Call for Papers

Smart Energy Systems (SES) Symposium

The 21h International Conference on Wireless Communications and Mobile Computing

Website: http://iwcmc.org/2025/

Submission Link: https://edas.info/newPaper.php?c=32919

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May 12-16, 2025, Abu Dhabi, UAE

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Scope

In the face of escalating global energy demands and growing calls for sustainability, the transformation of energy systems has become a critical priority. The **Smart Energy Systems (SES) Symposium** focuses on leveraging machine learning and artificial intelligence to address key challenges in modern energy systems. These include optimizing energy efficiency, enhancing cybersecurity, enabling predictive analytics, and supporting real-time decision-making under dynamic conditions. By fostering innovative, data-driven solutions, this symposium aims to drive advancements that ensure a resilient, cost-effective, and sustainable energy future.

Attendees will gain insights into cutting-edge research and practical implementations of machine learning in smart energy systems, encompassing energy production, consumption, storage, and distribution. Join us as we explore the intersection of energy technology and machine intelligence, paving the way for next-generation smart energy solutions.

Topics

Accepted papers will be published in the IEEE IWCMC 2025 proceedings and will be submitted to the IEEE digital library (IEEE Xplore). Authors are welcome to submit original papers (not published before or simultaneously to another venue) with topics that include but are not limited to:

- Large Language Models (LLMs) for Smart Energy Applications
- Generative AI for Energy Optimization and Management
- Natural Language Processing for Energy Data Analysis and Decision Making
- Explainable AI (XAI) for Smart Energy Systems
- Advanced Reinforcement Learning Solutions for Smart Energy Systems
- Deep Reinforcement Learning for Real-Time Energy Management
- AI/ML-Based Smart Energy Solutions
- Federated Learning for Smart Energy Solutions
- Federated Reinforcement Learning for Smart Energy Systems

- Smart Renewable Energy Systems
- Innovative Engineering Applications of Machine Learning
- Leveraging LLMs for Automated Energy System Diagnostics and Reporting
- Human-AI Collaboration in Smart Energy Management
- Predictive Analytics in Energy Consumption
- Real-time Decision Support
- Fault Detection and Diagnostics
- Energy Storage Management
- Cybersecurity for Smart Energy Systems
- Grid Resilience
- Demand Response Optimization
- Energy Production and Consumption
- Smart Cities Energy Management
- IoT for Smart Energy
- Blockchain and Energy Transactions
- Edge Computing for Smart Energy Systems
- Energy-Aware Manufacturing
- Energy-Efficient Transportation Systems
- Intelligent Home Energy Management
- Sustainable Data Centers
- Adaptive Energy Distribution Networks
- Resilient Machine Learning for Energy Infrastructure
- Cloud-Based Energy Management Systems
- Fog Computing for Real-Time Data Processing
- Lightweight Machine Learning for Smart Energy
- Cognitive Buildings
- Zero-Carbon Smart Energy Solutions
- Smart Hydrogen-Based Energy Systems
- Carbon Footprint Reduction through Smart Energy Solutions
- Smart Battery Management Systems for Renewable Energy Storage
- Low-Cost Green Energy Solutions Using AI
- Decarbonizing Industrial Processes with Green Energy
- AI for Agrivoltaics
- Bioenergy and Machine Learning
- AI for Energy Harvesting Technologies
- Digital Twin Applications in Green Energy
- Next-Generation Smart Grids
- Graph Neural Networks (GNNs) for Smart Energy Systems
- Few-Shot Learning for Smart Energy Systems
- Advanced Transfer Learning in Energy Applications
- Autonomous Microgrids or Smart Cities with AI
- Adaptive ML for Energy Infrastructure under Climate Change
- Smart Energy Solutions for Electric Vehicles
- Smart Energy Systems for Green Communication

Important Dates

All deadlines are the same as those of the main conference.

Note: Within this Symposium, there will be one Best Paper Award