



Recent Advances in Collaborative Robotics

Guest Editors:

Dr. Iñaki Maurtua

Smart and Autonomous System
Unit, Tekniker, Member of
Basque Research & Technology
Alliance, 20600 Eibar, Spain

Dr. Ander Ansuategui

Smart and Autonomous System
Unit, Tekniker, Member of
Basque Research & Technology
Alliance, 20600 Eibar, Spain

Deadline for manuscript
submissions:
closed (28 February 2023)

Message from the Guest Editors

Twenty-five years after Professors J. Edward Colgate and Michael Peshkin patented a robot architecture called the cobot, intended for direct physical interaction with human operators, one could argue that not all the expectations they created have been met.

However, the advances made have allowed the market to grow steadily, with established companies such as Universal Robot having sold more than 50,000 units since 2008, all robot brands including at least one cobot model in their portfolio, and many new cobot manufacturing companies appearing in the market. Analysts forecast 20% growth to continue until 2030.

This has been possible thanks to the shared efforts of scientists from different fields, standardization and regulatory bodies and industrial companies that have enabled advances in human–robot interaction, perception and cognition technologies, and the application of AI, new sensors and robot concepts to create safe environments, innovative control paradigms and regulatory frameworks.

This Special Issue aims to provide an overview of the latest developments in these fields, including examples of practical implementation.





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
[X@Machines_MDPI](https://twitter.com/Machines_MDPI)