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

Special Issue on
“Street View Imagery and GeoAI”

The advent of GeoAI and the proliferation of street view imagery have revolutionized our understanding of urban micro-environments. Unlike remote sensing data, street view imagery (Not only sourced from commercial companies, but also potentially obtained through crowdsourcing source such as social media and Volunteered Geographic Information) offers a close-up perspective, providing detailed, ground-level insights into cityscapes. This imagery enables researchers to conduct finely-grained, time-series analyses of environmental features. This Special Issue seeks to explore these unique advantages of street view imagery over traditional remote sensing approaches in urban analysis.

This Special Issue aims to showcase innovative research that utilizes street view imagery for intelligent perception of urban micro-environments. We invite contributions that apply GeoAI methods to address various urban issues. The broad topics include (but are not limited to):

- Urban functional zone identification, jointly observed from the aerial perspective of remote sensing imagery and the close-up perspective of street view imagery
- Urban resilience, jointly observing urban communities using multiple sensors and data sources to measure differences in resilience in the face of disasters;
- Health geography applications, urban ecological, and green space analysis;
- Urban safety perception, fine exploration of urban crime spatiotemporal patterns;
- Smart transportation, evaluating traffic patterns based on environmental features to improve urban mobility.
- Cultural heritage protection, using temporal imagery to record and identify changes in the built environment.
- Real estate analysis, assessing building age, style, energy consumption, and valuation, etc.

This special issue focuses on the joint observation of urban close-up imagery and remote sensing imagery, with at least one type of image observation data present. Studies demonstrating innovative methods and practical impacts on urban planning, policy-making, and environmental monitoring are especially welcome.

We welcome original research articles, reviews, case studies, and technical reports that detail the methodology, data analysis, and outcomes, highlighting the practical application and potential impact on urban micro-environment sensing. Submissions should clearly articulate the significance of street view imagery in urban studies and showcase innovative analytical techniques.

Schedule
- Jun 01, 2024, Submission system opening
- Dec 31, 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/ijstars, using the Manuscript Central interface and select the “Street View Imagery and GeoAI” 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/editorialTemplates.html to download a template for transactions. Please note that since Jan. 1, 2024, IEEE J-STARS, as a fully open-access journal, is charging a flat publication fee $1,496 per paper.

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