

## Special Issue

# Applied Artificial Intelligence for Data-Driven Predictive Maintenance of Equipment

### Message from the Guest Editors

In the modern era, sophisticated and complex systems are part of modern industry—for instance, heavy machines, engines, electronic circuits and other complex structures. The failure of industrial equipment leads to unwanted downtime, production loss, economic damage, and it also put the safety of the workers at risk. These issues can be mitigated if the maintenance of such assets is performed on a timely basis. This Special Issue intends to present original research papers with high quality and novelty as well as review papers on “Applied Artificial Intelligence for Data-Driven Predictive Maintenance of Equipment”. Topics of interest include, but are not limited to:

- Artificial intelligence, machine learning and deep learning for predictive maintenance;
- Data analytics for system operation and control;
- Multimodal data analytics and fusion;
- Distributed data mining;
- Cloud computing for data analytics and predictive maintenance;
- Data analytics for a resource demand forecasting;
- Data collection, visualization, statistical analysis, storage, and information management in industrial systems;
- Fault detection and diagnosis for energy systems.

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### Guest Editors

Dr. Sana Ullah Jan

Dr. Muhammad Sohaib

Prof. Dr. Naeem Ramzan

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### Deadline for manuscript submissions

closed (15 October 2023)



## Machines

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## 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.

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### Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso  
CISE - Electromechatronic Systems Research Centre, University of  
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#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.5 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2024).