



# 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**

Neural Networks and Deep Learning: Challenges, Opportunities, and the Road to Trustworthy AI in Smart Automation and Real-World Applications

### **SESSION ORGANIZERS:**

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**EDITORIAL BOARD: (Optional)** 

**Session Description:** 

This specialized session seeks to convene researchers, academics, and industry professionals to examine the latest advancements in neural networks, deep learning, and neuromorphic computing. It will address fundamental challenges, emerging opportunities, and strategies for achieving trustworthy AI, with an emphasis on intelligent automation and practical applications across diverse sectors. As AI-driven decision-making becomes increasingly integral, it is imperative to confront issues related to explainability, robustness, ethics, and scalability within deep learning models. Concurrently, innovations in neural network architectures, optimization methods, neuromorphic hardware, and deployment frameworks are paving the way for significant progress in intelligent systems. Hosted at ComSIA-2026, this session will provide an international forum for knowledge exchange and collaboration, promoting dialogue that bridges theoretical insights, practical implementation, and responsible AI adoption in real-world contexts.

# **RECOMMENDED TOPICS:**

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

- Foundations of neural networks and deep learning
- Trustworthy and explainable AI
- Ethical, fair, and transparent Al systems
- Robustness against adversarial attacks
- Smart automation using AI and deep learning
- Al in healthcare, manufacturing, and smart cities
- Real-world applications in computer vision, NLP, and multimodal AI
- Edge, cloud, and federated deep learning
- Privacy-preserving neural network models
- Quantum-inspired and neuromorphic neural networks
- Emerging paradigms: self-supervised, few-shot, and continual learning

# **SUBMISSION PROCEDURE:**

Researchers and practitioners are invited to submit papers for this special theme session on [Neural Networks and Deep Learning: Challenges, Opportunities, and the Road to Trustworthy AI in Smart Automation and Real-World Applications "] on or before 30<sup>th</sup> September 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 <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 ["Neural Networks and Deep Learning: Challenges, Neuromorphic Computing, Opportunities, and the Road to Trustworthy Al in Smart Automation and Real-World Applications"] at the top (above paper title) of the first page of your paper.

