



ICIRA 2024 Special Session Proposal

Title of the Proposal: Robot Perception and Machine Learning

Technical Outline of the Session and Topics:

Outline of the Session: Robot perception is one of the most important keys for measuring the intelligence of modern robots. The improvements in perception can lead robots to higher intelligence and autonomous operation levels. This session focuses on theory, modelling, algorithm, application, etc., in robot perception and machine learning, to make robots smarter and more powerful.

Topics of the Session:

- *Environment and object perception for robotics and autonomous vehicles*
- *Image/video enhancement*
- *Machine learning architectures and formulations*
- *Motion and tracking*
- *Optimization and learning methods*
- *Recognition and classification*
- *Transfer/Low-shot/Semi/Unsupervised Learning*
- ...

Contact details of the Session Organizers

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