

IEEE COINS 2021

IEEE International Conference on Omni-layer Intelligent Systems

IEEE | IEEE RAS | IEEE CEDA | IEEE COMPUTER SOCIETY | VSA-TC IEEE CAS | E-HEALTH-TC IEEE COMSOC | TC-ICPS IEEE IES | IEEE IOT

Hybrid Event:
(On-site In-person Presentation & Virtual Presentation)

Barcelona, Spain
August 23-25, 2021



Call for Papers

Track: Intelligent Robots and Systems

The intersection of Internet of Things (IoT) with robotics and autonomous systems elicits exciting research directions in both consumer and industrial areas, such as home service, healthcare, manufacturing, as well as inspection and maintenance. The *Intelligent Robots and Systems* track seeks novel research contributions the general area of networked robotics and associated areas, focusing on omni-layer intelligent systems. Such systems explicitly take the network component into account and present a concept of intelligence horizontally across participating devices as well as vertically across abstraction and functional layers.

Topics of interest include, but are not limited to:

- Distributed Robotics: Multi-Robot Systems, Fleet Management, Coordination, Task and Resource Allocation, Internet of Robotic Things, Cloud Robotics
- Perception: Distributed Environment Perception, Multi-Robot SLAM, Interactive Perception
- Human-Robot Interaction: User Interfaces, Shared Autonomy, Human-Robot Teaming, Remote Interaction, Telepresence, Teleoperation
- Learning: Decentralized Learning, Multimodal Learning, Multi-Agent Systems, Learning for Perception, Robust Methods
- Planning and Control: Navigation and Planning in Fleets, Shared Control, Exploration, Distributed Control, Task and Resource Allocation
- Applications: Industry (manufacturing, logistics, maintenance, inspection, etc.) and healthcare (service, manipulation, assistance, monitoring, etc.)

IEEE COINS will publish accepted papers in the conference proceedings and the proceedings will be submitted to the IEEE Xplore Digital library and indexing services.

Selected best contributions of IEEE COINS will be invited to submit expanded versions of their studies to IEEE IoTJ (IF=9.936) for review and potential publication.

Track Chair

Max Pfingsthorn, OFFIS, Germany

Sören Schwerteger, ShanghaiTech University, China

Technical Program Committee Members

Mauro Dragone, Heriot-Watt University, UK

Holger Kenn, Microsoft, Germany

Sebastian Zug, TU Bergakademie Freiberg, Germany

Jörg Walter, OFFIS, Germany



Submission of Regular Papers and
Special Session Papers
April 30, 2021



Notification of Paper Acceptance
June 30, 2021