





















#### 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**

- 4th December, 2024: Full Paper Submission Begins
- : Paper Submission Ends 4th May, 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

<sup>\*\*</sup>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 • Explainable AI (XAI)
- AI for IIoT (Industrial Internet of Things)
- Data Privacy and Al Al-Driven Software Engineering
- Al in Robotics and Automation
- Augmented Reality and AI
- Al for Predictive Analytics • AI in Healthcare Computing
- Quantum Computing and Al
- 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 Technologies.
- Green energy technologies

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<sup>\*\*</sup>Special discount in Registration Fees are available in Women in Engineering category. For details, refer to conference official website.