Special Issue

3D and Semantic Reconstruction of the Urban Environment Using Multi-Modal and Multi-Resolution Remote Sensing Data

Message from the Guest Editors

Photogrammetry and remote sensing techniques are utilized to produce 3D models of urban scenes using satellite, aerial, and terrestrial data with varying levels of automation, accuracy, and replicability. This Special Issue seeks to address the latest developments in remote sensing-based 3D urban scene reconstruction—from innovative methods and new benchmark datasets to relevant application examples. The topics of this Special Issue include, but are not limited to:

- Weakly or self-supervised methods for extracting 3D semantic information of the urban environment;
- Multimodal approaches for combining different sensing technologies (e.g., multispectral, LiDAR, and SAR);
- Multiplatform (satellite, aerial, and terrestrial) and multiresolution data fusion approaches for 3D urban scene reconstruction;
- Automatic 3D urban object identification and change detection methods from imagery, point clouds, and meshes;
- End-to-end approaches for the automatic generation of high-level semantic objects (e.g., LoD and BIM);
- Methods for efficient storage, processing, and visualization of 3D urban objects with a high level of detail and semantic attributes.

Guest Editors

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Message from the Editor-in-Chief

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peer-review process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend *Remote Sensing* for your best research publications for a fast dissemination of your research.

Editor-in-Chief

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