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Fault Detection Technology Based on Deep Learning

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Message from the Guest Editors

Dear Colleagues,

In recent years, there has been increasing interest in and investment on electrical-based systems in various applications. Such systems should have high performance, reliability, and availability. Indeed, they are exposed to several types of failures due to external and internal sources. Failures may affect energy sources, actuators, controllers. Consequently, predictive sensors. or maintenance based on accurate fault diagnosis approaches and fault-tolerant control strategies is of upmost importance.

State-of-the-art reviews have shown that fault diagnosis methods are mainly classified in model-based approaches and signal-based approaches. However, with the increase in data acquisition and processing algorithms, artificial intelligence (AI) tools have become more attractive for fault diagnosis and fault classification issues. Indeed, AI approaches are only based on recorded data obtained from measured quantities instead of specific complex mathematical models.

The main purpose of this Special Issue is to share highquality original research articles and reviews in the area of fault diagnosis based on deep learning and its applications.







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Message from the Editor-in-Chief

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