Special Issue

Modeling, Sensor Fusion and Control Techniques in Applied Robotics, 2nd Edition

Message from the Guest Editors

This Special Issue focuses on novel techniques for enhancing the closed-loop performance of modern robot systems (e.g., mobile robots, UAVs, manipulators). It invites contributions on the development of intelligent, robust, and energy-efficient control solutions. Topics of interest include:

* Optimized mechanical structures and vibration-diagnostic designs for improved motion control.
* Advanced robot modeling, simulation, and model validation techniques.
* Sensor fusion algorithms, state estimation methods, and novel measurement solutions.
* Energy-efficient and robust control strategies that handle system uncertainties.
* Efficient image processing for motion planning and trajectory tracking.
* Applied industrial intelligent robotic solutions (e.g., AI, IoT, Industry 4.0) in fields like agriculture, medicine, and construction.

Both research and review papers on these topics are welcome.

Guest Editors

Dr. Akos Odry

Institute of Informatics, University of Dunaújváros, 2400 Dunaújváros, Hungary

Prof. Dr. Peter Odry

1. Institute of Information Technology, University of Dunaujvaros, Tancsics Mihaly u. 1/A Pf.: 152, 2401 Dunaujvaros, Hungary
2. Symbolic Methods in Material Analysis and Tomography Research Group, Faculty of Engineering and Information Technology, University of Pecs, Boszorkany Str. 6, H-7624 Pecs, Hungary

Deadline for manuscript submissions

31 December 2025

Machines

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.7

mdpi.com/si/217406

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

mdpi.com/journal/machines

Machines

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.7

mdpi.com/journal/machines

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

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q1 (Control and Optimization)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.9 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).