

## Special Issue

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

### 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

### Guest Editors

Dr. Abdel-Nasser Sharkawy

Dr. Panagiotis N. Koustoumpardis

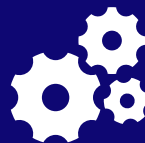
Prof. Dr. George Nikolakopoulos

Dr. Giuseppe Carbone

Prof. Dr. Med Amine Laribi

### Deadline for manuscript submissions

closed (30 June 2023)



## Machines

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### 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.

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### Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso  
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