Special Issue

Advances in Deep Learning and Machine Learning for Remote Sensing Image Analysis

Message from the Guest Editors

The scale and complexity of machine learning approaches and the availability of multi-source remote sensing data are significant challenges in handling big data and developing high-performance computational strategies for remote sensing applications. Addressing these challenges requires advancements in machine learning, deep learning techniques capable of managing large datasets, and methods for multi-source data fusion to enhance object detection, image segmentation, classification, and other remote sensing tasks. We encourage submissions of both regular research papers and reviews on topics, including, but not limited to, the following:

- Machine and deep learning models in remote sensing
- Image processing and computer vision
- RGB, multispectral, and hyperspectral imaging
- Thermal and LiDAR imagery data
- Advanced remote sensing applications
- Large language models for remote sensing
- The application of generative AI in remote sensing imagery
- Big data and predictive analytics

Guest Editors

Dr. Keshav D. Singh

Dr. Abdul Bais

Prof. Dr. Saeid Homayouni

Deadline for manuscript submissions

20 January 2026



an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



mdpi.com/si/244069

Remote Sensing Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 remotesensing@mdpi.com

mdpi.com/journal/ remotesensing





an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



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 peerreview 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

Dr. Prasad S. Thenkabail

Senior Scientist (ST), U. S. Geological Survey (USGS), USGS Western Geographic Science Center (WGSC), 2255, N. Gemini Dr., Flagstaff, AZ 86001, USA

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, PubAg, GeoRef, Astrophysics Data System, Inspec, dblp, and other databases.

Journal Rank:

JCR - Q1 (Geosciences, Multidisciplinary) / CiteScore - Q1 (General Earth and Planetary Sciences)

