ICIEA 2022 Special Session

Title of session	Future Robotics Technologies and Applications
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Summary of session	The objective of this session is to provide a forum for researchers to discuss and disseminate research work related to emerging technologies that are defining the future of robotics. Original research papers addressing the following four technology areas and their applications are invited: • **Robot intelligence**: deep learning, 3D vision, autonomous decision-making, learning by demonstration, cloud/edge robotics • **Human-robot collaboration**: multi-robot-human cooperation, collaborative AI, haptic technology, safety assurance, cybersecurity for robotics • **Digital Twin for Robot**: modelling, digital connectivity, IoT integration, AI computing, simulation-based decision making, virtual commissioning, industrial application case studies • **Autonomous mobile robot**: natural navigation, V-SLAM, perception, sensory data fusion, mobile manipulation, collision detection and avoidance Papers with proper consideration for practical applications, e.g., in the form of simulation models, prototypes, and/or with industrial collaboration will be considered favorably for acceptance.