Machine Learning and Artificial Intelligence in Machinery Condition Monitoring

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Message from the Guest Editors

In recent years, the technology for machinery diagnostics and prognostics has become even more robust and mature with the introduction of deep-learning-based approaches. This Special Issue aims solicits the latest developments in ML/AI-based solutions for this important area of work for the industry toward developing an environmentally friendly world. Suitable topics for this Special Issue include but are not limited to:

- Feature design and engineering for ML/AI-based machinery-related fault diagnosis and prognosis;
- Data-driven approaches for fault detection, diagnosis, and prognosis, including those based on anomaly detection;
- Deep learning models for fault detection, diagnosis, and prognosis;
- Rule-based methods for machinery health monitoring;
- Learning machines, e.g., SVM-based approach;
- Fuzzy-logic-based approach for machine condition monitoring;
- Evolutionary algorithms for fault detection and identification;
- Health management system design and engineering;
- Real-life applications involving large or small machines;
- Industry-ready laboratory prototypes.

Special Issue

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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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