



# 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.

\*\*\*\*\*\*\* CALL FOR PAPERS \*\*\*\*\*\*\*\*\*\*

#### **SPECIAL SESSION ON**

Agentic AI for Sustainable Development: Autonomous Decision-Makers Driving SDG 13 Climate Action

#### **SESSION ORGANIZERS:**

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#### **EDITORIAL BOARD: (Optional)**

[Name, University or Organization, Country, e-mail]

#### **SESSION DESCRIPTION:**

The climate crisis demands solutions that are **adaptive**, **proactive**, **and resilient**—traits often beyond the reach of conventional, pre-programmed Al. **Agentic Al** represents the next stage of artificial intelligence: systems that sense their environment, set intermediate goals, negotiate with other agents, and act autonomously while remaining aligned with human oversight.

By embedding these capabilities in climate-relevant domains—renewable energy, urban infrastructure, disaster management—agentic AI can operate as a **continuous decision-maker** rather than a passive analytics tool. For example, autonomous agents can:

- anticipate extreme weather using real-time multi-modal sensing and self-update their predictive models;
- dynamically balance energy loads across distributed renewable grids without waiting for human operators;
- negotiate carbon-credit trades or water-use rights in decentralized markets;
- coordinate emergency response during floods or wildfires when communication networks are disrupted.

Such applications directly accelerate **Sustainable Development Goal 13: Climate Action** by providing **timely, decentralized, and scalable interventions**.

This special session aims to unite AI researchers, climate scientists, urban planners, and policy stakeholders to explore **new architectures**, **governance frameworks**, **and pilot implementations** where agentic AI acts as an autonomous partner in climate resilience.

#### **RECOMMENDED TOPICS:**

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

# Autonomous Multi-Agent Networks for Adaptive Climate Monitoring and Early Warning Systems

– Designing swarms of sensing agents that collaboratively detect and predict micro-climate anomalies.

## Agentic AI for Dynamic Carbon Trading and Transparent Climate Finance

– Building negotiation agents to manage real-time carbon credit exchanges across decentralized ledgers.

## Self-Governing Renewable Energy Grids: Agentic Control for Net-Zero Cities

– Developing autonomous controllers that balance supply, demand, and storage in distributed energy networks.

# Disaster-Resilient Infrastructure Through Agent-Based Decision Loops

– Coordinating evacuation routes, resource allocation, and logistics in real time during floods, wildfires, or heatwaves.

#### **Ethics and Governance of Climate-Critical Agentic AI**

– Establishing frameworks for accountability, explainability, and democratic oversight of autonomous climate agents.

#### Integrating Indigenous Knowledge with Agentic AI for Community-Centric Climate Adaptation

– Fusing local ecological wisdom with autonomous reasoning to create culturally aware mitigation strategies.

#### **SUBMISSION PROCEDURE:**

Researchers and practitioners are invited to submit papers for this special theme session on [insert special session topic] on or before [insert due date]. 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 <a href="https://comsia.in/paper\_submission.html">https://comsia.in/paper\_submission.html</a>. All submitted papers will be reviewed on a double-blind, peer review basis.

**NOTE:** While submitting paper in this special session, please specify [insert special session title] at the top (above paper title) of the first page of your paper.