Special Issue

Remote Sensing Techniques for 3D Reconstruction and Multimodal Structural Analysis

Message from the Guest Editors

3D reconstruction plays a critical role in modern remote sensing by enabling the detailed representation of terrain, urban environments, and complex structures for various engineering applications. Advances in remote sensing technologies, such as synthetic aperture radar (SAR), LiDAR, multispectral, hyperspectral, and high-resolution optical sensors, have significantly expanded the capabilities for capturing geometric and spectral information for 3D modeling. However, the complexity of multimodal data integration presents ongoing challenges in achieving accurate, scalable, and efficient 3D reconstruction. The growing interest in machine learning, particularly physics-informed models and deep learning architectures, offers promising directions for improving data fusion and structural interpretation from diverse remote sensing datasets.

This Special Issue aims to provide a dedicated platform for the latest research efforts focused on developing and applying remote sensing methodologies for 3D reconstruction and structural analysis, highlighting both theoretical advancements and practical implementations across various engineering fields.

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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.

Editor-in-Chief

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