# Special Issue

# The Future of Mobility: Exploring Wheeled–Legged Robot Systems

## Message from the Guest Editors

This Special Issue aims to gather original research, reviews, and case studies that address the latest advances in the dynamic locomotion of wheeled–legged robots. We welcome contributions on model-based and learning-based control strategies, trajectory optimization, terrain interaction modeling, perception-driven planning, and integrated system design. Work demonstrating real-world deployments or benchmarking in unstructured environments is especially encouraged.

- wheeled–legged robots
- dynamic locomotion
- hybrid mobility systems
- motion planning and control
- whole-body control
- terrain adaptation
- perception-based locomotion
- trajectory optimization
- learning-based control
- real-world deployment
-

## Guest Editors

Dr. Songyan Xin
School of Mechanical Engineering, University of Leeds, Leeds LS2 9JT, UK

Dr. Guiyang Xin
School of Biomedical Engineering, Dalian University of Technology, Dalian 116024, China

## Deadline for manuscript submissions

30 April 2026

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

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# About the Journal

## 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.

## 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

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