Special Issue

AI and Data-Driven Methods for Fault Detection and Diagnosis

Message from the Guest Editors

This Special Issue is dedicated to recent developments and breakthroughs in **intelligent systems monitoring**, **fault detection**, and **diagnosis**. It seeks submissions on innovative technologies and methodologies for fault detection, real-time monitoring, predictive maintenance, and data-driven diagnosis using artificial intelligence, machine learning, and signal processing techniques. Contributions that address the challenges of improving equipment reliability, reducing downtime, and optimizing performance across diverse industrial applications are particularly encouraged.

Guest Editors

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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.

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