Special Issue

Next-Generation Machine Learning Models for Predictive Analytics in Condition Monitoring

Message from the Guest Editors

Condition monitoring is essential for modern industrial intelligent maintenance, enhancing the reliability of equipment through predictive data analytics. Next-generation machine learning techniques overcome the limitations of traditional deep learning, such as data dependence and interpretability, and are better suited for industrial environments with large-scale data and high safety demands.

This Special Issue highlights cutting-edge research and applications of next-generation machine learning in predictive analytics for condition monitoring across sectors, including aerospace, rail transportation, energy and chemical engineering, agricultural machinery, and semiconductor manufacturing, with a focus on health monitoring and management of advanced manufacturing systems. We welcome submissions on novel methods, industrial cases, and cyber–physical system integrations.

Guest Editors

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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

Editor-in-Chief

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