

Special Issue

Energy Optimization and Management in Smart IoT-Driven Mechanical Systems

Message from the Guest Editors

The integration of Artificial Intelligence (AI) and Virtual Reality (VR) into IoT-based mechanical systems represents a significant leap in the intelligent management and optimization of industrial and operational resources. Historically, mechanical systems have evolved from manual control to sophisticated, data-driven infrastructures, and the convergence with AI and immersive technologies now enables unprecedented real-time insights, simulation, and decision-making capabilities. This Special Issue aims to showcase cutting-edge research that explores how AI and VR technologies can improve energy efficiency, system diagnostics, predictive maintenance, and overall resource optimization. Applications may include digital twins, intelligent control algorithms, immersive training environments, and advanced monitoring platforms powered by machine learning. We invite original contributions that present theoretical advances, applied methodologies, and experimental validations.

- artificial intelligence
- virtual reality
- IoT
- mechanical systems
- resource optimization
- digital twins
- predictive maintenance
- immersive technologies
- intelligent control
- smart manufacturing

Guest Editors

Prof. Dr. Álvaro De La Puente Gil

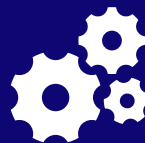
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About the Journal

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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