Special Issue

Deep Learning Techniques for Pixel Classification and Image Retrieval in Remote Sensing

Message from the Guest Editors

This Special Issue aims to synthesize recent advances in methods for pixel-wise classification and image retrieval in remote sensing, with a focus on both technical innovation and applications across diverse research domains. We welcome original research articles, review papers, and technical reports that propose novel model architectures or demonstrate meaningful applications and practical implementations in pixel-wise classification and image retrieval. Relevant topics include, but are not limited to, the following areas:

- Pixel-wise classification and semantic segmentation using deep learning;
- Content-based image retrieval in remote sensing imagery;
- Benchmark datasets and evaluation methods for classification and retrieval;
- Transfer learning and self-supervised approaches for label-scarce scenarios;
- Multi-source data fusion for classification and retrieval;
- Super-resolution for enhanced classification and retrieval performance;
- Transformer-based models for classification and visual feature extraction.

Guest Editors

Dr. Kyungil Lee

Dr. Eunbeen Park

Dr. Hyun-Woo Jo

Deadline for manuscript submissions

31 December 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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