



Collaborative Robotics: Prospects, Challenges and Applications

Guest Editors:

Dr. Alberto Borboni

Prof. Dr. Giuseppe Carbone

Dr. Matteo Claudio Palpacelli

Prof. Dr. Roberto Pagani

Antonio Arbore

Deadline for manuscript
submissions:

25 January 2025

Message from the Guest Editors

Cobots, also known as collaborative robots, are designed to collaborate with humans in a shared workspace. There are numerous potential applications for collaborative robotics in industries such as manufacturing, healthcare, and logistics.

Nevertheless, collaborative robotics presents several challenges. Among these are ensuring safety, integrating with existing systems, and preserving reliability. In addition, workers must be trained to effectively collaborate with robots, and ethical and social implications such as job displacement, as well as new work organization and the need for new skills, must be addressed.

The potential applications of collaborative robotics are vast despite these challenges. In the manufacturing industry, for instance, collaborative robots can perform dangerous or repetitive tasks. In the healthcare industry, collaborative robots can aid medical professionals with patient care and physical therapy.

Overall, the application of collaborative robotics is a dynamic and rapidly developing field with numerous growth and innovation opportunities. It is likely that collaborative robotics will play a greater role in a variety of industries.





sensors



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria
Elettrica e dell'Informazione
(Department of Electrical and
Information Engineering),
Politecnico di Bari, Via Edoardo
Orabona n. 4, 70125 Bari, Italy

Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

Author Benefits

Open Access : free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [Ei Compendex](#), [Inspec](#), [Astrophysics Data System](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Instruments & Instrumentation*) / CiteScore - Q1 (*Instrumentation*)

Contact Us

Sensors Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/sensors
sensors@mdpi.com
[X@Sensors_MDPI](#)