



The Application of Machine Learning in Structural Health Monitoring

Guest Editor:

Dr. Hao Xu

School of Aeronautics and
Astronautics, Dalian University of
Technology, Dalian 116024,
China

Deadline for manuscript
submissions:

20 June 2024

Message from the Guest Editor

For decades, continuous efforts have been made in the area of structural health monitoring (SHM) due to its crucial role in real-time health state awareness and safety evaluation for various engineering structures. With its typical interdisciplinary nature, SHM embraces the advances in solid mechanics, sensor technology, signal processing, hardware design, etc.

In this Special Issue, we invite worldwide researchers to publish their original works highlighting the state-of-the-art application of machine learning in structural health monitoring. The topics of submitted articles can cover both fundamental algorithms as well as lasting ML applications in aerospace, civil engineering, the automobile industry, machinery, and so on. The welcome topics include (among others):

- Data generation and augmentation;
- Robust model training to adapt to application environments;
- Novel SHM-related knowledge obtained from data mining;
- Uncertainty identification, propagation, and control in SHM process;
- Image/pattern recognition using SHM/NDT techniques.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

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.

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

Journal Rank: JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us

Applied Sciences Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/applsci
applsci@mdpi.com
X@Applsci