

# IEEE COINS 2023

## IEEE International Conference on Omni-layer Intelligent Systems

IEEE | IEEE RAS | IEEE CEDA | IEEE COMPUTER SOCIETY | VSA-TC & NCAS TC IEEE CAS | E-HEALTH-TC IEEE COMSOC | CONTROL, ROBOTICS, AND MECHATRONICS TC & CLOUD AND WIRELESS SYSTEMS FOR INDUSTRIAL APPLICATIONS TC IEEE IES | IEEE IOT

Berlin, Germany | Hybrid  
July 23-25, 2023  
<https://coinsconf.com>



Call for  
Papers

### Track: Industry 4.0 and Smart Manufacturing

The Industry 4.0 track aims to provide a platform for researchers to showcase findings and explore emerging technologies in the design and implementation of smart factories. Specific topics include, but are not limited to, the following:

- Intelligent IoT-based solutions for smart manufacturing
- Innovative sensing strategies for process monitoring and tracking of product history.
- Digital twin in product design and smart manufacturing
- Smart interconnection and interoperation for digital twin
- Machine learning techniques to improve process control and part quality
- Real-time IoT data analytics, data aggregation, data abstraction and event detection
- Integration of additive manufacturing in smart factories
- Smart modeling of factory floors and manufacturing processes integrated with sensor data
- Manufacturing data analysis and diagnostics for real-time reporting using intranet capabilities and/or the cloud
- Human machine interface and communication technologies
- Augmented reality (AR), virtual reality (VR) and mixed reality (MR) immersive technologies
- Security, safety and privacy in Industry 4.0
- Edge-fog-cloud computing in smart factories
- Privacy-preserving machine learning techniques
- Data Sharing/Exchanging for smart manufacturing
- The application of Distributed Ledger Technologies (DLTs) and blockchain for smart manufacturing
- Advanced robotics (collaborative and adaptive robots)
- Semantic Web of Things for Industry 4.0
- Blockchain, AI/ML, big data and IoT business model in smart energy
- Industry 4.0 implementation and real-world case studies

#### Track Co-Chairs

Gerhard Hancke, City University of Hong Kong, Hong Kong.

Gabor Sziebig, SINTEF, Norway

#### Track Program Committee

Bruno Silva, City University of Hong Kong, Hong Kong

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