



machines

an Open Access Journal by MDPI

IMPACT
FACTOR
2.1

CITESCORE
3.0

Machine Learning Based Methods for Safety and Control of Human–Robot Interaction

Guest Editors:

Dr. Abdel-Nasser Sharkawy

**Dr. Panagiotis N.
Koustoumpardis**

**Prof. Dr. George
Nikolakopoulos**

Dr. Giuseppe Carbone

Dr. Med Amine Laribi

Deadline for manuscript
submissions:
closed (30 June 2023)

Message from the Guest Editors

Human–robot Interaction (HRI) research concerns the understanding, design, and evaluation of robotic systems for use by or with humans, and could improve the efficiency of both human and robot systems.

The focus of this Research Topic is on applying machine learning algorithms, such as supervised learning, unsupervised learning, and reinforcement learning, to the following (and other) topics:

- Human–robot collaboration
- Advanced control methods for HRI and HRC
- Admittance/impedance control
- Collision detection and reaction
- Rehabilitation applications
- Human–robot system
- Innovative robotic architectures
- Safety-related issues
- Variable stiffness joint
- Passive/active compliance



mdpi.com/si/123904

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

**Prof. Dr. Antonio J. Marques
Cardoso**

CISE - Electromechatronic
Systems Research Centre,
University of Beira Interior,
Calçada Fonte do Lameiro, P-
6201-001 Covilhã, Portugal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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*, and other databases.

Journal Rank: JCR - Q2 (Engineering, Mechanical) / CiteScore - Q2 (Control and Optimization)

Contact Us

Machines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/machines
machines@mdpi.com
✉@Machines_MDPI