

Special Issue

Advanced Control and Path Planning of Unmanned Aerial Vehicles (UAVs)

Message from the Guest Editors

We are pleased to announce a special issue of our esteemed scientific journal focused on the advancements and challenges in Unmanned Aerial Vehicles (UAVs). UAVs have emerged as indispensable tools in various fields, offering remote-controlled or onboard computer-piloted aircraft capabilities. Particularly noteworthy is their ability to safely and securely conduct inspections in high or confined spaces. However, ensuring the safe and optimal operation of UAVs requires high-quality sensors and advanced control technology. Without these crucial components, UAVs may fail to detect potential collisions and navigate past them. Therefore, the accurate control and optimization of UAVs' paths remain key challenges in this field. As a result, research efforts have rapidly increased to enhance the accuracy and performance of UAVs. The scope of this Special Issue encompasses various aspects, including aircraft control, path planning, trajectory optimization, target tracking, among others. We invite submissions of original research articles and reviews, as we believe they will serve as valuable resources for researchers in the future.

Guest Editors

Dr. Giuseppe Silano

Department of Cybernetics, Faculty of Electrical Engineering, Czech Technical University, 12135 Praha 2, Czech Republic

Dr. Yahui Liu

Driver-Vehicle Automation Collaboration & Shared Control Lab, School of Vehicle and Mobility, Tsinghua University, Beijing 100084, China

Deadline for manuscript submissions

closed (31 October 2025)



Machines

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.7



mdpi.com/si/179744

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

[mdpi.com/journal/
machines](https://mdpi.com/journal/machines)





Machines

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.7



[mdpi.com/journal/
machines](https://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 17.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the second half of 2025).