

**1ST IEEE INTERNATIONAL CONFERENCE on
Artificial Intelligence for Computing, Astronomy and Renewable Energy
Organized by Center of Excellence on Renewable Energy**

**AICARE 2025
4th and 5th April, 2025**



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 4th and 5th April, 2025. After review, all accepted and presented papers will appear in IEEE Xplore.

SUBJECT TRACKS

AI IN ASTRONOMY

- Machine Learning for Astrophysical Data Analysis
- Deep Learning in Image Processing for Astronomy
- AI 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
- AI 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
- AI for Multi-Messenger Astronomy
- Visualization Techniques for AI-Generated Astronomical Data
- AI 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
- AI-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 IoT
- 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-enabled IoT

APPLICATIONS OF AI IN COMPUTING

- Machine Learning and Deep Learning Innovations
- Natural Language Processing Applications
- AI in Cybersecurity
- Ethics and Fairness in AI
- AI for Fog Computing
- AI in Cloud Computing
- AI for Edge Computing
- Reinforcement Learning Techniques
- Computer Vision and Image Processing
- Explainable AI (XAI)
- AI for IIoT (Industrial Internet of Things)
- Data Privacy and AI
- AI-Driven Software Engineering
- AI in Robotics and Automation
- Augmented Reality and AI
- AI for Predictive Analytics
- AI in Healthcare Computing
- Quantum Computing and AI
- AI for Resource Optimization

AI IN RENEWABLE ENERGY

- Machine Learning for Renewable Energy Forecasting
- AI 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
- AI for Energy Demand Response Strategies
- Computer Vision for Solar Panel Inspection
- Optimizing Energy Efficiency in Buildings with AI
- AI 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
- AI 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

KEY DATES

- 28th October : **Full Paper Submission**
- 20th January : **Submission Ends**
- 24th February : **Acceptance Notifications**
- 3rd March : **Camera Ready Submissions**
- 4th and 5th April : **Conference Dates**

FEES DETAILS

EARLY BIRD REGISTRATION FEE			REGULAR REGISTRATION FEE		
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Academic Institution Delegates	8000 INR	9000 INR	Academic Institution Delegates	9000 INR	10000 INR
Industry / R&D Professionals	10000 INR	11000 INR	Industry / R&D Professionals	11000 INR	12000 INR
Foreign Delegates	USD 250	USD 300	Foreign Delegates	USD 350	USD 400

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