Special Issue

Advances in Cognitive Robotics and Control

Message from the Guest Editors

A synergetic interaction between robotics and artificial intelligence is necessary in the development and deployment of robots that safely and reliably act in the real world.

Robot controllers should take into account the "non-functional" qualities of implemented behaviors, thus evolving towards an advanced "Perception, Reason, Act" paradigm which can achieve a higher level of awareness and behavior contextualization. Cognitive robotics is wide research area, fostering the interaction of robotics, Al, and cognitive sciences in order to realize innovative and human-like robot behaviors.

This Special Issue aims to collect contributions in this multidisciplinary research landscape, highlighting recent trends, novel results, and open issues in the design of human and socially aware robot controllers. Keywords

- cognitive architectures
- human-robot interaction
- perspective taking
- cognitive robotics
- artificial intelligence
- situation awareness
- human and social awareness
- human intent/action recognition
- human belief modeling

Guest Editors

Dr. Alessandro Umbrico

Dr. Daniel Beßler

Prof. Dr. Nele Russwinkel

Deadline for manuscript submissions

30 November 2025



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/200415

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applisci@mdpi.com

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

