Special Issue

Advanced Prognostic Models for Complex Systems: From Theory to Industrial and Scientific Applications

Message from the Guest Editor

Predicting the future behavior of complex systems is a fundamental challenge across science and engineering. The ability to accurately forecast system states, predict failures, and estimate remaining useful life is critical for enhancing reliability, safety, and efficiency in areas ranging from smart manufacturing and infrastructure management to climate science and biomedicine. The emergence of sophisticated Artificial Intelligence (AI) and Machine Learning techniques has dramatically advanced the field of prognostics, enabling the modeling of highly nonlinear, temporal dynamics from vast datasets. This Special Issue covers a broad range of topics, including but not limited to, the following:
Novel Methodologies for Forecasting and Prognostics
Industrial Applications and Industry 4.0
Scientific Applications and Discovery

Guest Editor

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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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