



CALL FOR PAPERS
IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
Special Issue on
“Intelligent Sensing and Recognition Technologies for Remote Sensing”

Remote sensing has been widely used in agriculture, geography, geology, ocean, hydrology, meteorological environment monitoring, earth resource exploration and other aspects. How to effectively sense the features of remote sensing information and recognize the key parts has always been a research direction worthy of attention. Extensive efforts have been made to obtain more robust and efficient features based on remote sensing information in various sensing and recognition tasks. With the development of satellite remote sensing and computer technology, the spatial resolution and texture information of remote sensing image have been improved and corresponding processing approaches have been updated. Among them, artificial intelligence (AI) has been successfully applied in extraction of abstract and semantic features and it performs well in information sensing, target identification, object detection, and classification thanks to the universal model of universal approximation of deep learning which can capture features that are difficult to obtain manually. Therefore, it is of great significance to design appropriate AI technology and apply it to the sensing and recognition tasks of remote sensing to expand the recognition scene and improve the recognition accuracy. This special issue aims to collect and highlight outstanding works of recent state-of-the-art contributions of intelligent sensing and recognition technologies for remote sensing.

The broad topics include (but are not limited to):

- Intelligent sensing and recognition for remote sensing target detection
- Intelligent sensing and recognition for remote sensing scenes classification
- Intelligent sensing and recognition for remote sensing image segmentation
- Intelligent sensing and recognition for remote sensing change detection
- Intelligent sensing and recognition for disaster prediction with remote sensing
- Distributed learning based remote sensing information recognition
- Few/zero shot learning based remote sensing information recognition
- Transfer learning based remote sensing information recognition
- Neural architecture search based remote sensing information recognition
- Lightweight deep learning models based remote sensing information recognition
- Explainable machine learning based remote sensing information recognition
- Multi-modal learning based remote sensing information recognition

Schedule

Jul 1, 2023, Submission system opening
Feb 28, 2024, Submission system closing

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 “**Intelligent Sensing and Recognition Technologies for Remote Sensing**” special issue manuscript type. Prospective authors should consult the site <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9082768> for guidelines and information on paper submission. All submissions must be formatted using the IEEE standard format (double column, single spaced). Please visit http://www.ieee.org/publications_standards/publications/authors/author_templates.html to download a template for transactions. Please note that as of Jan. 1, 2020, IEEE J-STARS has become a fully open-access journal charging a flat publication fee \$1,250 per paper.

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