

ComSIA-2026 International Conference on Computing Systems and Intelligent Applications

Organized by School of Open Learning, University of Delhi & Shaheed Rajguru College of Applied Sciences for Women, University of Delhi 20-21st March 2026.

SPECIAL SESSION ON

AI-Driven Green Computing and Sustainable IT Management – Innovations, Challenges, and Intelligent Solutions

SESSION ORGANIZERS:

Prof (Dr). Kamal Kundra, Professor (IT & AI/ML) & COE, New Delhi Institute of Management, New Delhi, India. (<u>kamalkundra123@gmail.com</u>) (9811292273) Dr. Deepti Khanna, Associate Professor, IIC- President, Jagan Institute of Management Studies, Rohini, New Delhi, India. (<u>dipudeepti@gmail.com</u>) (9958295454)

SESSION DESCRIPTION:

The convergence of Artificial Intelligence (AI) with Green Computing opens new frontiers for achieving sustainability in modern IT systems. This special session focuses on how AI techniques can be leveraged to design intelligent, energy-efficient, and environmentally sustainable computing infrastructures. From optimizing power consumption in data centers to automating resource management in cloud and edge environments, AI has become a critical enabler for sustainable digital ecosystems.

This session aims to gather researchers, practitioners, and industry experts to explore cuttingedge developments in AI-enhanced green technologies and sustainable IT management. It seeks to highlight interdisciplinary innovations that address environmental concerns while maintaining performance and scalability in computing systems.

RECOMMENDED TOPICS:

Topics to be discussed in this special session include (but are not limited to) the following:

- AI and machine learning for energy-efficient computing
- Smart workload scheduling and resource allocation using AI
- Green data centers powered by AI-based monitoring and control systems
- Carbon footprint reduction through intelligent software optimization
- AI for dynamic power management in IoT and embedded systems
- Predictive analytics for sustainable IT operations
- AI in optimizing renewable energy usage in IT infrastructure
- Lifecycle and sustainability modeling with AI techniques
- Environmental impact assessment of AI systems
- Policy, ethics, and governance in AI-driven green computing

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on "AI-Driven Green Computing and Sustainable IT Management – Innovations, Challenges, and Intelligent Solutions" on or before 30th August 2025. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at https://comsia.in/paper_submission.html. All submitted papers will be reviewed on a double-blind, peer review basis.

NOTE: While submitting paper in this special session, please specify AI-Driven Green Computing and Sustainable IT Management – Innovations, Challenges, and Intelligent Solutions at the top AI-Driven Green Computing and Sustainable IT Management – Innovations, Challenges, and Intelligent Solutions of the first page of your paper.

* * * * * *