviewers</p> <p>1. Dr. N.R. Rajagopalan – Chemical Papers, Discover Nano</p> <p>2. Dr. K. Jayamoorthy - Mini Reviews in Organic Chemistry, Chemistry Select, Journal of Chemistry, Journal of Alloys and Compounds Communications, Journal of Materials Science: Materials in Electronics</p> <p>3. Dr. B. Subash - Next Nanotechnology, Pharmacological Research- Modern Chinese Medicine, Surface Interfaces, Current Analytical Chemistry</p> <p>4. Dr. G. Prabha - American Journal of Polymer Science and Technology</p>
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DEPARTMENT OF PHYSICS AND MATHS

Sl.No.	Events	Remarks
1	Collabarative Quality initiatives with other institutions	<ol style="list-style-type: none">1. Dr. K. Manimekalai and Dr. A.Babu, had conducted a school outreach program on the concept of “Unlocking your Engineering Dream” at Ellen Sharma Memorial Matriculation Higher Secondary School at Sholinganallur on 01.08.26.2. Dr. S.Kiruba and Dr. K. Dhanaraj, had conducted a school outreach program on the concept of “Physics in Engineering” at Joshua Matriculation Higher Secondary School, Old Perunkolathur on 01.08.26.3. Dr. S.Suresh, Dr. S. Manikandan and Dr. S. Rama, had conducted a school outreach program on the concept of “AI in Education: Smart Tools for Smart Learners” at St.Peters Matriculation Higher Secondary School Pallikaranai, on 01.08.26.4. Dr. K. Manimekalai, Dr. A. Asha and Dr. A. Babu, had conducted a school outreach program on the concept of “Physics in Actions: Experiments, Demonstrations and Career Pathways” at Good Shepherd International School, Kalpakkam, on 06.08.26.5. Mr. Kaleel Mohammed Ibrahim, Dr. S. Rajeshwari and Dr. R. Stalin Mary, had conducted a school outreach program on the concept of “Physics in

		<p>Actions: Experiments, Demonstrations and Career Pathways” at Christ King Matriculation and Higher Sec School, Tambaram, on 07.08.26.</p> <ol style="list-style-type: none"> 6. Dr. A. Mahalakshmi and Dr. A. Asha, Dr.M. Elumalai had conducted a school outreach program on the concept of “The Physics and Maths for Smart Living” at Infant Jesus Educational Institutions, Kalpakkam, on 08.08.26. 7. Dr. A. Mahalakshmi and Dr. A. Asha, Dr. M. Elumalai had conducted a school outreach program on the concept of “Path to Profession - Career Roadmap” at Shining Star Matriculation School, Kalpakkam, on 08.08.26. 8. Dr. P. Shenbagarajan and Dr. M. Sugandhi, Dr. M. Shiva had conducted a school outreach program on the concept of “The Foundation of Future” at WPA Soundarapandian Hr. Sec School, Ayanavaram, on 12.08.26. 9. Dr. S. Philip Raja and Dr. S. Rama Dr. A. Babu had conducted a school outreach program on the concept of “Powering the World Around Us” at Holy Family Convent Matriculation Higher Secondary School, Keelkattalai, on 18.08.26. 10. Dr. N. Padmamalini and Dr. S. Manikandan Dr. S.Rajeshwari had conducted a school outreach program on the concept of “Significance of Physics and Mathematics in Higher Studies” at Zigma Matriculation Higher Secondary School, Medavakkam, on 22.08.26. 11. Dr. P. Krishnan and Dr. A. Arulmozhi Dr. M.Siva had conducted a school outreach program on the concept of “Build your future with Physics and Mathematics” at Bharath Dass Matriculation School, Perungudi, on 24.08.26.
4	FDP/Workshop/Conference	<p>Presented:</p> <ol style="list-style-type: none"> 1. Dr. M. Elumalai had presented a paper titled “Sharp Kankei Determinant Bounds for Bi-Univariant q-stariike and q-convex Functions involving q-Deformed Libera - zlotkiewicz Representations at international conference organized by - Nazarath Margoschis College at Pillaiyanmanai at 01.08.26. <p>Attended:</p>

		<ol style="list-style-type: none"> 1. Dr. S. Suresh, Dr. S. Philip Raja and Mr. Kaleel Mohamed Ibrahim had attended a online short term course on “Free-Space Quantum Communication” Organized by Centre for Space Science and Technology Education in Asia and the Pacific Dehradun held between 27.07.26 and 31 .07.26. 2. Dr. P. Jayaprakash &Dr. S. Philip Raja had attended six days Faculty Developed program (Online mode) on “Advanced Functional Materials for Sustainable Energy and Radiation Applications “Organized by - Sri Venkateswara College of Engineering Chennai held between 27.07.26 and 01 .08.26. 3. Dr. S. Rajeshwari had attended six days Faculty Developed program (Online mode) on “Advanced Applications of Mathematics in Engineering Systems Machine Learning and Scientific Research Organized by - Nehru Institute of Engineering and Technology, Coimbatore held between 03.08.26 and 10 .08.26. Also attended six days Faculty Developed program (Online mode) on “Mathematics In Action: Interdisciplinary Applications in Physics, Chemistry and Engineering” Organized by - Sri Shakthi Institute of Engineering and Technology held between 03.08.26 and 10 .08.26. 4. Dr. Stalin Mary had attended Five days Faculty Developed program (Online mode) on “Mathematical and Computational Sciences: Emerging Trends and Applications” Organized by – Women’s Christian College, Chennai held between 17.08.26 and 21 .08.26. 5. Dr. P. Krishnan had attended National Symposium on “Engineering Three-Dimensional Porous Transition Metal Nitride, Carbide and carbonitride Electrodes for Electrochemical Energy storage” organized by - SRM Institute of Science and Technology, Ramapuram held on 01-08-2026. 6. Dr. S. Kiruba, Dr. P. Krishnan, Dr. P. Shenbagarajan had attended Five days Faculty Developed program on “Next Gen AI Cybersecurity Solutions for Intelligent and Adaptive Security Systems” organized by - R.M.K. College of Engineering and Technology held between 03.08.26 and 08 .08.26. 7. Dr. M. Elumalai had attended Five days Faculty Developed program on “MATH-ML: Mathematical Foundations and Techniques for Machine
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		Learning and Interdisciplinary Applications” organized by - Amrita Vishwa Vidyapeetham Chennai Campus held between 17.08.26 and 22.08.26.
11	Publications(only published) details	<p>Journal Publications:</p> <ol style="list-style-type: none"> 1. Dr. P. Jayaprakash published a research article titled “Determination of Natural Radioactivity Levels and Evaluation of Radiological Hazards in Coastal Sediment of Kerala with Statistical Approach” in the Journal “Soil and Sediment Contamination: An International Journal”. DOI: 10.1080/15320383.2026.2710241. 2. Dr. S Philip Raja published a research article titled “Defect-induced modulation of magnetic and dielectric properties in Co-doped NiO nanoparticles” in the Journal “Nano Trends”. DOI: 10.1016/j.nwnano.2026.100226. 3. Dr.K Dhanaraj published a research article titled “Enhancement of mechanical and antibacterial properties of glass ionomer cement using oyster shell-derived TiO₂-hydroxyapatite nanorods for dental restoration application “in the Journal “Next Materials”. DOI: 10.1016/j.nxmte.2026.103094. 4. Dr. N. Punitha published a research article titled “Optimisation of single-slope solar still performance using response surface methodology” in the Journal “International Journal of Ambient Energy”. DOI: 10.1080/01430750.2026.2711313. 5. Dr. P Jayaprakash published a research article titled “Smart corrosion control: machine learning and genetic algorithm optimization of imidazole inhibitors” in the Journal “Chemical Papers”. DOI: 0.1007/s11696-026-05362-8. 6. Dr. N. Punitha published a research article titled “Engine operational characteristics of carbon nanotube-doped algae biodiesel with higher alcohol fuel blends” in the Journal “Scientific Reports”. DOI: 10.1038/s41598-026-67267-6. <p>Book Publications:</p> <ol style="list-style-type: none"> 1. Dr. P. Krishnan authored and published a book titled “Quantum Physics and Smart Engineering”, with ISBN 978-81-69804-70-7. <p>Patent Publications:</p>

		<ol style="list-style-type: none"> 1. Dr.N.Punitha had published a patent titled “ An engineered bifeo3 nanoparticle platform for coupled magnetic-electric functional applications" in the "Indian Patent Journal" Application Number: 202641092954, Date: 07.08.2026. 2. Dr.N.Punitha had published a patent titled “a multi-metal oxide nanocomposite composition based on zinc, nickel, and selenium for eco-safe functional use" in the "Indian Patent Journal" Application Number: 202641092842, Date: 07.08.2026. 3. Dr.K.Manimekalai had published a patent titled "Laminated Flax Fiber Insulation system for Acoustic and Therman performance in buildings" in the "Indian Patent Journal "Application number: 202641092384 Date:07.08.2026. 4. Dr. A. Asha has published patent titled "Method and system for enhancing computational efficiency using jacobsthal and jacobsthal-lucas numbers determinants" Application Number: 202641099091, Published Date- 28.08.26. 5. Dr.Rajeshwari S had published a patent titled, " Cloud-enabled machine learning framework for real-time prediction of energy shortages and economic loss during lockdown condition" in the "Indian Patent Journal" Application number:202621067905, dated : 24.07.2026. 6. Dr. P. Krishnan have published a patent application titled “Self-Healing Multifunctional Nanocomposite Coating for Enhanced Corrosion and Thermal Protection”, bearing Application No. 202641080431 A, filed on 30.06.2026, in the Indian Patent Office Journal No. 31/2026, published on 31.07.2026. 7. Dr. P. Krishnan have published a patent application titled" Thermally conductive phase-change composite for passive thermal energy storage" bearing Application No.202641080415 A, filed on 30.06.2026, in the Indian Patent Office Journal No. 31/2026, published on 31.07.2026. 8. Dr. P. Krishnan have published a patent application titled "An Advanced Optical Sensor System for Real-Time Monitoring of Light Intensity and Spectral Variations" bearing Application No.202621079483 in the Indian Patent Office, published on 14.08.2026.
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		<p>9. Dr. S. Philip Raja have published a patent application titled “Microchannel Heat Exchanger with Adaptive Multi-zone Flow Distribution For High-Density Thermal Management Applications”, bearing Application No. 202641094769, in the Indian Patent Office, published on 14.08.2026.</p> <p>10. Dr. S. Philip Raja have published a patent application titled “Intelligent Adaptive DC-DC Converter System and Method for Real-Time Voltage Regulation and Energy Optimization”, bearing Application No. 202641092824, in the Indian Patent Office, published on 07.08.2026.</p> <p>Journal Reviewers</p> <ol style="list-style-type: none"> 1. Dr. S. Suresh - Journal of Plant Biochemistry and Biotechnology, Chemical Papers. 2. Dr. M. Suganthi - Ionics, Bentham Science Publishers. 3. Dr. K. Dhanaraj - Discover Chemistry 4. Dr. S. Rajeshwari - Journal of Fuzzy Extension and Applications 5. Dr. P. Krishnan - Micro and Nanosystems 6. Dr. P. Jayaprakash - Chemical Physics, Heliyon, a Cell Press journal, Journal of Applied Geophysics
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Events conducted:

The following events have been conducted during August 2026 at College Level

1. PLACEMENT ACTIVITIES	Report
a. MOCK INTERVIEW	
	<p>The Department of Electronics and Communication Engineering organized a Mock Interview Bootcamp by Alumni – Preparing for Placements on 1 August 2026 at the Placement Block for the 2023–2027 and 2024–2028 batches. Alumni from reputed organizations shared insights on technical interviews, communication skills, professional etiquette, and recruiter expectations, improving students' placement readiness, confidence, and industry exposure while strengthening alumni–student engagement.</p>



b. ALUMNI TALK

Ms. Arivumathy M, an alumna of the 2010–2014 batch and Programme Administrator at the Indian Institute of Management Bangalore (IIMB), delivered an Alumni Talk on “Believe in Yourself: From Fear to Focus” on 22 August 2026 for III Year students. The session focused on building self-confidence, overcoming fear, setting clear goals, and



**MS. ARIVUMATHY M
PROGRAMME ADMINISTRATOR
INDIAN INSTITUTE OF
MANAGEMENT, BANGALORE**

maintaining focus, and students gained career-oriented motivation.



c. CODEX Workshop



SANTHOSH Y
CO-FOUNDER, DREAMDART

The Department of Electronics and Communication Engineering organized a CODEX Workshop on 17 August 2026 for III Year ECE students, conducted by Mr. Santhosh Y, Co-Founder, Dreamdart. The hands-on, interactive session strengthened students' coding, logical reasoning, analytical thinking, and problem-solving skills, and boosted their confidence in applying programming concepts to real-world challenges.



2. PLACEMENT EMPOWERMENT PROGRAM	
5G/6G - AI POWERED IMAGE PROCESSING WITH MATLAB	
<div data-bbox="281 367 638 712" data-label="Image"> </div> <div data-bbox="686 371 1052 540" data-label="Caption"> <p>Dr. Moupali Roy, Project Associate, ARK Infosolutions Pvt. Ltd., Chennai.</p> </div>	<p>The Department of Electronics and Communication Engineering, with the Placement Empowerment Program Centre and 5G/6G Technology Innovation Centre, organized a one-day workshop on “AI-Powered Image Processing with MATLAB Essentials” on 30 July 2026. Conducted by Dr. Moupali Roy, Project Associate, ARK Infosolutions Pvt. Ltd., Chennai, for II and III Year students, it offered hands-on MATLAB experience in Image Processing and AI, along with Onramp Certification.</p> <div data-bbox="1157 967 1434 1235" data-label="Image"> </div> <div data-bbox="1459 967 1938 1235" data-label="Image"> </div>
3. PROFESSIONAL SOCIETY ACTIVITIES	

a. VLSI-RTL Design and Verification



The Semiconductor and VLSI Design Centre, with Taras Systems and Solutions, Bangalore, organized a five-day Employability Enhancement Course on “SD0212 – RTL Design and Verification” from 10 to 14 August 2026 for III Year ECE and EEE students of Batch 2028. Students gained hands-on exposure to the VLSI design flow, Verilog HDL, SystemVerilog verification, UVM, and ASIC workflows. The course also led to six-month internship opportunities for 55+ top-performing students, with 15+ receiving spot selections.



b. 5G Deep Dive



MR.SANJAY KUMAR
CEO AND FOUNDER
TELCOLEARN

The Department of Electronics & Communication Engineering, with the 5G/6G Technology Innovation Centre and Placement Empowerment Program Centre (PEPC), organized the SD0202 – 5G Deep Dive Employability Enhancement Course from 04 to 08 August 2026 for III Year students. Led by Mr. Sanjay Kumar, CEO and Founder, TelcoLearn, it covered 5G architecture, radio technologies, and deployment, with MATLAB-based SDR demonstrations, testbed demonstrations, and Wireshark analysis of 5G call flows, enhancing technical competence and industry readiness.



c. Data Analytics Bootcamp



MR.JAGATHISHWARAN
AIML ENGINEER
IQMATH TECHNOLOGIES LLP

The Department of Electronics and Communication Engineering organized the five-day SD0203 – Data Analytics Bootcamp for 56 III Year ECE students of Batch 2028 from 10 to 14 August 2026. Conducted by Mr. Jagathishwaran P, AIML Engineer, IQMATH Technologies LLP, it covered Excel, SQL, Python, statistics, machine learning, and Power BI, strengthening students' analytical and problem-solving skills and supporting placement preparation, internships, and projects.



4. PROFESSIONAL SOCIETY ACTIVITIES	
a) IEEE - IEI Conference	
 <p>Chennai, Tamil Nadu, India Adams Road, Triplicane, Chennai, Tamil Nadu 600005, India Lat 13.066862, Long 80.281810 Saturday, 08/08/2026 04:28 PM GMT+05:30 Note : Captured by GPS Map Camera</p>	<p>The Department of Electronics and Communication Engineering participated in the one-day conference “The Engineer’s Role in India’s Nuclear Energy Mission” on 8 August 2026 at the IEI Main Auditorium, Chennai, organized with the IEEE Student Branch, IEI Kalpakkam Local Centre, and IEI Tamil Nadu State Centre. 64 ECE students from II, III and IV Year gained exposure to India’s nuclear energy programme, fast breeder reactor development, clean-energy technologies, and safety, and were encouraged to explore research and career opportunities in the sector.</p>



b) IEEE - Project Expo

The Department of Electronics and Communication Engineering organized School Visit – Project Expo 2026 at MCC Public School, Chetpet, on 18 August 2026. Through live project demonstrations and interactive activities, school students were introduced to electronics, hardware, Tinkercad, and emerging technologies, fostering curiosity in STEM, while IEEE members and student volunteers strengthened their communication and mentoring skills. The activity aligned with SDG 4 and SDG 9.



c) IEEE - INTERNATIONAL RESEARCH SEMINAR

An International Research Seminar on “Frontiers in Intelligent Signal Processing: Adaptive Algorithms, Machine Learning, and Audio Intelligence” was organized by the Department of Electronics and Communication Engineering in association with IEEE. The resource person, Dr. Asutosh Kar, Senior Lecturer, Birmingham City University, UK, covered active noise cancellation, adaptive signal processing,



**Dr. Asutosh Kar,
Senior Lecturer in Audio
Engineering at Birmingham City
University,
(United Kingdom)UK.**

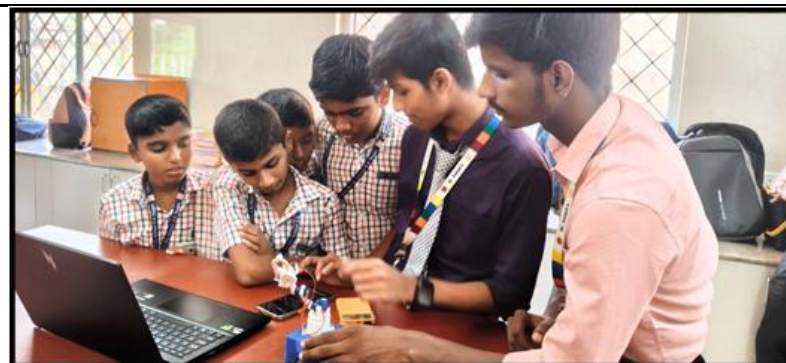
research methodologies, and postgraduate study prospects in the UK.



d) OPTICA - STEM Activity



The OPTICA Student Chapter of the Department of Electronics and Communication Engineering organized a STEM Activity School Visit at All Angels Matric Higher Secondary School, K.K. Nagar, Chennai, on 12 August 2026. The Project Expo and STEM Workshop engaged 215 students from Classes IX to XII (180 from Classes IX and X, 35 from Classes XI and XII) through prototypes, sensor-based circuits, and hands-on demonstrations, fostering creativity, teamwork, and interest in engineering.



e) OPTICA - TECHNICAL TALK

OPTICA - TECHNICAL TALK



**Mr. T. Rakesh,
Scientist 'E'
from the Centre for Development of
Advanced Computing (C-DAC),
Chennai.**

The OPTICA Student Chapter of the Department of Electronics and Communication Engineering organized a technical talk on “Cyber Security and Optical Sciences: Exploring Emerging Technologies” on 13 August 2026 for 78 students. Delivered by Mr. T. Rakesh, Scientist ‘E’, C-DAC, Chennai, the session enhanced students’ awareness of cyber threats, mitigation strategies, and emerging technologies, and encouraged them to pursue projects and higher studies in these areas.



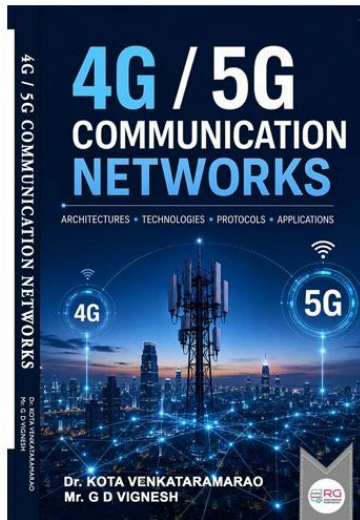
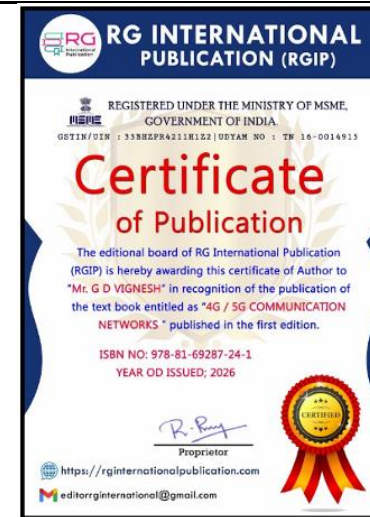
f) IETE & ED CELL - PROJECT EXPO

A Project Expo was organized by the ED Cell and IETE for the 11th and 12th Standard students of St. Johns Matriculation Higher Secondary School, Perungalathur, to foster innovation and practical learning. Students showcased working models in science, technology, electronics, and environmental solutions, enhancing their problem-solving, teamwork, communication, and presentation skills and encouraging an entrepreneurial mindset.

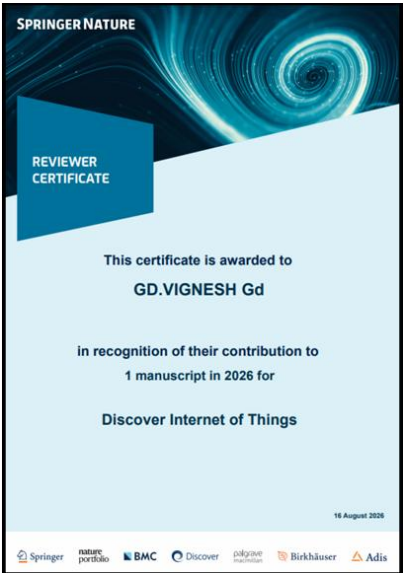


STAFF ACHIEVEMENTS

a. STAFF ACHIEVEMENTS



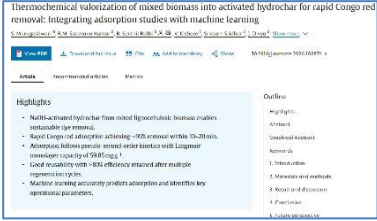
Mr. G. D. Vignesh has been recognized by RG International Publication (RGIP) with a Certificate of Publication for authoring the book titled “4G/5G Communication Networks,” published in its first edition in 2026.

	 <p>SPRINGER NATURE</p> <p>REVIEWER CERTIFICATE</p> <p>This certificate is awarded to GD.VIGNESH Gd</p> <p>in recognition of their contribution to 1 manuscript in 2026 for Discover Internet of Things</p> <p>16 August 2026</p> <p>Springer Nature Portfolio BMC Discover Palgrave Macmillan Birkhäuser Adis</p> <p>G. D. Vignesh was awarded a Reviewer Certificate by Springer Nature in recognition of his contribution as a reviewer for one manuscript in 2026. The manuscript was associated with Discover Internet of Things, reflecting his contribution to the peer-review process. The certificate was issued on 16 August 2026.</p>
<p>b. PATENTS</p>	

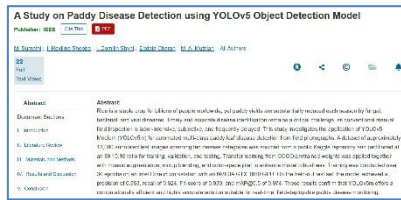
	<p>Mr. G. D. Vignesh, Assistant Professor, Department of ECE, is an inventor of the patent “Adaptive Deep Reinforcement Learning System for Real-Time Navigation in Complex Autonomous Environments”, published on 31 July 2026. The invention focuses on AI, Deep Reinforcement Learning, sensor-based decision-making, navigation. and autonomous</p> <p>Mrs. Thenmozhi P, Assistant Professor, Department of ECE, contributed to the patent “Smart Wear Guardian,” filed on 26 May 2026 and published on 10 July 2026. The invention focuses on smart wearable technology, safety monitoring, and intelligent personal protection.</p>
6) PUBLICATIONS	

Journal Publications

1. Dr.A.M.Balamurugan, Associate Professor, Department of ECE, has published a journal titled “Ultra high optical fiber system capacity through advanced optical signal processing based on optimum optical fiber design configurations with spatial optical coherent transceiver system” in the 2026 Journal of Optical Communications.
2. Dr. S. Rajesh Kannan, Professor, Department of ECE, has published a journal titled “Load Bearing Performance of Alkali-Silane-Treated Pineapple Fiber and Polyethylene Terephthalate Core-Reinforced Sandwich Composite for Building Applications” in Waste and Biomass Valorization.
3. Dr.Lakshmi D., Associate Professor, Department of ECE, has published a paper titled “Advanced Automated Parking Management System Using FPGA, AI, LiDAR, and Blockchain for Smart Cities” in Lecture Notes in Networks and Systems (LNNS 1674).
4. Dr. Lakshmi D., Associate Professor, Department of ECE, has published a paper titled “A Multimodal Hybrid Framework Integrating Hypergraph-Spatio Cognitive Transformers, Cross-Modal Adaptive Embeddings, and Temporal Attention Fusion Networks for Enhanced Early Detection of Autism Spectrum Disorder” in the Proceedings of the International Conference on Smart Electronic Devices and Intelligent Systems (ICSEDIS 2026).
5. Dr. Martin Leo Manickam J, Professor, Department of ECE, has published a journal titled “CCSW-RLNC: A Deep Learning-Enhanced Color-Coded Sliding Window Approach for Efficient Network Coding” in the International Journal of Communication Systems, Volume 39, Issue 9.

DEPARTMENT OF INFORMATION TECHNOLOGY		
	Photographs Captured During Event/Screenshot	Corresponding remarks in regarding the status of activity execution
1.	<div></div> <p>Co-Author Dr. Divya J, published a scopus indexed paper</p>	<p><u>Staff Publication</u></p> <p>Murugeswari S, Kumar, Saravana, Rathi, B. Senthil, Kishore V., Sridhar, Sriraam, Divya J., "Thermochemical valorization of mixed biomass into activated hydrochar for rapid Congo red removal: Integrating adsorption studies with machine learning" Next Materials, 2026, DOI: 10.1016/j.nxmte.2026.102874, ISSN 29498228, Volume 13, Article number 102874, October 2026 (Indexed in Scopus)</p> <p>Abstract</p> <p>Azo dye pollution from compounds such as Congo red (CR) remains a major environmental concern due to their persistence, toxicity, and resistance to conventional treatment methods. This study demonstrates a sustainable biomass waste valorization strategy by converting mixed lignocellulosic residues into NaOH-activated hydrochar through hydrothermal carbonization and evaluating its efficiency for CR removal. Characterization confirmed the formation of an amorphous, porous structure enriched with oxygen-containing functional groups that enhanced adsorption performance. Batch experiments showed rapid adsorption, achieving nearly 99% CR removal within 10 min under acidic conditions at 30°C. Kinetic data followed the pseudo-second-order model, while equilibrium data were best described by the Langmuir isotherm, indicating favorable monolayer adsorption with a maximum capacity of 59.85 mg g⁻¹ . Thermodynamic analysis confirmed that the process was spontaneous and exothermic. By Leave-One-Out Cross-Validation which showed satisfactory predictive capability for the experimental datasets investigated The integration of hydrothermal biomass valorization with AI-driven analysis provides an effective and sustainable approach for wastewater remediation and resource recovery.</p>

2.



Co-Author
Ms. I. Domilin Shyni
 published a scopus indexed
 paper

M. Sumathi, I. R. Sheeba, I. D. Shyni, E. Charan and M. A. Muthiah, "A Study on Paddy Disease Detection using YOLOv5 Object Detection Model," 2026 6th International Conference on Pervasive Computing and Social Networking (ICPCSN), Salem, India, 2026, pp. 939-944, doi: 10.1109/ICPCSN68523.2026.11543917. (Indexed in scopus)

Abstract:

Rice is a staple crop for billions of people worldwide, yet paddy yields are substantially reduced each season by fungal, bacterial, and viral diseases. Timely and accurate disease identification remains a critical challenge, as conventional manual field inspection is labor-intensive, subjective, and frequently delayed. This study investigates the application of YOLOv5 Medium (YOLOv5m) for automated multi-class paddy leaf disease detection from field photographs. A dataset of approximately 13,000 annotated leaf images spanning ten disease categories was sourced from a public Kaggle repository and partitioned at an 80:10:10 ratio for training, validation, and testing. Transfer learning from COCO-pretrained weights was applied together with mosaic augmentation, mixup blending, and color-space jitter to enhance model robustness. Training was conducted over 30 epochs on an Intel Core i5 workstation with an NVIDIA GTX 1650 GPU. On the held-out test set, the model achieved a precision of 0.953, recall of 0.924, F1-score of 0.930, and mAP@0.5 of 0.974. These results confirm that YOLOv5m offers a computationally efficient and highly accurate solution suitable for real-time, field-deployable paddy disease monitoring.

3.



Co-Author
Dr. K Madhan,
 published a scopus indexed
 paper

S Nancy Lima Christy, C Santhosh Kumar, P Esaiarasi, N Gurusamy, N Shanmugapriya and **K Madhan**, "ML-based Endpoint Security: Advancing from Reactive Defense to Proactive Protection", AI-Driven Threat Intelligence Frameworks: Revolutionizing Enterprise Cybersecurity, Book Chapter 2026, Pp: 164-190 (27), Publisher Bentham Science Publishers, 1 January 2026, DOI: 10.2174/9798898813840126010010. (Indexed in Scopus)

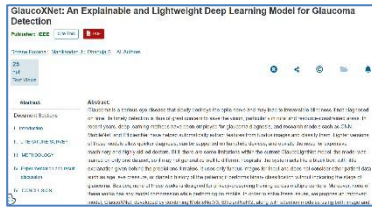
Abstract:

The rapidly changing cybersecurity environment makes enterprise system endpoints the main targets that cybercriminals use to gain access illegally. Web-based work and mobile devices, as well as IoT technologies, have substantially increased the potential attack space for endpoints. Modern cyber threats, along with ransomware-induced service attacks and fileless malware, and adversary artificial intelligence threats, diminish the effectiveness of traditional detection signatures at the endpoint. This chapter examines Artificial Intelligence that reinforces the defense at the endpoint to evolve towards predictive defense from conventional reactive controls. With machine learning partnered with natural language processing, along with behavioural analytics, AI enables real-time detection of threats, along with automation of incident response, while introducing security controls that adjust based on moving attack targets. The article discusses the ethical dimensions as well as regulatory positions while illustrating how generative AIs can evolve into systems that heal themselves while running autonomously to defend endpoints. The chapter provides essential guidance to organizations that want to develop AI-based automated endpoint security capabilities within the context of contemporary cyber defense.

4.	<div data-bbox="380 172 693 519"> <p>Chapter 11</p> <p>Early Detection and Automatic Diagnosis of Autism Spectrum Disorder Using Transformer Model</p> <p>S.M. Keerthana, Sasikala K. Subha, G. Smilarubavathy</p> <p>Book Editors: S.M. Keerthana, Sasikala K. Subha, G. Smilarubavathy</p> <p>First published: 28 July 2026 https://doi.org/10.1002/9781394408511.ch11</p> <hr/> <p>Summary</p> <p>The ever-growing field of artificial intelligence (AI) has revolutionized numerous industries, but its impact on healthcare has been more cautious due to the ethical considerations surrounding life-or-death decisions. Although many models have been developed to detect the disease, early detection of autism is still a challenging task. It starts even before the age of 3 years and goes unnoticed until their life cycle. In early stage, they start learning and living a healthy lifestyle where it gets degraded at a point in time. However, transformer models offer a promising avenue for assisting in the automation of patient diagnosis. This chapter explores the potential of transfer learning to detect autism using brain images and then transformers to automatically diagnose autism. It analyzes vast amounts of medical data, including patient symptoms, medical history, and electronic health records. By leveraging these data, large language models (LLMs) can be trained to identify patterns and correlations associated with neurological diseases and diagnose autism. This could significantly improve diagnostic accuracy and efficiency, particularly in settings where access to experienced medical professionals might be limited. The chapter acknowledges the limitations of current AI technology. LLMs cannot definitively diagnose diseases on their own. However, they can act as intelligent assistants, flagging potential diagnoses and providing clinicians with relevant medical information. This can streamline the diagnostic process, allowing healthcare</p> </div> <div data-bbox="369 537 688 670"> <p>Co-Authors Ms. K. Subha, published a scopus indexed paper</p> </div>	<p>S.M. Keerthana, Sasikala, K. Subha, G. Smilarubavathy, “Early Detection and Automatic Diagnosis of Autism Spectrum Disorder Using Transformer Model”, First published: 28 July 2026, Book: AI-Driven Threat Intelligence Frameworks: Revolutionizing Enterprise Cybersecurity, https://doi.org/10.1002/9781394408511.ch11. (Indexed in Scopus)</p> <p>Abstract:</p> <p>The ever-growing field of artificial intelligence (AI) has revolutionized numerous industries, but its impact on healthcare has been more cautious due to the ethical considerations surrounding life-or-death decisions. Although many models have been developed to detect the disease, early detection of autism is still a challenging task. It starts even before the age of 3 years and goes unnoticed until their life cycle. This chapter explores the potential of transfer learning to detect autism using brain images and then transformers to automatically diagnose autism. It analyzes vast amounts of medical data, including patient symptoms, medical history, and electronic health records. By leveraging these data, large language models (LLMs) can be trained to identify patterns and correlations associated with neurological diseases and diagnose autism. This could significantly improve diagnostic accuracy and efficiency, particularly in settings where access to experienced medical professionals might be limited. However, they can act as intelligent assistants, flagging potential diagnoses and providing clinicians with relevant medical information. This can streamline the diagnostic process, allowing healthcare professionals to focus on patient interaction and complex medical cases.</p>
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<p>5.</p>	 <p>Authors Rubika, R., Rajan, S.S. and Dr.Elavarasan, R, published a scopus indexed paper</p>	<p>Rubika, R., Rajan, S.S. and Elavarasan, R., “Voice-Based Scam Detection System Using Lightweight Speech-Transformer Models for Real-Time Phone Call Monitoring”. In 2026 1st International Electronics & Packaging Technologies Conference: Bridging Skills & Innovation for India’s Industry (EPT India) (pp. 1-6), 2026, March, IEEE. (Indexed in Scopus)</p> <p>Abstract: Financial fraud and social engineering schemes that are voice-based have increased over the past years, particularly due to the development of mobile banking, digital payment systems and VoIP communication. The destructive powers of fear, urgency, pressure of authority, or fake rewards are the typical tools of manipulation by the scammers who manipulate the victims by playing with human psychology. Majority of the available scam detection methods rely on blacklist databases, keyword check or after-incident methods and thus they are ineffective in detecting ever changing fraud scripts, multilingual dialogues and new deepfaked voices that are able to replicate trusted callers. To overcome this obstacle the proposed research development is a lightweight hybrid deep learning framework fusing a Speech Transformer and a 1D-CNN to classify scam calls in real time using a limited amount of resources. To train three models, 1,200 labeled audio samples, including both real scam calls, synthetic variants, and real speech of various accents and languages were used: CNN-RNN baseline, a single Speech Transformer, and the hybrid model. The CNN isolates the acoustic and prosodic features like pitch change, stress, and urgency tone whereas the transformer isolates the more semantic meaning, conversation flow, and intent. As experimental findings indicate, the hybrid model was the highest-performing model, with an F1-score of 94.8, compared to both the baseline CNNRNN model (87.6%), and the standalone transformer (92.1%), and is small enough to be deployed in real-time. These results indicate that contextual transformer reasoning coupled with the use of lightweight convolutional audio analysis provides a dependable and scalable method of scam call detection to be used in cybersecurity.</p>
<p>6.</p>	 <p>Authors Sanjai, K., Santhosh, S., and Mrs. Jeyapriya J, published a scopus indexed paper</p>	<p>Sanjai, K., Santhosh, S., and Jeyapriya J, “Crater Machine Learning-Enhanced Cloud Ransomware Response Platform with Automated GitOps Recovery”. In 2025 IEEE 9th International Conference on Information and Communication Technology (CICT) (pp. 1-7), 2025, December. IEEE.</p> <p>Abstract: Cloud ransomware attacks have become more advanced than mere file encryption. Current attacks involve cloud-native APIs for deleting data and disrupting services. Tools used for cloud ransomware identification have poor accuracy with an abundance of false positives, which reach up to 30%, with no automated recovery capability. To address this challenge, this research proposes CRATER (Cloud Ransomware Automated Threat Elimination and Recovery) based on a combination of machine learning behavioral analysis with a GitOps-Based infrastructure recovery technique. Our solution can detect cloud ransomware with a total accuracy of 94.7%, with a false positive rate of 3.2%, using Adaptive Containment and API sequence analysis. Our average recovery time is 87 seconds with a service availability of 99.1%, a 12-fold performance improvement over manual solutions. Lateral spread is successfully contained in 98.6% of attacks.</p>

7.



Authors
Roxana, D., Dr.
Manikandan, J. and
Dhanuja, S.,
 published a scopus indexed
 paper

Roxana, D., Manikandan, J. and Dhanuja, S., “GlaucoXNet: An Explainable and Lightweight Deep Learning Model for Glaucoma Detection”. In 2025 International Conference on Intelligent & Innovative Practices in Engineering & Management (IIPEM) (pp. 1-6), 2025, November, IEEE.

Abstract:

Glaucoma is a serious eye disease that slowly destroys the optic nerve and may lead to irreversible blindness if not diagnosed on time. Its timely detection is thus of great concern to save the vision, particularly in rural and resource-constrained areas. In recent years, deep learning methods have been employed for glaucoma diagnosis, and research models such as CNN, MobileNet, and EfficientNet have helped automatically extract features from fundus images and classify them. Lighter versions of these models allow quicker diagnosis, can be supported on handheld devices, and obviate the need for expensive machinery and highly skilled doctors. It uses only fundus images for input and does not consider other patient data such as age, eye pressure, or diabetic history of the patients; it performs binary classification without indicating the stage of glaucoma. Besides, none of these works is designed for privacy-preserving training across multiple centers. Moreover, none of these works has any model compression while performing on mobile. In order to solve these issues, we propose an improved model, GlaucoXNet, developed by combining MobileNetV3, EfficientNetV2, along with attention modules using both image and patient data. GlaucoXNet, using explainable AI with federated learning, gives clear and privacy-safeguarded predictions, works effectively on mobile devices, and it can classify the different stages of glaucoma with 96.8% accuracy, higher than 94.5% of GlaucoLightNet.

8.



Author
Snega, S., Dr.
Manikandan, J. and
Shalom Judi Pushpam, L.,
 published a scopus indexed
 paper

Snega, S., Manikandan, J. and Shalom Judi Pushpam, L., “BrainArcNet: Attention-Enhanced InceptionResNetV2 with ArcFace for Accurate Brain Tumor Classification from MRI Scans”. In 2026 2nd International Conference on Big Data & Machine Learning (ICBDML) (pp. 1-6), 2026, February, IEEE.

Abstract:

Brain tumors are among the more fatal neurological problems, where early and accurate diagnosis is a major factor in the success of the treatment. MRI is the most suitable method for tumor detection because of its high-resolution soft-tissue contrast. Still, manual interpretation of MRI scans is a source of inter-observer variability and requires a great deal of expertise. In order to alleviate these issues, we present a deep learning framework BrainArcNet that fuses InceptionResNetV2 as the backbone network merged with a Convolutional Block Attention Module (CBAM) for the additional feature refinement and an ArcFace classification head to facilitate the angular margin-based separability in the embedding space. These steps help in enhancing contrast and standardizing intensity distributions. Experiments were conducted on the Kaggle Brain Tumor MRI Dataset, which includes 7023 T1-weighted contrast-enhanced images across four types they are glioma, meningioma, pituitary tumor, and no tumor. Preliminary results demonstrate that the proposed model achieves ~90–96% classification accuracy, which is a realistic and achievable performance range for beginner-level implementations when using transfer learning and moderate computational resources. With further finetuning, data augmentation, and hyperparameter optimization, the model has the potential to give more accuracy.

9.	 <p>Author Omega, Priyadharshni A, H. and Dr. Aneesh Euprazia L, A, published a scopus indexed paper</p>	<p>Omega, Priyadharshni A, H. and Aneesh Euprazia L, A., “Skin Dehydration Tendency Estimation using Smartphone Macro Images via Micro-Texture Entropy and ResNet50 Transfer Learning”. In 2026 7th International Conference on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV) (pp. 1517-1523), 2026, May, pp. 1517-1523, doi: 10.1109/ICICV68925.2026.11554773, IEEE.</p> <p>Abstract: Skin dehydration is a significant indicator of dermatological and physiological conditions, but the existing methods of assessment involve invasive sensors or advanced medical equipment. This paper describes a non-invasive skin dehydration detection system that uses deep learning and image processing techniques. The proposed system uses a convolutional neural network developed on the ResNet50 model to classify skin images into four dehydration categories: Normal, Mild, Moderate, and Severe. The dataset is then arranged in class-wise folders and preprocessed using image resizing, normalization, and augmentation techniques to improve the robustness of the model and prevent overfitting. The trained model identifies the characteristic texture and surface patterns of dehydration levels. The experimental results show that the proposed system is capable of classifying dehydration levels effectively, offering a low-cost and user-friendly solution to dehydration measurement systems based on sensors.</p>
10	 <p>Author Mrs. Kavitha A; Lohithadevi M; Kaviya Suresh, published a scopus indexed paper</p>	<p>Kavitha A; Lohithadevi M; Kaviya Suresh "Self-Supervised Multi-Scale Vision Transformer Framework for Early Detection and Segmentation of Brain Tumors in 3D MRI Volumes using Hybrid CNN-Transformer Architectures," 2026 4th International Conference on Sustainable Computing and Smart Systems (ICSCSS), Coimbatore, India, 2026, pp. 88-95, doi: 10.1109/ICSCSS69635.2026.11646125.</p> <p>Abstract: One of the most aggressive and lethal forms of neoplasia is brain tumor because they are typically diagnosed at an advanced stage, and there are inherent surgical complexities associated with the neuro-anatomic environment. To fill this critical diagnostic gap, the new methodology has been proposed that will be used to accurately and early segment tumor boundaries in 3D volumes of MRI. The framework is a Multi-Scale Self-Supervised Hybrid (MSSH) that was optimized in a unique way by hierarchical neural synthesis. Although recent developments have pursued 3D Self-Supervised Contrastive Learning to detect glioblastoma and Vision-Language Models to diagnose multimodally. The design explicitly targets the capture of the multifaceted topology of structural and reactive neuro-oncological features. Moreover, a multi-scale attention-based fusion framework enables the system to obtain context-related information at diverse resolutions, which is quite useful in classifying complex brain pathologies. The combination of these hybrid modules, combined with the resource efficient mixed-precision training, is what ensures that the system is not only explainable, but also fully deployable on commodity-grade clinical hardware. Quantitative validation is used to confirm the accuracy of the framework, with the Dice Similarity Coefficient (DSC) showing a value of 0.938 and Hausdorff Distance (HD95) at 2.84mm. Finally, the proposed system supports patient-specific planning of surgery and enhances the overall prognosis through the provision of a comprehensive volumetric analysis of the 3D tumor data.</p>

11.



Author
Mrs. Kavitha A; Jeya
Sherlyne P; Jovita Rex A,
 published a scopus indexed
 paper

Kavitha A; Jeya Sherlyne P; Jovita Rex A, "Cross-Domain Transfer Learning and Self-Supervised Representation Learning for Automated Histopathological Image Classification in Colorectal Cancer Grading System," 2026 7th International Conference on Inventive Research in Computing Applications (ICIRCA), Coimbatore, India, 2026, pp. 2044-2050, doi: 10.1109/ICIRCA69024.2026.11570550.

Abstract:

Colorectal cancer (CRC) is an important cause of cancer-related mortality and an effective diagnosis and treatment planning require the accurate histopathological grading. However, pathologist assessment is time consuming, subjective and can be inter-observer variability. Despite the potential of deep learning techniques, it is hindered by issues such as limited availability of labeled data, domain shift, and variability in staining, all of which limit their clinical applicability. This paper gives a cohesive architecture that incorporates cross-domain transfer learning and self-supervised representation learning to automatically grade CRC. It trains powerful feature representations on a self-supervised method based on DINO, and patch-level analysis to give global and cellular features. To cope with domain variability, the DomainAdversarial Neural Networks (DANN) and Maximum Mean Discrepancy (MMD) are used to effectively adapt a domain. Moreover, CycleGAN and Attention-GAN are also used in the generation of synthetic data and in the normalization of stains. This framework includes an attention-based classifier, explainability such as GradCAM to interpretability. Elastic Weight Consolidation (EWC) will enable learning at any time. Experimental outcomes are enhanced accuracy, generalization and reliability which reveal its potentiality of being utilized clinically.

12



Author
Mrs.I. Domilin Shyni,
K. Dinesh and R.
Dhinesh,
 published a scopus
 indexed paper

I. D. Shyni, K. Dinesh and R. Dhinesh, "Deep Hybrid Learning Framework for Disease Prediction from Electronic Health Records," 2026 Third International Conference on Innovations in Cybersecurity and Data Science (ICICDS), Pathum Thani, Thailand, 2026, pp. 403-408, doi: 10.1109/ICICDS70526.2026.11604698. (Indexed in Scopus)

Abstract:

EHRs consist of patient-specific information such as demographic details, medical histories, laboratory tests, and clinician notes. With proper utilization, EHRs have the potential to contribute to early disease detection and improved health decision-making. In this paper, an approach integrating classical machine learning algorithms and deep learning is proposed with a view to achieving more accurate prediction outcomes. For instance, Logistic Regression and Random Forest models are used as the baseline for structured clinical data analysis, whereas CNNs are employed for pattern discovery and relationship mining. The major elements of the proposed model include data preprocessing, feature selection, training of the model, and assessment of the model's performance. From the experiments that were conducted, a hybrid approach was found to have a much better predictive ability than single models. The combination of ensemble learning and deep feature extraction has proven to make the predictions better and more reliable. This model will help clinicians by giving necessary information, especially from large sets of medical data. Also, it can help to reduce the quality of mistakes done in the process of diagnosing the patient and help in improving the overall health of the patient. The proposed method has to be adaptive to future intelligent healthcare systems by complex deep learning systems and real time systems integrations.

13.	 <p>Mrs. Shoba Rajendran Published an India Patent</p>	<p style="text-align: right;"><u>Patent Published</u></p> <p>Title of the invention: AI- Based Diagnostics in Pathology: Automating Tissue Analysis for Accurate Disease Identification</p> <p>Name of Inventor:</p> <ol style="list-style-type: none"> 1. Dr. Sneha Prakash 2. Dr. Vincy Devi V K 3. Anjali Sankar 4. Sukrith Lal P S 5. Rintu Augustine 6. Dr. Pulla Sujarani 7. Kamalakkannan Somasundaram 8. Dr. A. Poongodi 9. Shoba Rajendran 10. Kavitha Pachamuthu <p>Patent Application Number: 202641074291</p> <p>Date of filing of Application: 5/06/2026</p> <p>Publication Date: 26/06/2026</p>
14.	 <p>Mrs. Shoba Rajendran Published an India Patent</p>	<p>Title of the invention: AI-Powered Wearable Biosensor System for Continuous Health Assessment</p> <p>Name of Inventor:</p> <ol style="list-style-type: none"> 1. Dr. Sowmyashree Narayana Setty 2. Dr. Deepa Saragur Nagaraja Murthy 3. Dr. Kannadhsan Suriyan 4. Dr. Kalaivani Ramanathan 5. Ajay Sumantrao Bonde 6. Prathibha Ilanczelian 7. Joshua Sundar Raja Amirtharaj 8. Kavitha Shanmugakani 9. Shoba Rajendran 10. Dr. Poongodi Anbarasi <p>Patent Application Number: 202641085465</p> <p>Date of filing of Application: 13/07/2026</p> <p>Publication Date: 17/07/2026</p>

15.

Application Details	
APPLICATION NUMBER	202641089659
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	23/07/2026
APPLICANT NAME	1. Dr. Resmi. A. M 2. Mithra V 3. Kruthika R 4. Jothi Keerthana Sri M 5. Dr. Nidhi Nagar 6. Charu Srivastava 7. Dr. Manikandan S 8. S. Revathi 9. Dr. V. Ravi Shankar 10. Thanigaivel Sundaram 11. Dr. Purra Anuradha 12. E. Elakkiya
TITLE OF INVENTION	SYSTEM, LEARNING AND DATA ANALYTICS FOR EVIDENCE BASED DECISION MAKING FOR COVID-19, EPIDEMIC PREDICTION AND PREVENTION IN SMART HEALTHCARE SYSTEMS
FIELD OF INVENTION	SOFTWARE TECHNOLOGY
E-MAIL ID FOR RECORDS	apn@apnrecords@gmail.com
ADDITIONAL E-MAIL ID FOR RECORDS	
E-MAIL UPLOADED ORIGIN	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	
PUBLICATION DATE (EST)	31/07/2026

Mrs. E. Elakkiya
Published an India Patent

Title of the invention: Machine Learning-Based Smart Epidemic Intelligence System for Ebola Virus Disease Prediction and Prevention in Smart Healthcare Systems

Name of Inventor:

1. Dr. Resmi. A. M
2. Mithra V
3. Kruthika R
4. Jothi Keerthana Sri M
5. Dr. Nidhi Nagar
6. Charu Srivastava
7. Dr. Manikandan S
8. S. Revathi
9. Dr. V. Ravi Shankar
10. Thanigaivel Sundaram
11. Dr. Purra Anuradha
12. E. Elakkiya

Patent Application Number: 202641089659

Date of filing of Application: 23/07/2026

Publication Date: 31/07/2026

16.

Application Details	
APPLICATION NUMBER	202641096108
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	08/08/2026
APPLICANT NAME	1. Dr. K. Mahendran 2. M. Anusha Sri 3. Dr. C. Ravichandran 4. P.M.G. Jegathambal 5. T. Kalaivani 6. Dhanya Krishnan 7. Avani Anawardekar 8. Madhan K 9. S. Archanadevi 10. Dr. Sumita Kimar 11. Sumita Archanadevi 12. Dr. P. Anuradha
TITLE OF INVENTION	SYSTEM AND METHOD FOR IOT AND MACHINE LEARNING ENABLED SMART CITY INTEGRATED INTELLIGENT PETROL BUNK SYSTEM FOR FUEL DISPENSING ANOMALY PREDICTION AND PREVENTION
FIELD OF INVENTION	COMPUTER SOFTWARE
E-MAIL ID FOR RECORDS	apn@apnrecords@gmail.com
ADDITIONAL E-MAIL ID FOR RECORDS	apn@apnrecords@gmail.com
E-MAIL UPLOADED ORIGIN	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	
PUBLICATION DATE (EST)	21/08/2026

Dr. Madhan K
Published an India Patent

Title of the invention: IOT and Machine Learning Enabled Smart City Integrated Intelligent Petrol Bunk System for Fuel Dispensing Anomaly Prediction and Prevention

Name of Inventor:

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