



State-of-the-Art LIDAR Technologies

Guest Editors:

Dr. Caterina Balletti

Department of Architecture and Arts, Università Iuav di Venezia, Santa Croce 191, 30135 Venezia, Italy

Dr. Valentina Alena Girelli

Department of Civil, Chemical, Environmental and Materials Engineering (DICAM), University of Bologna, Viale del Risorgimento 2, 40132 Bologna, Italy

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Message from the Guest Editors

Dear Colleagues,

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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Dr., Flagstaff, AZ 86001, USA

Prof. Dr. Dongdong Wang

Institute of Remote Sensing and
Geographic Information Systems,
Peking University, Beijing, China

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Remote Sensing Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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