

Special Track Proposal Format

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**

1. Title of the Special Track

AI for Resilient, Secure, and Intelligent Systems in Societal Applications

2. Track Description

The increasing integration of Artificial Intelligence (AI) into critical societal systems—such as smart infrastructure, healthcare, transportation, communication networks, and governance—demands robust, adaptive, and trustworthy solutions. This special track aims to explore the role of AI in designing resilient, secure, and intelligent systems capable of operating under uncertainty, dynamic environments, and large-scale complexity.

The track focuses on the convergence of AI/ML techniques, optimization methods, statistical inference, and system modelling to address challenges in reliability, decision-making, and performance in real-world applications. Emphasis is placed on systems where failure or inefficiency has direct societal consequences, including smart cities, disaster response, cyber-physical systems, and digital public infrastructure.

The objective is to bring together researchers and practitioners from diverse domains to present innovative methodologies, interdisciplinary approaches, and scalable solutions that enhance system robustness, efficiency, and trustworthiness. The track encourages contributions that bridge theory and practice, aligning with the broader vision of leveraging AI for sustainable, inclusive, and socially impactful development.

4. Topics of Interest

1. AI for Resilient and Fault-Tolerant Systems
2. Machine Learning for Predictive Maintenance and Risk Assessment
3. Optimization and Decision-Making under Uncertainty
4. Statistical Inference and Probabilistic Modelling in Complex Systems
5. AI for Cyber-Physical Systems and Smart Infrastructure
6. Secure and Trustworthy AI Systems
7. AI Applications in Healthcare, Smart Cities, and Governance
8. Intelligent Resource Allocation and Scheduling
9. Explainable AI for Critical and Safety-Critical Systems
10. AI for Disaster Management and Societal Resilience

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5. Special Track Organizers

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