

Special Issue

Machine Learning for Predictive Maintenance

Message from the Guest Editor

Almost all infrastructure and systems today are repairable systems. Proper maintenance plays an important role in maintaining the system's operational efficiency and achieving the required performance. However, maintenance costs usually do not represent a small fraction of the total lifecycle cost (LCC) of the systems. Over the last 10 years, with the advancement of new technologies in sensing networks, the cost of the implementation of condition-monitoring systems has been driven continuously down, and at the same time, huge amounts of data have been collected in day-to-day operation. The data bring new value to the asset owners and operators if properly utilized. Therefore, there is a tremendous opportunity for condition-based maintenance (or predictive maintenance) of systems. To cope with the current research trend, this Special Issue is proposed to serve as a forum for researchers to circulate and discuss their research outcomes in system maintenance using advanced technologies including machine learning.

Guest Editor

Dr. Tieling Zhang

Faculty of Engineering and Information Sciences, University of Wollongong, Wollongong, NSW 2522, Australia

Deadline for manuscript submissions

closed (31 May 2024)



Machines

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 3.0



mdpi.com/si/127844

Machines

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 2.1
CiteScore 3.0



[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 - Q2 (Control and Optimization)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2024).