Special Issue

State-of-the-Art LIDAR Technologies

Message from the Guest Editors

Urban environments are complex and dynamic, presenting numerous challenges for remote sensing technologies. Remote sensing and LIDAR technologies have emerged as powerful tools for capturing high-resolution 3D data of urban areas, enabling a range of applications in fields such as urban planning, architecture, and cultural heritage preservation. As techniques, laser scanning and digital photogrammetry find widespread use in various fields to acquire three-dimensional data. In combination, these technologies offer significant benefits for the documentation and conservation of cultural heritage in urban environments, including improved accuracy, efficiency, and safety. In this Special Issue, we will overview the current state of the art in LIDAR technologies, including airborne and terrestrial LIDAR systems. We aim to focus on the latest advances in LIDAR data processing, visualization, and analysis, and discuss their potential for application in urban monitoring, management, and modeling. Recent studies that showcase the use of LIDAR in urban environments via exercises such as creating 3D models of buildings are of particular interest to this Special Issue.

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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.

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