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

Special Issue on
"Scene Analysis and Understanding in the Intelligent Transportation for Urban Area"

Transportation system is an indispensable infrastructure for urban development. It not only supports the formation and expansion of the city, but also plays a key role in promoting economic prosperity and improving the life quality of residents. With the progress of science and technology, the combination of remote sensing technology and artificial intelligence has brought revolutionary changes to urban traffic management. By perceiving the elements such as vehicles and roads in the urban traffic scene to analyzes and understands the collected image data, it can dynamically monitor urban traffic from a larger perspective. However, with the innovation of remote sensing imaging technology and the improvement of application requirements, the collected image data show new trends, such as modal heterogeneity, spatial-temporal asynchronism, large scale, etc. How to effectively analyze and use these data to improve the accuracy and comprehensiveness of scene analysis has become a key problem to be solved urgently. In addition, the limitations of the existing methods gradually appear in the face of complex and changeable traffic scenes, resulting in a significant decline in performance in some cases. To solve these problems, we invite researchers from academia and industry to publish original research on the technologies and applications related to scene analysis and understanding in the transportation for urban area. The purpose of this special issue is to provide a platform to share the latest research results, methods and best practices, and to promote the development of scene analysis and understanding in the transportation.

The broad topics include (but are not limited to):
- Multi-source data fusion
- Image quality enhancement
- Traffic element information extraction, such as vehicles, roads, and buildings
- Object detection, object tracking, object counting
- Crowd analysis
- Behavior recognition
- Event detection
- Change detection, anomaly detection

Schedule
Jan. 1, 2025 Submission system opening
Jul. 31, 2025 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 "**Scene Analysis and Understanding in the Intelligent Transportation for Urban Area**" 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 since Jan. 1, 2025, IEEE J-STARS, as a fully open-access journal, is charging a flat publication fee $1,800 per paper.

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