

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

Pioneering the Future of Networking with AI, Machine Learning, and Deep Learning

SESSION ORGANIZERS:

Dr. Lokesh Jain, Associate Professor, Department of Information Technology, Jagan Institute of Management Studies, Rohini, Delhi, India, lokesh.jain@jimsindia.org

EDITORIAL BOARD: (Optional)

Dr. Lokesh Jain, Associate Professor, Department of Information Technology, Jagan Institute of Management Studies, Rohini, Delhi, India, lokesh.jain@jimsindia.org

SESSION DESCRIPTION:

This session will dive into how Artificial Intelligence (AI), Machine Learning (ML), and Deep Learning (DL) are revolutionizing the future of networking. These advanced technologies are reshaping traditional networking by enabling networks to become more intelligent, self-optimizing, and adaptive. From predictive maintenance and anomaly detection to traffic optimization and enhanced security, AI, ML, and DL are driving innovations that improve network performance and reliability. The session will highlight how these technologies are transforming network management, exploring both the challenges and opportunities of integrating them into existing infrastructures. Attendees will gain a comprehensive understanding of how AI-powered solutions are setting the stage for next-gen networking technologies, such as 5G, IoT, and edge computing, paving the way for more autonomous, efficient, and dynamic network systems.

RECOMMENDED TOPICS:

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

- Introduction to AI, ML, and DL in Networking
- The Evolution of Networking Technologies
- AI-Driven Network Automation
- Machine Learning for Traffic Prediction and Optimization
- Deep Learning for Anomaly Detection and Security
- Predictive Maintenance with AI
- AI in Dynamic Resource Allocation
- Network Fault Detection and Self-Healing Networks

- Enhanced Network Security with AI/ML
- AI-Powered Optimization for 5G and Beyond
- Edge Computing and AI in Networking
- AI for Intelligent Network Traffic Routing
- AI in SDN and NFV
- Challenges in Implementing AI in Networking
- The Future of AI-Driven Networking

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this particular theme session on **[Pioneering the Future of Networking with AI, Machine Learning, and Deep Learning]** *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 **[Pioneering the Future of Networking with AI, Machine Learning, and Deep Learning]** at the top (above paper title) of the first page of your paper.

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