Special Issue

Advances in Remote Sensing and Digital Twin Technologies for Transportation Infrastructure

Message from the Guest Editors

The recent surge in the advancement of remote sensing technologies heralds a new era of promising possibilities and competitive advantages across a broad spectrum of transportation applications. The advent of digital twin technologies (BIM, GIS, IoT) has introduced the creation of dynamic, virtual counterparts to physical transportation infrastructures. These virtual models are perpetually refreshed with real-time data, thereby enabling the simulation, testing, and optimization of infrastructure performances across a multitude of scenarios, all without exerting any direct impact on the physical systems themselves.

This Special Issue is dedicated to exploring the forefront of research and development in the amalgamation of remote sensing technologies and digital twin concepts within the transportation infrastructure domain. It presents a collection of scholarly articles and research papers that probe into the transformative impacts that these advanced technological solutions exert on the monitoring, management, and maintenance of transportation networks, encompassing roads, bridges, railways, and airports.

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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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