REV2022 Special Session
Call for Papers

Title
Machine and Deep Learning Applications for Robotics

Acronym
MDLAR

Overview

Over the last decades there has been an increasing interest in using machine learning and in the last few years, deep learning methods, combined with other vision techniques to create autonomous systems that solve vision problems in different fields. This special session is designed to serve researchers and developers to publish original, innovative and state-of-the art algorithms and architectures for real time applications in the areas of computer vision, image processing, biometrics, virtual and augmented reality, neural networks, intelligent interfaces and biomimetic object-vision recognition.

Topics

- Computational Intelligence methods
- Machine Learning methods
- Self-adaptation, self-organisation and self-supervised learning
- Robust computer vision algorithms (operation under variable conditions, object tracking, behaviour analysis and learning, scene segmentation,,)
- Extraction of Biometric Features (fingerprint, iris, face, voice, palm, gait)
- Registration Methods
- Convolutional Neural Networks CNN
- Recurrent Neural Networks RNN
- Deep Reinforcement Learning DRL
- Generative Adversial Networks
- Predictive Learning
- Active-Incremental-Online Learning
- Hardware implementation and algorithms acceleration (GPUs, FPGA,s,.)

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