ICAIN-2025
International Conference on Artificial Intelligence and Networking

Organized by
University of Stirling - RAK Campus, UAE

10th - 11th October 2025

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

SPECIAL SESSION ON

Sustainable Agriculture through Internet of Things and Artificial Intelligence

SESSION ORGANIZERS:

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SESSION DESCRIPTION:

Sustainable agriculture, enhanced by IoT (Internet of Things) and AI (Artificial Intelligence), is revolutionizing farming practices to address global challenges like climate change, resource scarcity, and food security. IoT devices, such as soil sensors, weather stations, and drones, collect real-time data from farms, monitoring environmental conditions like soil moisture, temperature, and crop health. The integration of IoT and AI plays a crucial role in achieving these goals by providing real-time monitoring, data-driven decision-making, and predictive analytics for farming operations.AI algorithms then

analyze this data to predict optimal planting times, water usage, and pest control measures. This data-driven approach allows farmers to make informed decisions, reducing waste, improving crop yields, and minimizing the environmental impact of agriculture. Ultimately, IoT and AI technologies empower farmers to adopt more efficient, eco-friendly practices, sustainable agriculture aims to maximize food production while minimizing environmental impact, optimizing resource usage, and ensuring long-term agricultural viability.

RECOMMENDED TOPICS:

Topics to be discussed in this special session include (but are not limited to) the following:
1. **Water Conservation and Smart Irrigation**
2. **Crop Monitoring and Disease Management**
3. **Soil Health and Fertility Management**
4. **AI-Powered Yield Optimization and Crop Prediction**
5. **Resource and Energy Efficiency**
6. **Supply Chain Optimization**
7. **Sustainable Livestock Farming**
8. **Climate Resilience and Carbon Footprint Reduction**
9. **AI-Driven Food Waste Reduction**
10. **Organic Waste Recycling and Sustainability**

Together, these technologies help farmers transition to more sustainable, efficient, and resilient farming practice

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this particular theme session on ***Sustainable Agriculture through Internet of Things and Artificial Intelligence on or before*** **[30th May 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://www.icain-conf.com/downloads. All submitted papers will be reviewed on a double-blind, peer-review basis.

NOTE: While submitting a paper in this special session, please specify [**Sustainable Agriculture through Internet of Things and Artificial Intelligence**] at the top (above paper title) of the first page of your paper.

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