Special Issue

Remote Sensing and Artificial Intelligence for Structural Health Monitoring

Message from the Guest Editors

Structural Health Monitoring (SHM) plays a vital role in ensuring the safety, functionality, and longevity of critical infrastructure, including bridges, tunnels, dams, high-rise buildings, and other large-scale civil structures. With the increasing complexity, aging, and exposure of infrastructure systems to extreme environmental conditions and natural disasters, there is a growing demand for advanced and intelligent monitoring solutions that can provide early warnings of potential damage or failure, enable condition-based maintenance, and ultimately enhance public safety and asset management efficiency. Recent advancements in remote sensing technologies have opened new avenues for high-resolution, real-time, and scalable SHM solutions. At the same time, the exceptional growth of data generated from these remote sensing systems necessitates the use of Artificial Intelligence (AI) and Machine Learning (ML) techniques for effective analysis, anomaly detection, and predictive modeling. This Special Issue aims to showcase recent advances and novel methodologies at the intersection of remote sensing technologies and physics- and AI-driven data analytics for SHM.

Guest Editors

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Message from the Editor-in-Chief

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peer-review process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend *Remote Sensing* for your best research publications for a fast dissemination of your research.

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