Special Issue

Legged Robots into the Real World, 2nd Edition

Message from the Guest Editor

Legged robots have the potential to augment human capabilities across diverse operational environments. Humanoid robots, alongside quadrupeds, are revealing significant potential across various sectors. Nonetheless, while there have been notable advancements in recent years, the broad deployment of legged robots in real-world applications remains in its nascent stages, with numerous challenges yet to be surmounted.

This Special Issue seeks contributions that highlight cutting-edge advancements in the deployment of legged robots. We are particularly interested in novel mechanisms, innovative actuator designs, optimal control strategies, and leveraging machine learning to harness the full potential of legged robots in practical settings.

Topics of interest encompass, but are not limited to, the following:

- Novel design and development of legged robots;
- Advancements in legged manipulation;
- Dynamic legged locomotion;
- Whole-body motion generation and optimization;
- Jumping and running robots;
- Innovations in localization, mapping, and navigation for legged systems;
- Case studies and real-world applications utilizing legged robots.

Guest Editor

Dr. Chengxu Zhou

School of Mechanical Engineering, University of Leeds, Leeds, UK

Deadline for manuscript submissions

closed (31 May 2025)

Robotics

an Open Access Journal by MDPI

Impact Factor 3.3
CiteScore 7.7

mdpi.com/si/186257

Robotics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
robotics@mdpi.com

mdpi.com/journal/robotics

Robotics

an Open Access Journal by MDPI

Impact Factor 3.3
CiteScore 7.7

mdpi.com/journal/robotics

MDPI

About the Journal

Message from the Editor-in-Chief

It is my great pleasure to welcome you to our open access journal, *Robotics*, which is dedicated to both the foundations of artificial intelligence, bio-mechanics and mechatronics, and the real-world applications of robotic perception, cognition and actions. The 21st century is the robotics century and intelligent robots will change our lifestyle forever. Let us work together toward the realization of intelligent robots step by step.
It is great fun to create intelligent robots and imagine their practical applications. *Robotics* is now ready to serve you in the long journey towards such a goal.

Editor-in-Chief

Prof. Dr. Marco Ceccarelli
LARM2: Laboratory of Robot Mechatronics, Department of Industrial Engineering, University of Rome Tor Vergata, Via del Politecnico 1, 00133 Roma, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, ESCI (Web of Science), dblp, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Robotics) / CiteScore - Q1 (Control and Optimization)