

Special Issue

Artificial Intelligence in Rail Transportation

Message from the Guest Editors

This Special Issue aims to collect the latest innovations, applications, and practical implementations of AI technologies in rail systems encouraging collaboration between academia and industry to accelerate advancements in rail transportation. Researchers and practitioners are invited to submit original research articles, reviews, and case studies that push the boundaries of knowledge in these areas. This Special Issue aims to foster scholarly discourse and contribute substantively to the evolution of modern railway transportation systems. Suitable topics include, but are not limited to, the following:

- Autonomous Train Operations;
- Automated Inspection Systems;
- Computer Vision Applications for Rail Safety;
- AI-Driven Predictive Maintenance in Rail Systems;
- Data Analytics and Big Data in Rail Transportation;
- Real-Time Monitoring of Wheel-Rail Contact;
- AI in Energy Management and Sustainability;
- Wear Prediction Models.

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About the Journal

Message from the Editor-in-Chief

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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