Special Issue

Deep Learning Based Intelligent Fault Diagnosis

Message from the Guest Editors

The rapid development of deep learning has significantly transformed various fields, including fault diagnosis in complex systems. Intelligent fault diagnosis, leveraging deep learning techniques, offers unprecedented opportunities to improve the reliability, safety, and efficiency of machinery and equipment. By harnessing deep learning, researchers can uncover intricate patterns, enhance fault identification accuracy, and adapt to diverse operational conditions, addressing challenges such as non-stationary signals, data scarcity, and cross-domain variability. We are pleased to invite you to contribute to this Special Issue titled “Deep Learning Based Intelligent Fault Diagnosis” to share your innovative research and insights into this vital and evolving field. This Special Issue aims to highlight recent advances in combining deep learning with sensing technologies, multi-sensor information fusion, and diagnostic techniques while emphasizing innovative solutions for real-world engineering problems and fostering multidisciplinary approaches to enhance system diagnostics.

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Deadline for manuscript submissions

20 December 2025

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/230997

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mdpi.com/journal/sensors

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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