REV2022 Special Session
Call for Papers

Title
Robotics and Artificial Intelligence for Knowledge Discovery

Acronym
RAIKD'22

Overview

The intersection of Robotics and Artificial Intelligence can create ideal Knowledge Discovery machines. The knowledge sought can range from caves exploration, hostile terrain maneuvering to medical exploration inside the human body and medical micro-surgeons. Numerous application examples include robot assisted medical procedures, discovering architectural plans of a building, estimating damage in machines – or humans, medical micro-surgeons, and robots for the pharmaceuticals industry such the development of "robot scientists for drug discovery".

In this special session, we seek to publish papers introducing original research, case studies, engineering advancements, technical projects or ongoing work describing most recent advances in Knowledge Discovery algorithms, tools or machines using Robotics and Artificial Intelligence.

Topics

Topics include but are not limited to the following:
- Advancements in the design and algorithms of Robotics and AI for Knowledge Discovery
- Planning and scheduling for robotic mission execution
- Validation, verification, and dependability of robotic platforms
- Reinforcement and deep learning for AI robots
- Autonomy in human-robot collaborative scenarios
- Simulation environments for modelling and testing robots
- Medical and Bio-medical applications
- Applications in Education and educational tools
- Applications in the Pharmaceutical industries and research
- Applications in Surveying and Terrain Exploration

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