



Artificial Intelligence and Intelligent Robots: Challenges and Opportunities

Guest Editors:

Dr. Christian Tamantini

Unit of Advanced Robotics and Human-Centred Technologies, Department of Engineering, Università Campus Bio-Medico di Roma, 00128 Rome, Italy

Dr. Andrea Orlandini

Institute of Cognitive Science and Technology, National Research Council of Italy, 00185 Roma, Italy

Dr. Francesca Cordella

Unit of Advanced Robotics and Human-Centred Technologies, Department of Engineering, Università Campus Bio-Medico di Roma, 00128 Rome, Italy

Deadline for manuscript submissions:

30 September 2024

Message from the Guest Editors

As technology continues to advance, the use of robots and other machines in human environments and various aspects of daily life is increasing. By combining artificial intelligence (AI) algorithms with multimodal data, such as visual inputs, robots can better perceive and respond to human states and contexts, improving the quality of its actions and user experience. Similarly, AI-powered vision systems assist individuals in daily tasks by understanding, forecasting, and responding to their needs. By harnessing the power of AI, robots can understand, adapt, and respond to diverse and dynamic environments, thereby enhancing their ability to assist individuals with varying needs. Despite challenges such as data privacy, ethical issues, and accuracy, the potential benefits of AI are substantial, enhancing the capabilities of intelligent systems. Exploring and optimizing the role of AI in human–robot interaction opens new avenues for improving healthcare and assistance. This Special Issue aims to examine and promote recent developments in the applications of AI for enhancing human–robot interaction and its impact on healthcare and assistance.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

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.

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), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)