



CALL FOR PAPERS

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

Special Issue on

"Remote Sensing for Smart Cities: Datasets, Algorithms and Applications"

Smart city initiatives have become a leading mechanism to improve the competitiveness and operational efficiency of a city, to increase livability, and to solve challenging city-wide problems. Remote sensing (RS) technology can achieve long-distance detection accurately with wide space coverage and rich information, and is an important tool for the dynamic collection and monitoring of spatial and spectral information. As such, the effective use of RS can provide accurate and reliable support for smart city initiatives and is a valuable aid to improve the efficiency and level of smart city construction. To provide a better data analysis basis for smart city construction based on RS, it is necessary to develop novel RS benchmark datasets as well as key basic RS image processing technologies, such as image fusion and image super-resolution. These ingredients will maximize the value of RS data and play a significant role in supporting the development of smart cities. In addition to this, exploring the important and varied applications of RS in smart cities, such as environmental monitoring, agricultural development, and city management, can provide scientific decision-making basis and reference suggestions for smart city construction. Finally, in order to promote the broad deployment of RS technology in smart cities, it is also necessary to develop efficient and lightweight models, and build RS data processing algorithms or systems that can be used in practical engineering applications. As such, this special issue aims to communicate recent advances in RS for smart cities including datasets, algorithms, and applications, and to promote a new body of research on this topic.

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

- RS benchmark datasets for smart cities
- Multi-modal and multi-source RS data fusion and analysis
- Object detection and tracking based on RS images
- New theories and methods in RS approaches for smart environmental protection
- New theories and methods in RS approaches for smart agriculture
- New theories and methods in RS approaches for smart traffic
- New theories and methods in RS approaches for smart security
- RS software/hardware implementations for smart cities

Schedule

Feb. 1, 2023 Submission system opening Aug. 31, 2023 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 "Remote Sensing for Smart Cities: Datasets, Algorithms and Applications" 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 openaccess journal charging a flat publication fee \$1,250 per paper.

Guest Editors

Fan Li Xi'an Jiaotong University, China (lifan@mail.xjtu.edu.cn)

Clinton Fookes Queensland University of Technology, Australia (c.fookes@qut.edu.au)

Gang Li Tsinghua University, China (gangli@mail.tsinghua.edu.cn)

Mingyang Ma Xi'an Jiaotong University, China (mamingyang@mail.xjtu.edu.cn)
Shaohui Mei Northwestern Polytechnical University, China (meish@nwpu.edu.cn)
The University of Sydney, Australia (zhiyong.wang@sydney.edu.au)