IEEE International Conference on Omni-layer Intelligent Systems IEEE | IEEE RAS | IEEE CEDA | IEEE COMPUTER SOCIETY | VSANCE NOAS TO IEEE CAS | E-HEALTH-TO IEEE COMSOC | CONTROL, ROBOTICS, AND MECHATORNICS TO & CLOUD AND WIRELESS SYSTEMS FOR INDUSTRIAL APPLICATIONS TO IEEE IES | IEEE IOT | Berlin, Germany | Hybrid July 23-25, 2023 | https://coinsconf.com | Call for Papers | P

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:

- <u>Distributed Robotics</u>: Multi-Robot Systems, Fleet Management, Coordination, Task and Resource Allocation, Internet of Robotic Things, Cloud Robotics
- <u>Perception:</u> Distributed Environment Perception, Multi-Robot SLAM, Interactive Perception
- <u>Human-Robot Interaction:</u> User Interfaces, Shared Autonomy, Human-Robot Teaming, Remote Interaction, Telepresence, Teleoperation
- · Learning: Decentralized Learning, Multimodal Learning, Multi-Agent Systems, Learning for Perception, Robust Methods
- <u>Planning and Control</u>: 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.)

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