## IEEE COINS 2022 IEEE International Conference on Omni-layer Intelligent Systems

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<u>Hybrid Event:</u> (On-site In-person Presentation & Virtual Presentation) Barcelona, Spain August 1-3, 2022 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 Lehlo Ledwaba, CSIR, South Africa Daniel Ramotsoela, University of Cape Town, South Africa Umair Qureshi, Polytechnic University of Hong Kong, Hong Kong