



CALL FOR PAPERS

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

Special Issue on “Urban Remote Sensing for Smarter Cities”

The rapid growth of urban environments poses unique challenges in monitoring various aspects of evolution of urban form and also on the development of applied solutions to related urban problems in terms of planning, safety, security, etc. With the recent advances in remote sensing technologies, such as airborne remote sensing using unmanned aerial vehicles, autonomous vehicles, etc., and large volumes of data available from volunteered geographical information, internet of things based systems, etc., urban sensing and modeling has become a very interesting field with a more promising outlook for developing practical solutions for continuously evolving cities. Aided by the technological advances, the concept of “Smart Cities” has been generating a lot of interest, where intelligent information and communication technology solutions are being developed to face the challenges posed by economic and environmental changes. Remote Sensing plays a crucial role in providing such solutions for development of highly efficient and adaptive urban environments. This special issue will focus on the aspects of role of remote sensing in the development of future cities in the wake of the recent technological advances.

The technical topics of interest include but are not limited to:

- New data & sensors for urban area remote sensing (VHR, hyperspectral, SAR, PolSAR, InSAR, LiDAR, UAV, etc.), including unconventional sources (thermal imagery, oblique imagery, etc.);
- Internet of things, multi-modal data analysis and data fusion (including multiple remote sensing data, in-situ urban monitoring data, VGI, etc.)
- Algorithms and techniques for remotely sensed data interpretation, structure detection and characterization in urban areas (feature extraction, pattern recognition, semantic segmentation, buildings/roads extraction, vehicle detection, land use/cover mapping, urban area extraction, change detection, multitemporal analysis, etc.)

We warmly welcome application papers, including

- Smart cities (monitoring, sustainable development, energy modeling, BIM, etc.)
- Urban climatology, geology, and geohazards (heat islands, air quality, subsidence, coastal, etc.)
- Social science (health, vital statistics, security, archaeology)
- Urban planning and conservation
- Urban development and growth pattern
- Technical reviews on related topics

The special issue follows the JURSE 2017 conference (Joint Urban Remote Sensing Event, <http://jurse2017.com>) but submission is not restricted to JURSE contributors and attendees.

Schedule

Sept. 30, 2017 Full paper submission deadline
October 2018 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 “Urban 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). Please note that IEEE JSTARS applies a mandatory page over length charge of \$200 per page (beginning with page 7 and beyond).

Guest Editors

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