

**Conference Name:**

*2<sup>nd</sup> International Conference on Advances in Artificial Intelligence for Society*

*(ICA2S - 2026)*

**Proposal for Special Track in ICA2S-2026**

**1. Track Name:**

**“AI in Electronics Devices and Sensors Systems”**

**2. Track Description**

The special track on AI in Electronics, Sensors and Communication Systems focuses on the integration of artificial intelligence techniques with modern electronic systems to enable smarter, more efficient, and adaptive technologies. With the rapid growth of intelligent devices and interconnected networks, AI is playing a crucial role in enhancing electronics devices performance, optimizing signal processing, and improving their reliability.

This track aims to explore innovative research in areas such as smart sensor systems, AI-driven signal processing, intelligent communication networks, VLSI and hardware design, IoT and embedded systems, and next-generation wireless technologies. It also encourages interdisciplinary approaches that combine AI with photonics, automation, and emerging applications like smart cities and healthcare.

The goal is to provide a platform for researchers and practitioners to present advancements that leverage AI to address real-world challenges in electronics and communication systems, leading to scalable, energy-efficient, and intelligent solutions for future technologies.

**3. Topic Names:**

1. AI for Device Modelling/Simulation and Fabrication
2. AI for Smart Sensors Systems
3. AI for Signal Processing and Communication Systems
4. AI for VLSI and Hardware Design
5. AI for Photonics and Optical Systems
6. AI for IoT and Embedded Electronics
7. AI in Control and Automation Systems
8. AI in Wireless & Next-Gen Networks
9. Other Emerging and Interdisciplinary Topics

**4. Special Track Organizers**

Department of Electronics and Communication Engineering  
Indian Institute of Information Technology Bhopal, India

**5. Contact Details:**

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