CALL FOR PAPERS

IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
Special Issue on
"2020 Gaofen Challenge on Automated High-Resolution Earth Observation Image Interpretation"

With the significant advances of different earth observation missions, massive volumes of high-resolution data have been widely accessible, providing diverse information of earth, and further encouraging the application to cope with current and future societal needs. However, the automated interpretation of high-resolution earth observation data is very challenging due to the complicated image background and insufficient annotated data, and requires highly advanced techniques. To promote the research in this field, the 2020 Gaofen Challenge on Automated High-Resolution Earth Observation Image Interpretation, serves to bring together researchers from both Earth Observation and Computer Vision communities to discuss cutting-edge topics on object detection and recognition, semantic segmentation and their applications in realistic application scenarios. This special issue intends to report the cutting-edge methods that emerged in the 2020 Gaofen Challenge, which are tailored for specific detection tasks in earth observation. It aims at boosting the interpretation of high-resolution earth observation data towards more accurate, autonomous, and cost-effective quality levels.

The broad topics include (but are not limited to):
- Advanced methods for airplane detection and recognition in optical remote sensing images
- Advanced methods for ship detection in synthetic aperture radar (SAR) images
- Automated image interpretation for high-resolution earth observation data, including other categories of geo-spatial objects (e.g. bridge, water-body, vehicle, etc.) detection, semantic segmentation, etc.

Schedule
January 1st, 2021:   Submission system opening
June 30th, 2021:   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 "**2020 Gaofen Challenge**" 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). To download a template for transactions, please visit http://www.ieee.org/publications_standards/publications/authors/author_templates.html. 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.

Guest Editors
Xian Sun   Chinese Academy of Sciences, China (sunxian@aircas.ac.cn)
Feng Xu   Fudan University, China (fengxu@fudan.edu.cn)
Ronny Hänsch   DLR, Germany (rww.haensch@gmail.com)
Cheng Wang   Xiamen University, China (cwang@xmu.edu.cn)
Naoto Yokoya   RIKEN, Japan (naoto.yokoya@riken.jp)