

Special Issue

Machine Learning in Structural Dynamic Analysis and Health Monitoring

Message from the Guest Editors

This Special Issue aims to summarize the recent advances in machine-learning-based structural dynamic analysis and structural health monitoring (SHM), considering the various approaches that have been developed and put forward for application in health monitoring and periodic inspection in civil, mechanical and aerospace engineering. Numerical analysis has also experienced rapid development for use in structural dynamic analysis, such as in the case of genetic-algorithm-based structural dynamic optimization. This Special Issue also welcomes investigations on algorithm development, deep learning, signal processing, data management and so on. High-quality investigations regarding machine learning based SHM and damage identification are encouraged, as are reviews summarizing advances over recent years.

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