remote sensing

an Open Access Journal by MDPI

IMPACT FACTOR 4.848

CITESCORE 6.6 SCOPUS

Wavelet Transform for Remote Sensing Image Analysis

Guest Editors:

Dr. Sathishkumar Samiappan
Geosystems Research Institute, Mississippi State University, 2 Research Boulevard, Starkville, MS 39759, USA

sathish@gri.msstate.edu

Prof. Dr. Balakrishna Gokaraju
Computational Science & Engineering, North Carolina A&T University, 1601 E. Market Street, Greensboro, NC 27411, USA

bgokaraju@ncat.edu

Deadline for manuscript submissions:
31 May 2022

Message from the Guest Editors

Wavelet transform is a popular approach in signal and image processing, with wide-ranging applications including remote sensing. Wavelet transforms start with an orthogonal basis of constant functions, constructed by simple dilation and translation to map any function to its coefficients with respect to this basis. When this transformation is applied to remote sensing images, the resulting coefficients can be used to solve numerous problems in this field ranging from feature extraction, compression, and registration to advanced applications such as extracting bathymetry from radars.

This Special Issue is focused on the use of wavelet transforms for remote sensing images in order to cover the broad range of possibilities. Theoretical, methodological, experimental, and application papers are welcome addressing (but not limited to) the following aspects:

- Feature extraction—multispectral, hyperspectral, and radar;
- Image enhancement and noise reduction;
- Super-resolution reconstruction;
- Image change detection;
- Image fusion;
- Image registration;
- Image compression;
- Applications in high-resolution images collected from small drones.