

## Special Issue

# Machine Learning for Noise and Vibration Engineering

### Message from the Guest Editors

Machine learning techniques offer new pathways in noise and vibration engineering. New modeling techniques emerge that make use of large data sets, pattern recognition deepens the insight into noise and vibration phenomena, and new algorithms can “learn” to identify the dynamic properties of mechanical structures. The Special Issue “Machine Learning for Noise and Vibration Engineering” aims at reporting on machine learning techniques in noise and vibration engineering. Authors are invited to submit their original work, including but not limited to:

- Artificial neural networks, deep learning including statistical analyses and explainability techniques;
- Data-driven vibration and acoustic modeling techniques;
- Inverse problems in vibration and acoustics based on machine learning;
- engineering noise control by means of data-driven approaches;
- Pattern recognition and pattern prediction including applications in vibration and acoustic-based condition monitoring;
- Identifying, quantifying, and controlling uncertainty of data-driven models.

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### Guest Editors

Dr. Christian Adams

Dr. Merten Stender

Prof. Dr. Tyler Dare

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### Deadline for manuscript submissions

closed (30 September 2022)



## Applied Sciences

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## 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.

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### Editor-in-Chief

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