



an Open Access Journal by MDPI

# Artificial Intelligence in Automation Systems for Aerospace Engineering

Guest Editors:

**Message from the Guest Editors** 

Dr. Jingshan Zhao Dr. Guowu Wei

Prof. Dr. Helge Wurdemann

Prof. Dr. Daniel Martins

Deadline for manuscript submissions: closed (15 November 2023) Automation systems for aerospace engineering have many benefits, including a safer working environment, more flexible manufacturing, increased capacity, and intelligence. However, some obstacles and problems still need to be resolved. It is difficult to perform the necessary assembly, drilling and riveting, surface grinding, and painting of the fuselage and wings in limited and tight spaces. Complex parts require higher accuracy and repeatability. Therefore, the first priority is to develop robotic applications and processes to address these extremely difficult, large-scale manufacturing challenges.

This Special Issue aims to present state-of-the-art developments in automation systems for aerospace engineering, with a focus on creating a successful robotic integration solution that maximizes productivity.

- Machine design, analysis, and application;
- Artificial intelligence;
- Aerospace automation systems;
- Aerospace composite manufacturing;
- Aerospace manufacturing intelligence;
- Aerospace systems and technology.





mdpi.com/si/170749





an Open Access Journal by MDPI

### **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

### 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.

# **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), Inspec, and other databases.

**Journal Rank:** JCR - Q2 (Engineering, Mechanical) / CiteScore - Q2 (Control and Optimization)

# **Contact Us**

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