

2nd International Conference on Advances in Artificial Intelligence for Society (ICA2S-2026)

Organized by
Indian Institute of Information Technology, Bhopal, India

in collaboration with University of Vizja, Warsaw, Poland

Call for Papers

Special Track:15

Intelligent AI-Driven Cyber-Physical Systems: Integrating IoT, Cloud, and Blockchain for Smart and Sustainable Applications

The rapid progress of Artificial Intelligence (AI), signals the beginning of a new era defined by extensive interdisciplinary collaboration involving IoT, Cloud Computing, Blockchain, and other technologies. In the current scenario traditional boundaries between fields of expertise blur, fostering innovative partnerships. Within this convergence, AI serves as a unifying force, integrating insights from diverse domains including healthcare, finance, biotechnology, natural language processing, cyber security, evolutionary computation, arts, agriculture, social sciences, and engineering. This integration goes beyond the mere adoption of AI, IoT, Machine Learning and Cloud Computing; it represents a purposeful alliance aimed at fostering creativity, unlocking deep insights, and addressing complex challenges holistically.

Keywords: Artificial Intelligence, Cyber-Physical Systems, IoT, Edge Intelligence, Cloud Computing, Blockchain, Federated Learning, Smart Cities, Smart Healthcare, Smart Agriculture, Intelligent Transportation, Sustainable Systems, Explainable AI, Digital Twins, Secure AI, Edge Computing, Data Analytics

Brief Description and Justification (200-250 words):

Artificial Intelligence (AI) is rapidly transforming cyber-physical ecosystems through the convergence of Internet of Things (IoT), Cloud-Edge Computing, Blockchain, and intelligent data analytics. This special track focuses on the design of secure, scalable, adaptive, and sustainable AI-driven cyber-physical systems capable of addressing complex real-world challenges across interconnected environments.

The integration of AI with IoT infrastructures enables intelligent sensing, autonomous decision-making, predictive analytics, and real-time system optimization in domains such as smart healthcare, smart agriculture, intelligent transportation, industrial automation, smart grids, and urban infrastructure. Cloud and edge computing paradigms further enhance computational scalability, low-latency processing, and distributed intelligence, while blockchain technologies provide trusted, decentralized, and privacy-preserving mechanisms for secure data sharing and system coordination.

This track emphasizes emerging research areas including edge AI, federated learning, explainable and trustworthy AI, intelligent digital twins, AI-enabled cybersecurity, autonomous cyber-physical systems, and sustainable intelligent infrastructures. It also encourages research addressing challenges related to interoperability, data privacy, energy efficiency, robustness, resilience, and real-time decision-making in large-scale distributed environments.

The objective of this special track is to bring together researchers, academicians, and industry practitioners working at the intersection of AI and intelligent cyber-physical systems to present innovative methodologies, interdisciplinary approaches, and scalable solutions for next-generation smart and sustainable applications.

Session Organizers

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Paper Submission Link:

Kindly submit your papers at the following link:

Step 1: <https://cmt3.research.microsoft.com/ICAAS2026/Submission/Index>

Step 2: Select Track – ST-15: Intelligent AI-Driven Cyber-Physical Systems: Integrating IoT, Cloud, and Blockchain for Smart and Sustainable Applications
