

Call for Papers Track 02 - Artificial Intelligence in Industrial Applications

Focus - This technical track focuses on current and emerging topics of artificial intelligence that are relevant and important for industrial applications and industrial information technologies. It is aligned to the transformation of industrial informatics from model-based solutions to generative, data-driven solutions that address the challenges of dynamic and non-deterministic digital environments.

Topics

Machine Learning

- Deep Learning and large pretrained models in industrial applications
- Hyperdimensional computing for energy efficient machine learning on the Edge
- Automated machine learning
- Online learning from data stream
- Unsupervised machine learning
- Scalable machine learning
- Machine learning for multimodal information fusion
- Explainable Artificial Intelligence (XAI) and traceable machine learning
- Text, image, audio, video and social media analysis in industrial applications
- Anomaly and Fault Detection;
- Predictive Maintenance and data-driven prognostics;
- Forecasting methods for industrial applications;
- Soft Sensing and Virtual Metrology;
- Data-driven technologies for Industrial Internet of Things (IoT);
- Semantic Reasoning and Digital Twins
 - Semantic models for industrial applications
 - Probabilistic reasoning on IoT data
- Combined reasoning and machine learning in digital twins
- Context and semantic learning for industrial domain expertise
 Digital thread models
- AI methods for making Human-Machine Interaction Intelligent
- Intelligent human behaviour monitoring in industrial scenarios
- Optimization and Control
- Reinforced learning in control
- Fuzzy based control
- Aim & Scope IEEE INDIN is a flagship conference of IEEE Industrial Electronics Society providing a forum for presentation and discussion of the state-of-art and future perspectives of industrial information technologies.

Solicited Papers

- Regular research papers reporting on new developments in technological sciences
- Special Session papers to stimulate in-depth discussions in special areas relevant to the conference theme
- Industry and development papers reporting on actual developments of technology, products, systems and solutions
- Tutorials

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Track Chairs

- Daswin De Silva, La Trobe University, Australia

- Khan Muhammad, Sungkyunkwan University, Korea

- Gian Antonio Susto, University of Padova. Italy

Track Program Committee

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- Mohib Ullah, NTNU, Norway
- Ijaz Ul Haq, Oakland University, USA
- Shuihua Wang, Leicester University, UK
 Chen-Wei Yang, Lulea University, Sweden

Important Dates

Submission of papers (regular, special sessions) March, 01, 2023 March, 31, 2023 Notification of acceptance April, 15, 2023 May, 15, 2023 Submission of final manuscript June, 05, 2023

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