Call for Digests: Special Session on

AI application in Smart Infrastructure, Innovative Robotics and Industrial System Applications

Organized and co-chaired by

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Technical Outline of the Special Session

With emerging of new technologies and applications, it is necessary to tackle and be aware of new challenges. Smart infrastructure is the design, construction, and management of existing infrastructure by deploying intelligent materials, sensors, and equipment to sustain performance under the impacts of climate change and preserve the condition by developing smart asset-management systems. Thus, building smart infrastructure is one of the most critical considerations in developing smart cities. The aim of this Special Session is to propose, explore, introduce, discuss, and clarify research innovation and theoretical and practical industrial concepts related to Smart Infrastructure and AI Industrial System Applications. In addition, it aims to publish high-quality research papers as well as state-of-the-art review articles that focus on artificial intelligence and robotics in designing, building, and managing infrastructure, transportation, and industrial manufacturing.

Topics of the Special Session

- Innovative machine learning or model-based investigation and optimization for real-time fault diagnosis and error detection in power flow calculation
- Intelligent energy-harvesting infrastructure
- Smart power grids and energy infrastructure
- Intelligent Robotics applications and next gen Robots
- Autonomous transportation infrastructure
- Smart urban parking management systems
- Field tests of smart infrastructure materials and sensors
- AI diagnosis & evaluation in infrastructure using drone monitoring and assistance
- Next-gen Intelligent smart autonomous driving for EVs in different applications
- AI assistance for efficient manufacturing process, robotic design and optimization
- Optimized algorithm for real-time diagnosis of degradation in manufacturing process
- Next-gen connectivity and autonomous decision-making configuration system for boost enhancement in quality and production rate

Important Dates

- Digest Submission Deadline – 30th of June
- Notification of Acceptance – 18th of August
- Final Paper Submission – 29th of September

Digest Template and Submission Information
https://spec-ieee.org/spec2024/digest-submission/

Digest Submission Link
https://easychair.org/conferences/?conf=ieeespec2024