# Special Issue

## Advances in Understanding and 3D Semantic Modeling of Large-Scale Urban Scenes from Point Clouds

#### Message from the Guest Editors

Driven by many applications and the improvement of 3D data acquisition technology, computer vision, and remote sensing communities are now focusing on deep learning-based and knowledge-based algorithms to tackle the challenges in understanding and 3D semantic modeling of large-scale urban scenes. We position our Special Issue to support the ongoing efforts in 3D scanning and modeling industry and applications of LiDAR/RGB-D/photogrammetric point clouds. The topics of this Special Issue include, but are not limited to:

- Enhancement, registration, filtering of point clouds;
- Semantic, instance, panoptic, and part-level segmentation;
- Large-scale outdoor scene and indoor scene reconstruction;
- Detail synthesis and implicit modeling of urban scenes;
- 3D modeling of buildings, bridges, roads, trees, and utilities:
- Rendering and visualization of urban scenes;
- Polyhedral meshes, procedural models and model simplification;
- Innovative applications in smart cities, VR/AR, autonomous driving, indoor navigation, etc.

#### **Guest Editors**

Dr. Dong Chen

Dr. Zhengxin Zhang

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#### Deadline for manuscript submissions

closed (31 August 2023)



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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 peerreview 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

#### Dr. Prasad S. Thenkabail

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