# Special Issue

# 3D Reconstruction and Mobile Mapping in Urban Environments Using Remote Sensing

## Message from the Guest Editors

This Special Issue focuses on the techniques for 3D reconstruction and mobile mapping in urban environments, especially for new instruments for data acquisitions in complex urban environments, scale-illumination invariant algorithms for robust feature matching, efficient image retrieval for image or LiDAR-based localization, SfM-based solutions for image orientation, SLAM-based solutions for image or LiDAR processing, and deep-learning-based network for feature detection and matching, etc. In this topic, the involved data sources are limited to the remote sensing field, including images from high altitude satellites, aerial planes, UAVs and MMS vehicles, and point clouds from airborne and ground scanners.

- new instruments for data acquisitions in complex urban environments
- scale-illumination invariant algorithms for robust feature matching
- deep learning for feature detection and matching
- efficient image retrieval for image or LiDAR-based localization
- SfM-based solutions for image orientation
- SLAM-based solutions for image or LiDAR processing
- Neural Radiance Field for 3D reconstruction
- high-resolution satellite images for urban building 3D modeling

## Guest Editors

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## Deadline for manuscript submissions

closed (19 July 2024)

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*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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