Knowledge-Driven and/or Data-Driven Methods for Remote Sensing Image Processing

Guest Editors:

Prof. Dr. Junmin Liu

Prof. Dr. Xile Zhao

Prof. Dr. Tieyong Zeng

Dr. Bin Zhao

Dr. Claudia Paris

Deadline for manuscript submissions:
31 May 2024

Message from the Guest Editors

Remote sensing image processing plays a critical role in diverse fields such as environmental monitoring, resource management, and disaster response. However, processing and analyzing remotely sensed data can be challenging due to complex environments, limited signal-to-noise ratio, and the presence of noise and artifacts. Recently, two different approaches to remote sensing image processing have emerged: knowledge-driven and data-driven methods. Among these, the knowledge-driven methods, based on expert experience or mathematical models describing the physical processes underlying remote sensing data, show high interpretability. In contrast, data-driven methods leverage machine learning algorithms to identify correlations and patterns from observed data, which are prevalent in recent years.

In particular, this Special Issue focuses on exploring the advantages and limitations of knowledge-driven and data-driven approaches and suggesting ways to combine them to boost remote sensing image processing.

Special Issue

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

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.

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*)

Contact Us