Digital Twins Applications in Manufacturing Optimization

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Message from the Guest Editors

Dear Colleagues,

In recent years, Digital Twin (DT) technology has emerged as a transformative force, reshaping the landscape of manufacturing optimization across various industries. This innovative technology has opened new horizons for predictive maintenance, Machine Learning (ML) and Deep Learning (DL) applications, modeling and simulation techniques, reference architectures, big data-driven strategies, and the integration of IoT and edge architectures in the smart manufacturing sector.

This special issue aims to explore the dynamic evolution of DT applications in the context of manufacturing optimization and beyond. Moreover, we will delve into the intricacies of ML and DL techniques, modeling and simulation advances, reference architectures for optimizing manufacturing processes, the role of big data in predictive maintenance, and the synergy between IoT and edge architectures in the era of Industry 4.0.

I/We look forward to receiving your contributions.

Keywords

- digital twins
- smart manufacturing
- predictive maintenance
- modeling and simulation
- IoT edge architecture
- machine learning

Special Issue

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Message from the Editor-in-Chief

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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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