



an Open Access Journal by MDPI

Artificial Intelligence in Mechanical Engineering: From Statistical Learning to Generative Models

Guest Editors:

Dr. Luigi Gianpio Di Maggio

Department of Mechanical and Aerospace Engineering (DIMEAS), Politecnico di Torino, Corso Duca Degli Abruzzi 24, 10129 Torino, Italy

Prof. Dr. Cristiana Delprete

Department of Mechanical and Aerospace Engineering (DIMEAS), Politecnico di Torino, Corso Duca Degli Abruzzi 24, 10129 Torino, Italy

Deadline for manuscript submissions:

31 December 2024

Message from the Guest Editors

The Special Issue “*Artificial Intelligence in Mechanical Engineering: From Statistical Learning to Generative Models*” covers the advancements in artificial intelligence in the field of mechanical engineering, tracing its development from statistical learning through discriminative and regression models to generative models. This Special Issue encompasses a broad spectrum of AI applications, such as robotics, automation, predictive maintenance, optimization of manufacturing processes, advanced materials design, machine design, structural integrity, damage identification, and evolution and fatigue life estimation.

Topics in this Special Issue of Serious Games include, but are not limited to:

- artificial intelligence
- mechanical engineering
- intelligent fault diagnosis
- robotics
- machine learning
- machine design
- material design
- fatigue damage
- deep learning
- generative AI
- manufacturing
- industry
- feature extraction
- sensors
- data analysis



mdpi.com/si/204774

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and
Telecommunications,
Politecnico di Torino, 10129
Torino, Italy

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Control and Systems Engineering*)

Contact Us

Electronics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/electronics
electronics@mdpi.com
[X@electronicsMDPI](https://x.com/electronicsMDPI)