

Special Session

Intelligent Sensors and Deep Learning for Robot Perception and Navigation

Description/Scope

Robots need advanced skills to move around and perform complex tasks in unstructured environments. Perception allows understanding the operation or service environment to provide different behaviors according to the objects of interaction. The proposal of this section aims to promote the use of intelligent sensors and deep learning techniques for applying advanced behaviors in robotic systems. This track aims to promote research, innovative applications, models, approaches, projects, best practices, case studies, performing tasks, and products regarding robot perception. Prospective authors are invited to submit papers on the topics listed below.

Topics (but are not limited to)

- Spatial Perception
- Multimodal Sensors
- Multi-Perception and Fusion
- Complex Behaviors
- Intelligent Sensing
- Deep Learning-Based Sensors
- Intelligent Navigation

Organizers

Prof. André Schneider de Oliveira
Federal University of Technology – Paraná (UTFPR) – Brazil

Prof. Ronnier Frates Rohrich
Federal University of Technology – Paraná (UTFPR) – Brazil

• Prof. José Lima

Research Centre in Digitalization and Intelligent Robotics (CeDRI), Polytechnic Institute of Bragança - Portugal



