



an Open Access Journal by MDPI

# **Advanced Autonomous Machines and Designs**

Guest Editors:

#### Prof. Dr. Hamid Reza Karimi

Department of Mechanical Engineering, Politecnico di Milano, Via La Masa 1, 20156 Milan, Italy

#### Prof. Dr. Kai Cheng

College of Engineering, Design and Physical Sciences, Brunel University London, Uxbridge, London UB8 3PH, UK

### Prof. Dr. Yanhua Zou

School of Engineering, Course of Mechanical Engineering Systems, Utsunomiya University, 7-1-2 Yoto, Utsunomiya, Tochigi 321-8585, Japan

Deadline for manuscript submissions: closed (30 September 2021)

### Message from the Guest Editors

With the rapid technological development of machines in different applications such as vehicles, robotics, manufacturing, etc., it may raise concerns with regards to complexity, safety, performance, and maintenance costs associated with the machine operation. To partly overcome these challenges, the concept of autonomy was introduced to machines, which means the machines are able to operate with minimal influence from external controllers or users. The functionality of autonomous machines depends on the integration of mechanical, electrical, or hydraulic components with informational components to reach a higher level of autonomy in machine operation. Toward this aim, the operation of autonomous machines is mainly related to local technology, environment-sensing remote control technology, as well as interaction with their environment.

The primary objective of this Special Issue is to provide a forum for researchers and practitioners to exchange their latest theoretical and technological achievements and to identify critical issues and challenges for future investigation on the integration of autonomous concepts based on information system technologies in machines.









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