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Data-Driven Fault Diagnosis for Machines and Systems

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Deadline for manuscript submissions:
closed (30 April 2025)

Message from the Guest Editors

The proposed Special Issue aims to cover the latest advancements and challenges in data-driven fault diagnosis and prognosis, including the following:

- Novel approaches for data preprocessing, feature extraction, and feature selection;
- Advanced ML algorithms for fault detection, isolation, and classification;
- Online and real-time fault diagnosis and prognosis techniques;
- Hybrid (physics-based and data-driven) models for fault diagnosis;
- Integration of ML-based fault diagnosis with other smart manufacturing technologies;
- Case studies and applications in different industrial domains such as manufacturing, energy, transportation, and others.

The target audience includes researchers and practitioners in ML, data analytics, industrial engineering, and chemical engineering.

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Dr. Mouloud Amazouz
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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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