

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING



AIML Monthly Newsletter: 01-11-25 to 30-11-25



1 Department Activities and Achievements

1.1 Malaysia Visit for Collaboration and Workshop Conduction- INTI University

The visit to INTI International University, Malaysia, on November 19, 2025, was an international outreach initiative by the Department of Computer Science & Engineering -**Artificial Intelligence and Machine Learning** of the School of Engineering at Dayananda Sagar University (DSU). The primary purpose was to explore academic collaborations, conduct a faculty workshop, and strengthen global academic partnerships, aligning with SDG 4 (Quality Education), SDG 9 (Industry, Innovation and Infrastructure), and SDG 17 (Partnership for the goals). The DSU Delegation members present included **Dr. Puttamadappa, Dr. Supriya Mathew, Dr. Udaya Kumar Reddy, Dr. Jayavrinda Vrindavanam, Dr. Princy Randhawa, and Mr. Nitesh Naik**, who were met by INTI Officials, including **Dr. Malathy, Professor Dr. Asokan Vasudevan, and Mr. Kumaresan Krishnasamy**. The event included a formal welcome, presentations on both universities, a lab tour, and discussions on potential joint academic events, research, credit transfer, and student exchange/internship opportunities. The visit culminated in a post-lunch workshop titled “How to Boost Academic Research Using AnswerThis”, delivered by the DSU team to approximately 80 participants (students, faculty, and research scholars), which included interactive demonstrations and a quiz, resulting in a request from INTI for a follow-up online session in January.







1.2 Malaysia Visit for MoU Signing Ceremony and Workshop Conduction- MAHSA University

The two-day visit to MAHSA University, Malaysia, on November 20–21, 2025, was a significant international collaboration initiative by the Department of Computer Science & Engineering (Artificial Intelligence and Machine Learning) of the School of Engineering at Dayananda Sagar University (DSU). DSU served as the Co-Academic Partner for the MAHSA International Conference on Industrial Revolution Information & Communication Technology (Mi-IRICT-2025). The primary purpose was to explore academic collaborations, conduct a pre-conference workshop, participate in the conference, and formalize the partnership through an MOU Signing Ceremony, aligning with SDG 4 (Quality Education), SDG 9

(Industry, Innovation and Infrastructure), and SDG 17 (Partnership for the goals). The DSU Delegation members present included **Dr. Puttamadappa, Dr. Supriya Mathew, Dr. Udaya Kumar Reddy, Dr. Jayavrinda Vrindavanam, Dr. Princy Randhawa**, and Mr. Nitesh Naik, who were met by MAHSA Officials, including **Prof. Emeritus Dato' Ikram Ismail** (Vice Chancellor), **Professor Emeritus Dr. Rosnah Binti Mohd Zain** (Deputy Vice-Chancellor), **Audrey Yong, Ts. Vickneswari Durairajah, Ir. Ts. Suria Prakkash Vijayasuria**, Dr. Sadiq Batcha Abdul Rahim, **Kasirajan Kasipandian**, and **Shanthi Muniandy**. The event included a pre-conference workshop titled **“How to Boost Academic Research using AnswerThis”** delivered by the DSU team on November 20th , attended by around 30 participants, the Keynote Address by Dr. Udaya Kumar Reddy at the Mi-IRICT-2025 inaugural session , student paper presentations , a lab tour , and the successful MOU signing ceremony that formalized collaboration in joint research, student/faculty exchange, and academic events.





1.2 Malaysia Visit for Collaboration and Workshop Conduction- University of Malaya

The visit to the University of Malaya (UM), Kuala Lumpur, on November 22, 2025, was part of the ongoing international academic initiative by the Department of Computer Science & Engineering (Artificial Intelligence and Machine Learning) of the School of Engineering at Dayananda Sagar University (DSU). The primary objectives were to understand UM's research ecosystem, explore collaboration in engineering and AI/ML, and initiate the MOU process for long-term partnership, aligning with SDG 4 (Quality Education), SDG 9 (Industry, Innovation and Infrastructure), and SDG 17 (Partnership for the goals). The DSU Delegation members present included **Dr. Udaya Kumar Reddy, Dr. Jayavrinda Vrindavanam, Dr. Princy Randhawa, and Mr. Nitesh Naik**, who were met by UM Official Professor **Harikrishnan Ramiah**. The visit included a warm welcome, a detailed lab tour showcasing innovation and computational research facilities, productive discussions on joint events, student exchange, and research proposals, with UM expressing strong interest in initiating the MOU process and connecting DSU with their International Affairs and Computer Science teams. The engagement featured a Workshop on “**How to Boost Academic Research using AnswerThis**”, delivered by the DSU team to around 25 participants (students and research scholars), which focused on improving research skills and was well-received.

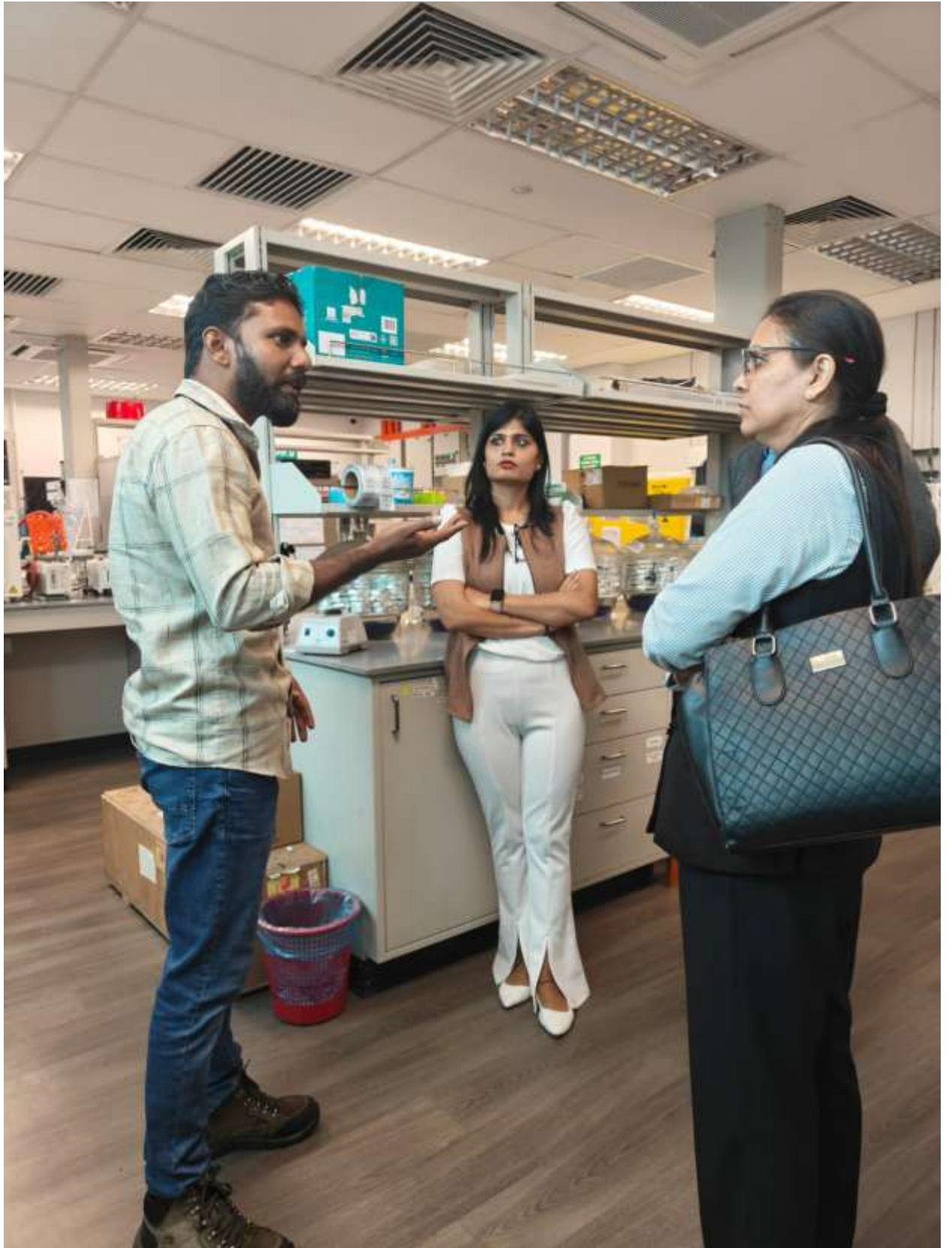


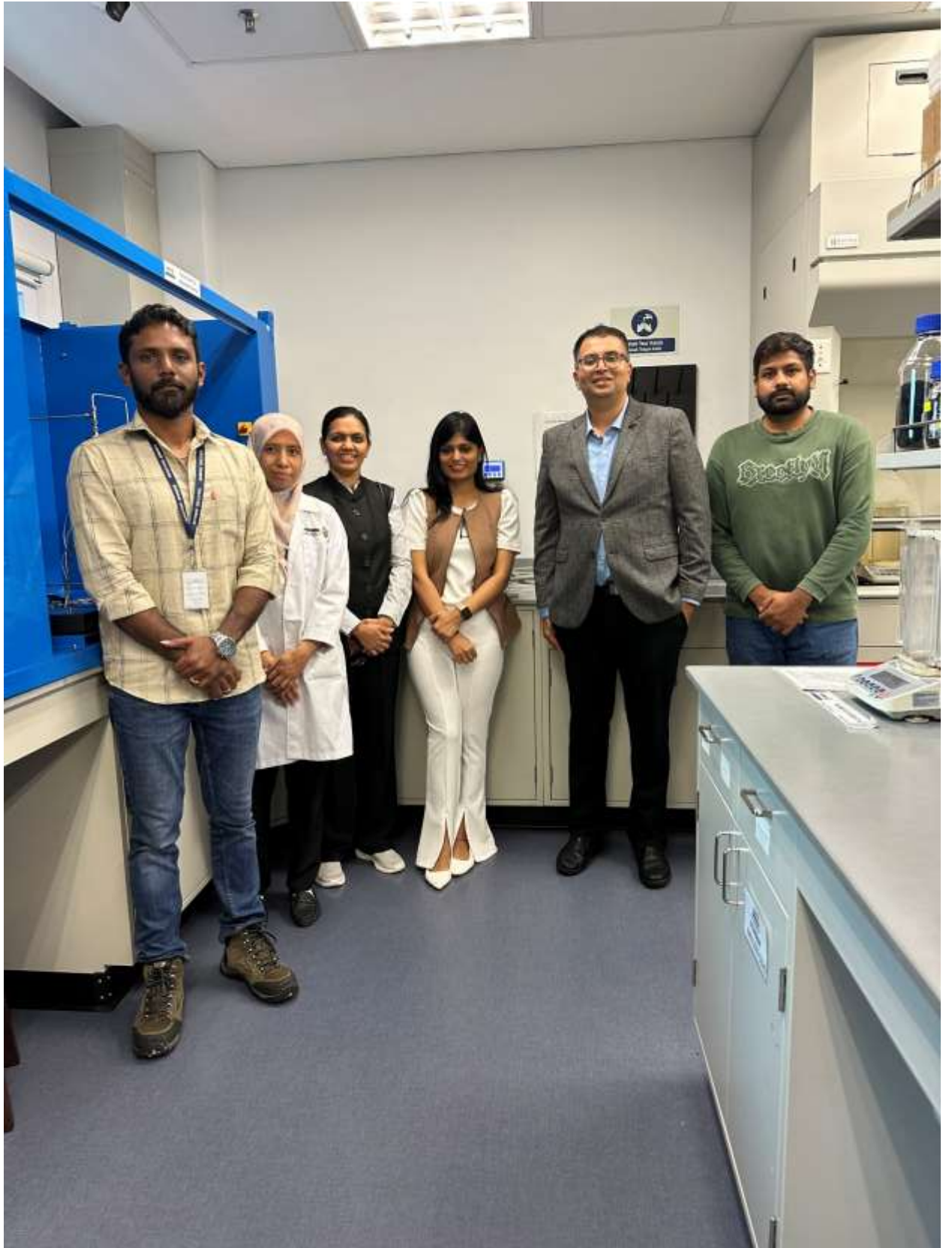


1.3 Malaysia Visit for Collaboration- Sunway University

The visit to Sunway University, Malaysia, on November 21, 2025, was an initiative by the Department of Computer Science & Engineering (Artificial Intelligence and Machine Learning) of the School of Engineering at Dayananda Sagar University (DSU) to expand international academic partnerships and explore collaboration opportunities in research, innovation, and student mobility. The primary objectives included understanding Sunway's research ecosystem, discussing joint research projects, student credit exchange, and exploring research-based project opportunities with stipends for DSU students. The engagement aimed to align with SDG 4 (Quality Education), SDG 9 (Industry, Innovation and Infrastructure), and SDG 17 (Partnership for the goals). The DSU Delegation

members present were **Dr. Jayavrinda Vrindavanam, Dr. Princy Randhawa**, and Mr. Nitesh Naik, who were welcomed by Dr. Kalidasan Balasubramaniam, Lecturer from the Faculty of Engineering and Technology, Sunway University. The visit included a discussion on Sunway's strong QS ranking, a tour of their innovation labs and research facilities , an explanation of the stipend opportunities for research students (Master's research assistantship of 3,000 Ringgit/month for one year and 10,000 Ringgit/year for PhD students) , and an agreement to start joint events immediately, such as workshops and seminars.





1.4 Faculty Catalyze Innovation with Research Seed Grants

Dr. Jayavrinda Vrindavanam, Professor & Chairperson, Department of CSE (AI&ML), School of Engineering, Dayananda Sagar University (DSU), along with Co-Principal Investigators **Prof. Pradeep Kumar K** Assistant Professor, Department of CSE (AI&ML), School of Engineering, Dayananda Sagar University (DSU), and Dr. Kiran Kumar D, was awarded a Seed Money Grant of ₹3,00,000/- (INR). The grant was sanctioned for their project titled "Detection of Cardiovascular Disease using 4 ECG leads signals by applying machine learning Model".

Dr. Bahubali Shiragapur, Professor, and **Dr. Vinutha N**, Associate Professor, from the Department of AI&ML, School of Engineering (SOE), Dayananda Sagar University (DSU), were awarded a Seed Money Grant of ₹4,00,000/- (INR) in August 2025. The grant was sanctioned for their innovative research project titled "Neurotechnology Meets Education: Advancing Multiple Intelligences with BCIs". Dr. Bahubali Shiragapur is the Principal Investigator and Dr. Vinutha N is the Co-Principal Investigator.

2 Student activities

2.1 Ms. Manyashree D, 5-B Section, student of the Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), School of Engineering, Dayananda Sagar University (DSU), was the student representative presenting DSU's community engagement initiatives at the Best Practices Sharing of Community Engagement Initiatives event. The event was jointly organized by the Karnataka State NSS Cell and Azim Premji University, Bengaluru on 6 October 2025 at the Azim Premji University campus. DSU, one of 11 shortlisted universities, showcased its diverse range of initiatives, including NSS activities, Unnat Bharat Abhiyan (UBA) projects, social awareness programs, rural development activities, health and education campaigns, and youth-led service initiatives. Her presentation received high appreciation for its clarity, organization,

innovation, and the strong social commitment reflected by DSU's NSS unit and student volunteers.



2.2 Chethan K. Murthy, 7-A Section, student of the Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), School of Engineering, Dayananda Sagar University (DSU) presented the paper titled “A Hybrid Spiking Convolutional Neural Network for Computationally Efficient Pathology Image Classification” at the 2nd IEEE International Conference on Intelligent Signal Processing and Effective Communication Technologies 2025, held on 07–08 November 2025 at ABV-IIITM Gwalior.



2.3 R L JAYESH and RAJATH U, 5-C Section, students of the Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), School of Engineering, Dayananda Sagar University (DSU), participated in TechnoCognition '25, a 36-hour international protothon at DSU. The event challenged students to build real working prototypes in domains such as IoT, robotics, aerospace, circuits, and AI. It served as a fast-paced innovation sprint for turning ideas into impactful tech solutions, offering ₹3,00,000+ in prizes and funding up to ₹10 lakhs.



3 Faculty activities & Achievements

3.1 Prof.R. Sriramkumar, Assistant Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), Dayananda Sagar University, Bengaluru, has successfully completed the NPTEL course titled “Stress Management” conducted during July–August 2025. The course duration was four weeks, and he secured an overall score of 58.34/75 with a perfect score of 25/25 in assignments, achieving a final consolidated score of 83% with Elite Silver certification. This course has equipped him with valuable insights into stress management techniques, contributing positively to both his personal and professional development.



Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)





This certificate is awarded to

SRIRAMKUMAR R

for successfully completing the course

Stress Management

with a consolidated score of **83** %

Online Assignments	25/25	Proctored Exam	58.34/75
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Total number of candidates certified in this course: **2480**



Jul-Aug 2025

(4 week course)



Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL25HS140S348400129

To verify the certificate



No. of credits recommended: 1 or 2

3.2 Prof. Trupthi Rao, Assistant Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), has presented a paper entitled “Design and Enhanced Analysis of Silk Fabric Classification Using MobileNetV2 with Grad-CAM Interpretability” in 2025 6th Global Conference for Advancement in Technology (GCAT) during 24th to 26th October 2025 held at Nagarjuna College of Engineering & Technology, Bangalore.



3.3 Prof. Trupthi Rao, Assistant Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), has presented a paper entitled “Crop and Farming Technique Selection: A Hybrid Fuzzy AHP-TOPSIS Model” in 2025 6th Global Conference for Advancement in Technology (GCAT) during 24th to 26th October 2025 held at Nagarjuna College of Engineering & Technology, Bangalore.



3.4 Dr.V.K.R. Rajeswari Satuluri, Assistant Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), Dayananda Sagar University, has served as a Resource Person for the Personality Development Workshop organized by SRM Centre for Clinical Pharmacology at SRM Medical College Hospital & Research Centre, held during 7th and 8th November, 2025.



**SRM MEDICAL COLLEGE HOSPITAL &
RESEARCH CENTRE**

Guest Speaker in Personality Development Workshop

Organized by

SRM CENTRE FOR CLINICAL PHARMACOLOGY

on 7th and 8th November 2025



Dr V.K.R. Rajeswari Satuluri

Assistant Professor - CSE-AI & ML Department
Dayananda Sagar University

We appreciate your invaluable contribution as a
Resource Person

3.5 Prof. Trupthi Rao, Assistant Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), has presented a paper entitled “Causal LIME: Enhancing Local Explanations with Causal Perturbations for Military Sensor Data” at the 2025 IEEE Region 10 Conference (TENCON 2025), held at the Sabah International Convention Centre (SICC), Kota Kinabalu, Malaysia, from 27–30 October 2025.



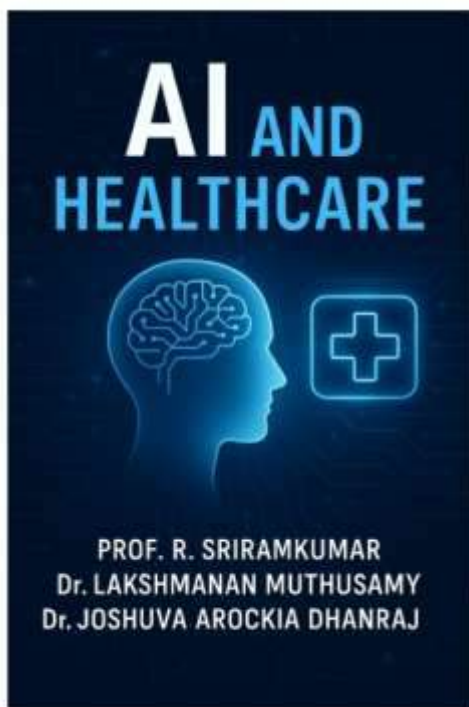
3.6 Prof. Trupthi Rao, Assistant Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), served as a Reviewer during the IEEE International Conference on Electrical, Electronics and Computer Science with Advance Power Technologies – A Future Trend (ICE2CPT 2025), organized by the Department of Electrical Engineering, National Institute of Technology Jamshedpur, in association with the IEEE

Kolkata Section, IEEE Industrial Electronics Society and IEEE Student Branch, NIT Jamshedpur, held from 29th to 31st October 2025.



3.7 Prof. R. Sriramkumar, Assistant Professor, **Dr. M. Lakshmanan**, Assistant Professor, **and Dr. Joshuva Arockia Dhanraj**, Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), School of Engineering, Dayananda Sagar University, has successfully published a book titled “*AI and Healthcare: The Intelligent Future of Medicine*” on Amazon Kindle. The book provides a comprehensive understanding of the applications of Artificial Intelligence in healthcare, including Machine Learning, Deep Learning, Natural Language Processing, and Computer Vision, along with real-world case studies and ethical perspectives. The publication was released under Amazon Kindle Direct Publishing with ASIN: B0G14RV4C8.

Availability: https://www.amazon.in/dp/B0G14RV4C8/ref=sr_1_1?crid=2QQ9P1EI4FF6C&dib=eyJ2IjoiMSJ9.HjZIF9dPTylltIHsTgP1OQ.pgdbEOe4w mnlKQpBSwhJbJXs3B54ZtF2_E9cM9Dzubc&dib_tag=se&keywords=Artificial+Intelligence+and+Healthcare%3A+The+Intelligent+Future+of+Medicine.%3A+AI+and+Healthcare+by+R+Sriramkumar&nsdOptOutParam=true&qid=1762504093&s=digitaltext&sprefix=artificial+intelligence+and+healthcare+the+intelligent+future+of+medicine.+ai+and+healthcare+by+r+sriramku mar%2Cdigital-text%2C193&sr=1-



Title:

AI and Healthcare: The Intelligent Future of Medicine.

Authors:

**Prof.R.SriramKumar, Dr.Lakshmanan M,
Dr.Joshuva Arockia Dhanraj**

Dayananda Sagar University, Bangalore, Karnataka, India .

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Dedicated to AI healthcare professionals and innovators shaping the future of medicine.

3.8 Mr. Govind Kumar Pandey, Assistant Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), School of Engineering, Dayananda Sagar University (DSU), Bangalore, has participated in an online webinar on “RF Power Amplifier Design Methodology” organized by the IEEE Antennas and Propagation Society (AP-S) Student Branch Chapter, IIT Jodhpur, under the IEEE Rajasthan Subsection, held on 11th October, 2025. The session focused on advanced concepts and methodologies in RF power amplifier design.



3.9 Dr. Joshuva Arockia Dhanraj, Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), School of Engineering, Dayananda Sagar University (DSU), Bangalore, has served as a peer reviewer for 16 high-impact Scopus- and SCI-indexed international journals during the period from 1st to 25th November 2025, completing a total of 33 manuscript reviews. His reviews covered multidisciplinary areas including Energy Systems, Artificial Intelligence, Control Engineering, Sustainable Computing, and Environmental Studies, evaluating advanced topics such as federated learning, digital twins, hydrogen technologies, microgrid modelling, and sustainable computing. His contributions significantly supported the dissemination of high-quality research and reflect his strong scholarly engagement with the global research community.



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT

Total journals reviewed for: 16

Total reviews completed: 33



Applied Energy 1



Artificial Intelligence Chemistry 1



Colloids and Surfaces A: Physicochemical and Engineering Aspects 1



Control Engineering Practice 1



Energy Conversion and Management: X 1



Energy Reports 2



Engineering Applications of Artificial Intelligence 5



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Environmental and Sustainability Indicators

1



HardwareX

1



Journal of the Franklin Institute

2



Knowledge-Based Systems

2



Measurement

4



Polyhedron

1



Results in Engineering

1



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Sustainable Computing: Informatics and Systems 8



Sustainable Energy Technologies and Assessments 1



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Applied Energy

1 reviews completed

Manuscript title	Revision	Date completed
Innovative approaches to waste heat recovery: Coupling high temperature vapour compression heat pumps with salt hydrate thermochemical systems	2	10 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Artificial Intelligence Chemistry

1 reviews completed

Manuscript title	Revision	Date completed
Neural networks for neurocomputing circuits: a computational study of tolerance to noise and activation function non-uniformity when machine learning materials properties	1	5 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Colloids and Surfaces A: Physicochemical and Engineering Aspects

1 reviews completed

Manuscript title	Revision	Date completed
Silver-Doped Bioactive spherical Glass Ceramic Nanoparticles with Enhanced Osteogenic and Antibacterial Properties for Bone Tissue Engineering	1	20 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Control Engineering Practice

1 reviews completed

Manuscript title	Revision	Date completed
Wind turbine inflow estimation via nested, self-calibrating EKF: a field test	0	24 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Energy Conversion and Management: X

1 reviews completed

Manuscript title	Revision	Date completed
Navigating towards e-fuel: A scientometric insight into the application of membrane reactors	0	19 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Energy Reports

2 reviews completed

Manuscript title	Revision	Date completed
Optimization of Waste Heat Utilization from Green Hydrogen PEM Electrolyzers for Enhanced Energy Efficiency in Hot Climates: A Persian Gulf Region Airport Study	1	20 November 2025
Decision Analytic Scheme of Emergency Energy Supply Strategies Under Pessimistic Multi-Granulation Roughness of Pythagorean Fuzzy Sets through Soft Relation	0	20 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Engineering Applications of Artificial Intelligence

5 reviews completed

Manuscript title	Revision	Date completed
Adaptive Kalman-Based Federated Learning Framework with ResiDense GRU Network for Railway Point Machine Fault Diagnosis	0	20 November 2025
Enhanced Visual State Space Model for Real-Time Wafer Defect Detection	0	19 November 2025
Physics-informed blind wavelet deconvolution transfer network for cross-machine bearing fault diagnosis	1	19 November 2025
Causal Reliability-Aware Meta-Learning for Industrial Fault Diagnosis	0	10 November 2025
Active Learning Evaluation Metrics for Classification and Regression Frameworks	0	7 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Environmental and Sustainability Indicators

1 reviews completed

Manuscript title	Revision	Date completed
Drivers of variation in wildlife mortality at wind energy facilities: power production, turbine size, and seasonality	0	19 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



HardwareX

1 reviews completed

Manuscript title	Revision	Date completed
Octopus: A low-cost, modular environmental sensing platform for makers.	0	23 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Journal of the Franklin Institute

2 reviews completed

Manuscript title	Revision	Date completed
Estimating the Covariance of Quaternion Measurements from Accelerometer and Magnetometer Using a Least Squares Regression Approach	1	12 November 2025
VMWFusion-Net: An Integrated Deep Fusion Network for Early Fault Diagnosis of DC–DC Converters	1	7 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Knowledge-Based Systems

2 reviews completed

Manuscript title	Revision	Date completed
Physics-Augmented Federated Continual Learning for Rotating Machinery Fault Diagnosis	0	12 November 2025
From Domain-Invariant Channel Adaptation to Prototype Consistency Learning: A Novel Framework for Single Domain Generalization Fault Diagnosis	2	7 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Measurement

4 reviews completed

Manuscript title	Revision	Date completed
Accuracy Analysis of Cross-spectral Bearing for Arbitrary SNR based on the Von Mises distribution	0	19 November 2025
In-Situ Dynamic Transmission Error-Driven Lightweight Wide-Area Deconstruction Network for Gear Spalling Fault Intelligent Diagnosis	0	19 November 2025
Suppression of Common-Mode Interference in Space Accelerometer Data Using Synchronous Angular Measurements	1	6 November 2025
Bayesian probability-based intelligent diagnosis of mechanical faults of integrated high-speed electric powertrain with small samples	1	6 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Polyhedron

1 reviews completed

Manuscript title	Revision	Date completed
The synthesis of a N-SO ₃ H rich functionalized magnetic catalyst based on silica and its efficiency in the synthesis of spiro-indeno[1,2-b]quinoxaline-pyran derivatives	1	19 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Results in Engineering

1 reviews completed

Manuscript title	Revision	Date completed
Environmental Implications of Technological Advancements: A Global Perspective on ICT, Green Innovation, Science, and Economic Factors	0	6 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Sustainable Computing: Informatics and Systems

8 reviews completed

Manuscript title	Revision	Date completed
Design and Performance Assessment of a Green Hydrogen and Renewable Integrated Hybrid Industrial Microgrid with Advanced Control Strategies Considering Uncertainties of Renewable Energy	1	24 November 2025
Integration of Intelligent Building Operation Data Based on Multi Feature Fusion Federated Learning Algorithm	0	20 November 2025
Energy-aware Load Balancing System for Large Language Models Deployed on High-performance Computing Clusters	0	20 November 2025
A Hybrid Fuzzy Logic and Deep Reinforcement Learning Algorithm for Adaptive Task Scheduling and Resource Allocation in Heterogeneous Fog-Cloud Environments	3	19 November 2025
A Digital Twin-Enabled Priority-Driven Attention Graph with Meta-PPO Resource Reclamation Framework for Energy-Efficient Resource Allocation in WBANs	0	19 November 2025
Multi-Objective with Archimedes One-to-One Algorithm enabled Energy Efficient CH Selection and Routing in IoT-enabled WSN	0	19 November 2025
HAPSO: An ACO-Initialized, Discretization-Aware PSO for Energy- and Carbon-Efficient VM Consolidation in Green Cloud Datacenters	1	12 November 2025



Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT

Energy-Efficient Congestion Control in RDMA Networks Using DCQCN for Scalable Performance	3	10 November 2025
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Review History Report

Joshuva Arockia Dhanraj



From: 1 November 2025

To: 25 November 2025

All dates in GMT



Sustainable Energy Technologies and Assessments

1 reviews completed

Manuscript title	Revision	Date completed
Catalytic Sono-Chemical Water Electrolysis for Clean Hydrogen Production	0	7 November 2025

3.10 Dr. Joshuva Arockia Dhanraj, Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), School of Engineering, Dayananda Sagar University (DSU), Bangalore, has been recognized by Springer Nature for serving as a peer reviewer for the journal *Discover Applied Sciences* in 2025, having successfully completed the review of one manuscript. His contribution supported the maintenance of the journal's academic quality and integrity, reflecting his expertise in applied sciences and his commitment to promoting high-quality, evidence-based research publication.



SPRINGER NATURE

**REVIEWER
CERTIFICATE**

**This certificate is awarded to
Joshuva Arockia Dhanraj**

**in recognition of their contribution to
1 manuscript in 2025 for**

Discover Applied Sciences

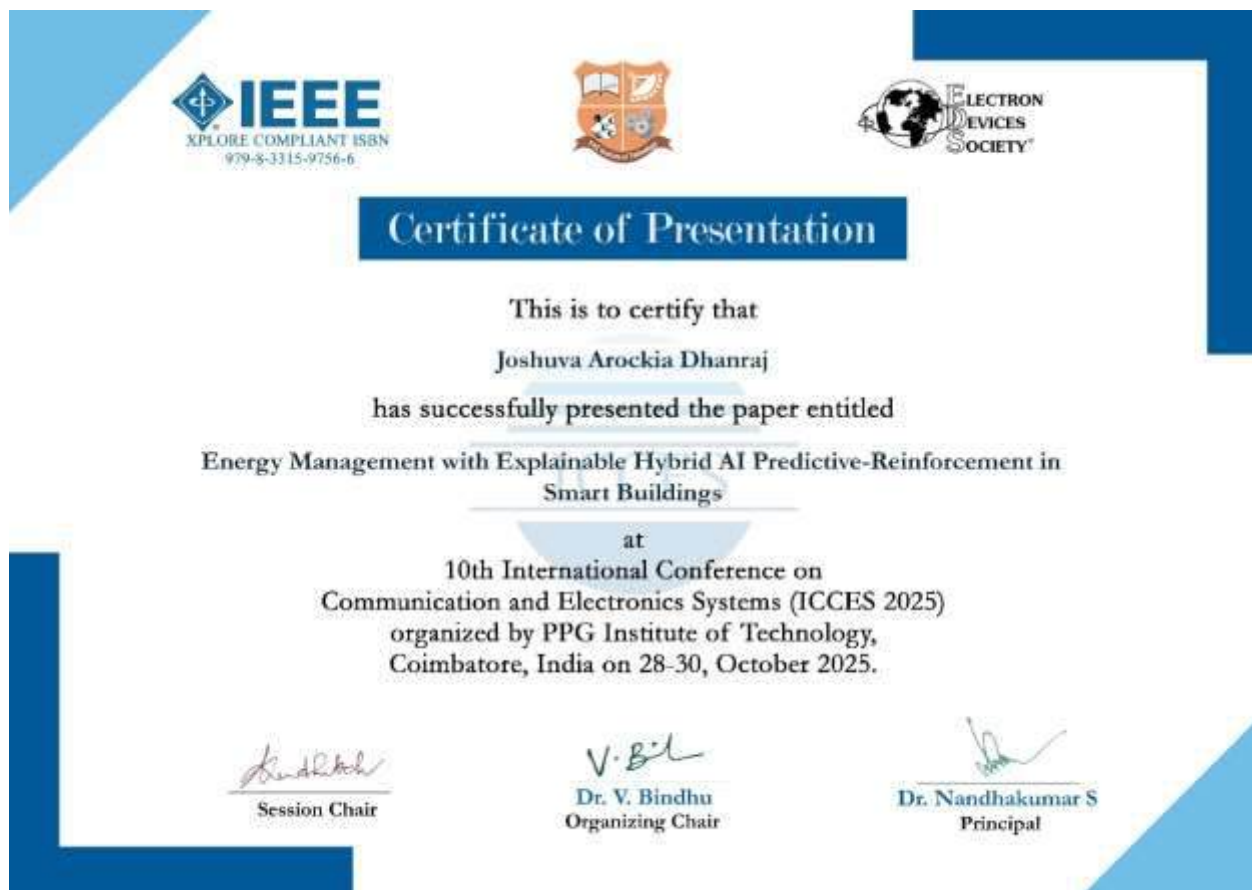
25 November 2025



3.11 Dr. Joshuva Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), School of Engineering, Dayananda Sagar University (DSU), Bangalore, actively participated in the advanced technical webinar titled “Demonstration of ML-Driven VLSI Design Tools”, held on 6 November 2025, organized jointly by AMD-Xilinx and CoreEL Technologies. This certificate highlights his engagement with state-of-the-art VLSI design methodologies that integrate Machine Learning to enhance intelligent design automation workflows. Topics typically covered in this domain include ML-assisted hardware optimization, EDA acceleration, intelligent circuit synthesis, and predictive performance modeling. His participation reflects a strong commitment to continuous upskilling in the rapidly evolving semiconductor and AI-driven automation landscape.



3.12 Dr. Joshuva Arockia Dhanraj, Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), School of Engineering, Dayananda Sagar University (DSU), Bangalore, successfully presented his research paper titled “Energy Management with Explainable Hybrid AI Predictive-Reinforcement in Smart Buildings” at the 10th International Conference on Communication and Electronics Systems (ICCES 2025), held at PPG Institute of Technology, Coimbatore, during 28th to 30th October 2025. This work integrates Explainable Artificial Intelligence (XAI) with Predictive Reinforcement Learning to develop intelligent and transparent energy optimization strategies for smart buildings. His presentation reflects strong research leadership in AI-driven sustainable infrastructure and contributes to global discussions on energy-efficient systems.



3.13 Dr. Joshuva Arockia Dhanraj, Professor, Department of Computer

Science and Engineering (Artificial Intelligence and Machine Learning), School of Engineering, Dayananda Sagar University (DSU), Bangalore, successfully presented his research paper titled “Nanosatellite and IoT-Enabled Climate-NDVI Data Fusion for Accurate Wheat Yield Prediction” at ICCES 2025. The work integrates nanosatellite Earth observation data, IoT-based climate sensing, and NDVI-derived vegetation indices to develop an advanced predictive framework for agricultural yield estimation. His presentation demonstrates strong interdisciplinary research contributions in artificial intelligence, remote sensing, IoT systems, and smart agriculture in line with global trends toward climate-smart and digital farming solutions.



3.14 Dr. Joshuva Arockia Dhanraj, Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), School of Engineering, Dayananda Sagar University (DSU), Bangalore, has served as

an official reviewer for the IEEE International Conference on Electrical, Electronics and Computer Science with Advance Power Technologies – A Future Trend (ICE2CPT 2025), held at NIT Jamshedpur in association with the IEEE Kolkata Section, IEEE Industrial Electronics Society, and IEEE Student Branch. By evaluating technical papers, he contributed to maintaining academic rigor and the overall quality of research presented at the international conference. This recognition highlights his expertise across artificial intelligence, electronics, power systems, and advanced computing.



3.15 Dr. Joshuva Arockia Dhanraj, Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), School of Engineering, Dayananda Sagar University (DSU), Bangalore, successfully completed the AICTE–ATAL Faculty Development Program titled “Next-Gen VLSI and Semiconductor Systems: Integrating Machine Learning for

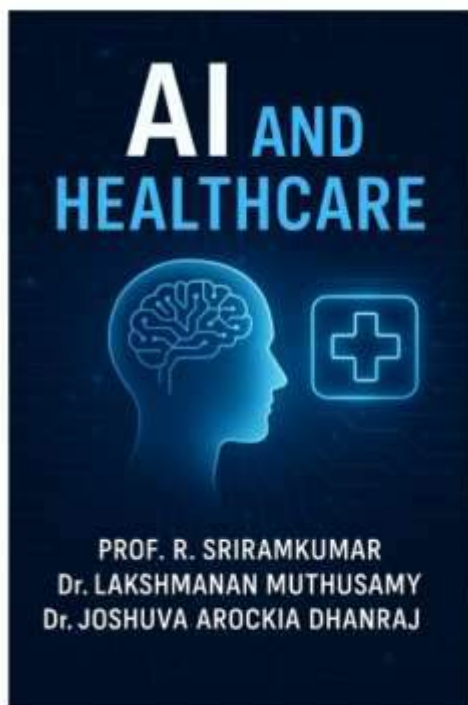
Intelligent Design Automation,” conducted at R.M.D. Engineering College from 3rd to 8th November 2025. The program focused on advanced topics including AI-assisted VLSI automation, machine learning in semiconductor design, hardware acceleration, EDA toolchains, and future semiconductor trends. This FDP strengthened his expertise in the convergence of VLSI and Artificial Intelligence for next-generation chip design and intelligent computing systems.



3.16 Dr. Joshua Arockia Dhanraj, Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), School of Engineering, Dayananda Sagar University (DSU), Bangalore, is a co-author of the book titled “AI in Healthcare: The Intelligent Future of Medicine,” published and listed on Amazon as a Kindle Edition (177 pages), along with Prof. R. Sriramkumar and Dr. M. Lakshmanan. The book offers comprehensive coverage of AI applications in healthcare, including medical

imaging analytics, predictive diagnosis, clinical decision support systems, personalized treatment, and healthcare automation. This publication reflects his scholarly contribution to advancing the integration of artificial intelligence with medical science for real-world healthcare solutions.

Availability: https://www.amazon.in/dp/B0G14RV4C8/ref=sr_1_1?crid=2QQ9P1EI4FF6C&dib=eyJ2IjoiMSJ9.HjZIF9dPTylltIHsTgP1OQ.pgdbEOe4wmnlKQpBSwhJbJXs3B54ZtF2_E9cM9Dzubc&dib_tag=se&keywords=Artificial+Intelligence+and+Healthcare%3A+The+Intelligent+Future+of+Medicine.%3A+AI+and+Healtcare+by+R+Sriramkumar&nsdOptOutParam=true&qid=1762504093&s=digital-text&sprefix=artificial+intelligence+and+healthcare+the+intelligent+future+of+medicine.+ai+and+healtcare+by+r+sriramkumar%2Cdigital-text%2C193&sr=1-



Title:

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3.17 Dr. Vinutha N, Professor, Department of Computer Science and Engineering (Artificial Intelligence and Machine Learning), School of

Engineering, Dayananda Sagar University (DSU), Bangalore, presented the paper titled “Advanced Vision Transformer Ensemble For Automated Polycystic Ovary Syndrome Classification: A Deep Learning Approach With Gpu Optimisation” at the 2nd IEEE International Conference on Intelligent Signal Processing and Effective Communication Technologies 2025, held on 07–08 November 2025 at ABV–IIITM Gwalior.

