Special Issue

AI-Driven Reliability Analysis and Predictive Maintenance

Message from the Guest Editors

AI-driven reliability analysis and predictive maintenance is a proactive and data-driven approach that leverages artificial intelligence (AI) technologies to analyse the reliability and proactively optimize maintenance of industrial systems and equipment. By harnessing the power of machine learning algorithms, predictive analytics, and advanced data processing techniques, this methodology allows us to efficiently anticipate and prevent equipment failures before they occur, thereby minimizing downtime, reducing maintenance costs, and maximizing operational efficiency. This Special Issue will gather innovative research contributions and practical applications in the field of leveraging AI technologies for optimizing reliability analysis and predictive maintenance strategies in industrial settings.

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Deadline for manuscript submissions

31 January 2026

Machines

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.7

mdpi.com/si/204239

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Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.
Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.
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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