

Special Issue

Application of Artificial Neural Networks in Fault Diagnosis

Message from the Guest Editors

Artificial neural networks have revolutionized fault diagnosis by enabling accurate detection, classification, and prediction of faults across diverse domains. Their ability to process large-scale data and extract intricate patterns has proven invaluable in industries ranging from manufacturing and energy to healthcare and transportation. This Special Issue seeks to provide a platform for researchers to share advancements, methodologies, and practical implementations of ANN in fault diagnosis. Research areas may include (but are not limited to) the following:

- Integration of ANNs with other machine learning techniques;
- Integration of ANNs with other computational intelligence techniques;
- Data preprocessing and feature engineering for ANNs in fault diagnosis;
- Predictive maintenance strategies using ANNs.

Guest Editors

Prof. Dr. Ai-jun Yin

College of Mechanical Engineering, Chongqing University, Chongqing 400044, China

Dr. Rui Araújo

Institute of Systems and Robotics (ISR-UC), Department of Electrical and Computer Engineering (DEEC-UC), University of Coimbra, Pólo II, PT-3030-290 Coimbra, Portugal

Deadline for manuscript submissions

20 August 2025



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/231313

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

mdpi.com/journal/

[applsci](https://mdpi.com/journal/applsci)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)