



CALL FOR PAPERS
IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing

Special Issue on
“Sparse and Collaborative Representation in Remote Sensing”

Recently, representation-based machine learning methods have attracted considerable attention due to the development of sophisticated remote sensing systems. Therefore it is necessary to explore effective and accurate data processing researches using sparse and collaborative representation in remote sensing. The representation-based data processing can facilitate a fundamental shift in solving complex remote sensing related problems. For instance, the popular sparse and collaborative representation has evolved into remote sensing data for feature extraction or selection, image classification, scene understanding, spectral unmixing, target detection and provided tremendous power for image processing and further applications. Therefore, the primary goal of this Special Issue is to provide the opportunity for researchers to discuss the advances and trends of theories, methodologies, techniques, and applications for the remote sensing and geoscience understanding using representation-based models.

This special issue will explore the state-of-the-art theory, methods, and applications of sparse and collaborative representation in remote sensing. The topics of interest include, but are not limited to:

- Fundamental representation-based theories for remote sensing data processing.
- Representation-based methods and techniques for remote sensing data processing.
- Some typical fields: dimensionality reduction, clustering, segmentation, image classification, scene understanding, spectral unmixing, target detection.
- Applications of remote sensing dataset using representation-based methods (i.e., land cover, hydrology, agriculture, environment, forest, carbon cycle, atmosphere, Earth surface processes).

Schedule

March 1, 2020: Submission system opening
August 31, 2020: Submission system closing
2020: Publication date

Format

All submissions will be peer reviewed according to the IEEE Geoscience and Remote Sensing Society guidelines. Submitted articles should not have been published or be under review elsewhere. Submit your manuscript on <http://mc.manuscriptcentral.com/jstars>, using the Manuscript Central interface and select the “Sparse and Collaborative Representation in Remote Sensing” special issue manuscript type. Prospective authors should consult the site <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7676436> for guidelines and information on paper submission. All submissions must be formatted using the IEEE standard format (double column, single spaced). As of January 1, 2020, J-STARS will become a fully open-access journal, charging a flat rate of \$1250 for each paper.

Guest Editors

Hongjun Su Hohai University, China (hjsurs@163.com, hjsu@hhu.edu.cn)
Sen Jia Shenzhen University, China (senjia@szu.edu.cn)
Hongyan Zhang Wuhan University, China (zhanghongyan@whu.edu.cn)
Junshi Xia RIKEN Center for Advanced Intelligence Project, Japan (junshi.xia@riken.jp)