Special Issue

Artificial Intelligence and Machine Learning for Multi-Modal and Multi-Spectral Remote Sensing Image Processing

Message from the Guest Editors

This Special Issue aims to focus on cutting-edge research of artificial intelligence and machine learning technology in multimodal and multispectral remote sensing image processing, invites scholars to submit articles including, but not limited to: 1. Intelligent fusion and feature extraction of multimodal remote sensing data (optical, SAR, hyperspectral, infrared, etc.); 2. Remote sensing image classification, object detection, and semantic segmentation based on deep learning; 3. Application of small-sample/weakly supervised learning in remote sensing image interpretation; 4. Generative models (such as GAN, diffusion models) and remote sensing data augmentation; 5. Dynamic analysis and prediction of time-series remote sensing data; 6. Intelligent Processing of 3D point clouds and stereoscopic remote sensing images; 7. Edge computing and remote sensing real-time processing system; 8. Research on the credibility of explainable AI and remote sensing models; 9. Innovative applications of multimodal remote sensing in fields such as ecology, agriculture, and disasters; 10. Construction of open-source remote sensing datasets and algorithm frameworks.

Guest Editors

Prof. Dr. Tao Lei

Prof. Dr. Tao Gao

Prof. Dr. Lefei Zhang

Prof. Dr. Asoke K. Nandi

Deadline for manuscript submissions

30 November 2025

About the Journal

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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