



















INTERNATIONAL CONFERENCE on

Artificial Intelligence for Computing, Astronomy and Renewable Energy Organized by Center of Excellence on Renewable Energy



ABOUT AICARE

International Conference on "Artificial Intelligence for Computing, Astronomy and Renewable Energy" (AICARE 2025) is being organized by the Centre Of Excellence in Renewable Energy, UEM Kolkata and Centre Of Excellence in Astronomy, UEM KOLKATA. The conference is technically co-sponsored by IEEE Kolkata Section.Participants from academia, industry, and government agencies come together to present their research findings, discuss challenges and propose innovative solutions to address the evolving demands of the different Engineering fields. Through keynote speeches, technical sessions, and networking opportunities, the conference aims to stimulate interdisciplinary discussions and inspire new avenues of research that contribute to the advancement of modern Artificial Intelligence and IOT based engineering practices worldwide.

AICARE 2025 will be held at the University of Engineering and Management, Kolkata on 21st and 22nd November, 2025.

After review, all accepted and presented papers will appear in IEEE Xplore. *(IEEE CONFERENCE ID: 66005) Paper Submission link: https://cmt3.research.microsoft.com/AICARE2025

SUBJECT TRACKS

AI IN **ASTRONOMY**

- Machine Learning for Astrophysical Data Analysis
- Deep Learning in Image Processing for Astronomy
- Al for Exoplanet Detection and Characterization
- Time Series Analysis of Astronomical Data
- AI in Telescope Automation and Control • Big Data Challenges in Astronomy
- AI-Driven Simulations of Cosmic Phenomena
- Neural Networks for Galaxy Classification
- Al Applications in Radio Astronomy
- Machine Learning for Gravitational Wave Detection
- Predictive Modeling of Stellar Evolution
- Data Mining Techniques for Large Astronomical Surveys AI for Cosmological Simulations and Modeling
- Natural Language Processing in Astronomy Research
- AI in Space Mission Planning and Operations
- Anomaly Detection in Astronomical Observations Al for Multi-Messenger Astronomy
- Visualization Techniques for Al-Generated Astronomical
- Al Ethics and Fairness in Astronomy Research
- Future Trends: Quantum Computing and AI in Astronomy

AI APPLICATIONS IN UAV NETWORKS

- AI enabled UAV applications in Autonomous Navigation and Flight Control
- Computer Vision Techniques for Smart UAVs
- Al-Enhanced Object Detection and Tracking • Swarm Intelligence and Cooperative UAV Systems
- Machine Learning for Environmental Monitoring
- AI enabled UAV Applications in Precision Agriculture
- Data Processing and Analysis for UAV Imagery • Ethics and Regulations in UAV AI Applications
- UAVs in Search and Rescue Operations Security Challenges in UAV Operations and AI Solutions
- New opportunities/challenges/use cases for UAV-enabled
- UAV swarming and coordination for IoT deployments UAV-assisted data collection and analytics for IoT
- applications Protocols and architectures for UAV-enabled MEC
- Computation offloading for UAV-enabled MEC
- UAV's trajectory design for UAV-enabled IoT Spectrum management and multiple access schemes for
- **UAV-enabled IoT** Green energy powered UAV-enabled IoT networks MIMO/massive MIMO/millimeter wave technologies for
- UAV-enabled IoT • Quality of Service provisioning for UAV-enabled IoT
- Network security and information assurance for UAV-

KEY DATES

- 3rd March, 2025 : Full Paper Submission Begins
- : Paper Submission Ends 6th June, 2025
- 4th August, 2025 : Acceptance Notifications
- 15th September, 2025 : Camera Ready Submissions
- 21st and 2nd November, 2025 : Conference Dates

FEES DETAILS

EARLY BIRD REGISTRATION FEE

REGULAR REGISTRATION FEE

| Author Category | IEEE Members Fee | Non-IEEE Members Fee | Author Category | IEEE Members Fee | Non-IEEE Members Fee |
|--------------------------------------|---------------------|-------------------------|--------------------------------------|---------------------|-------------------------|
| Student Authors | 8260 INR | 9440 INR | Student Authors | 9440 INR | 10620 INR |
| Academic Institution Delegates | 9440 INR | 10620 INR | Academic Institution Delegates | 10620 INR | 11800 INR |
| Industry / R&D Professionals | 11800 INR | 12980 INR | Industry / R&D Professionals | 12980 INR | 14160 INR |
| Foreign Delegates | USD 295 | USD 354 | Foreign Delegates | USD 413 | USD 472 |

^{**}All fees are inclusive of 18% GST charges.

APPLICATIONS OF AI IN COMPUTING

- Machine Learning and Deep Learning Innovations
- Natural Language Processing Applications Al in Cybersecurity
- Ethics and Fairness in Al
- Al for Fog Computing AI in Cloud Computing
- Al for Edge Computing
- Reinforcement Learning Techniques
- Computer Vision and Image Processing
- Data Privacy and Al
- Al in Robotics and Automation
- Augmented Reality and AI • Al for Predictive Analytics
- Quantum Computing and Al

• Explainable AI (XAI) • AI for IIoT (Industrial Internet of Things)

- Al-Driven Software Engineering
- AI in Healthcare Computing
- Al for Resource Optimization

AI IN **RENEWABLE ENERGY**

- Machine Learning for Renewable Energy Forecasting
- Al in Smart Grid Management and Optimization
- Predictive Maintenance for Renewable Energy Systems
- AI-Driven Energy Storage Solutions
- Data Analytics for Solar Energy Performance
- Wind Energy Prediction and Optimization using AI AI in Electric Vehicle Integration with Renewable Energy
- Decentralized Energy Management using Blockchain and AI
- Al for Energy Demand Response Strategies
- Computer Vision for Solar Panel Inspection
- Optimizing Energy Efficiency in Buildings with AI • Al in Hydropower Generation and Management
- AI Solutions for Biomass Energy Optimization • Artificial Intelligence for Renewable Energy Microgrids
- Environmental Impact Assessment using AI Techniques
- Integration of AI in Climate Change Mitigation Strategies • Al and IoT for Enhanced Energy Monitoring Systems
- Smart Renewable Energy System Design with AI
- Data-Driven Policy Making in Renewable Energy • Future Trends: AI and Next-Generation Renewable

Contact: Email: aicare@uem.edu.in

Technologies. Green energy technologies

| Category | Fee Fee | Members Fee | | tegory | Fee Fee | Members Fee |
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| Academic Institution Delegates | 9440 INR | 10620 INR | Inst | idemic itution egates | 10620 INR | 11800 INR |
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^{**}Special discount in Registration Fees are available in Women in Engineering category. For details, refer to conference official website.