# Special Issue

# Deep Learning and Predictive Maintenance

**Message from the Guest Editors**

This Special Issue highlights the immense potential of deep learning in achieving precise prediction and efficiently processing large volumes of data. Owing to the widespread application of deep learning across various domains, the capabilities of predictive maintenance are being enhanced. We are, therefore, interested in articles that explore the application of deep learning for predictive maintenance.

- Application cases of deep learning in predictive maintenance;
- Predictive models and algorithms based on deep learning;
- Application of deep learning in fault diagnosis and prediction;
- Utilization of deep learning in equipment condition monitoring and warning systems;
- Application of deep learning in industrial big data analysis;
- Integration of deep learning in maintenance decision support systems;
- Role of deep learning in the Industrial Internet and Industry 4.0;
- Application of deep learning in predictive maintenance in the energy, manufacturing, and transportation sectors;
- Application of deep learning in equipment lifecycle management;
- Challenges and future directions in the field of deep learning for predictive maintenance.

**Guest Editors**

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## Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

## Editor-in-Chief

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