Advanced Technologies for the Construction Industry in the Digital Era

Guest Editors:

Dr. Ahsen Maqsoom
Department of Civil Engineering, COMSATS University Islamabad, Wah Campus, Rawalpindi 47040, Pakistan

Dr. Fahim Ullah
School of Surveying and Built Environment, University of Southern Queensland, Springfield Central, QLD 4300, Australia

Deadline for manuscript submissions:
closed (31 March 2023)

Message from the Guest Editors

Dear Colleagues,

The construction industry is complicated and faces new challenges every day due to the involvement of complex processes and associated resource management. Advanced technologies such as artificial intelligence (AI), machine learning (ML), computer vision, and geospatial and scanning technologies have shifted the way civil engineers and urban planners operate in the digital era. Technologies such as geospatial, remote sensing, and ML techniques have provided new ways for collecting and analyzing data that were not easily possible earlier. In addition to introducing much-needed disruption, such technologies provide missing innovation and uplift the otherwise traditional construction industry.

This Special Issue focuses on collecting high-quality articles on advanced technologies in the construction and urban domains. The target contributors include civil engineers, urban planners, construction and project managers, city management teams, architects, government officials, and others, in addition to academics and scientists.

Special Issue

Editor-in-Chief

Prof. Dr. David Arditi
Construction Engineering and
Management Program,
Department of Civil,
Architectural, and Environmental
Engineering, Illinois Institute of
Technology, 3201 South
Dearborn Street, Chicago, IL
60616, USA

Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance, interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.
Journal Rank: JCR - Q2 (*Engineering, Civil*) / CiteScore - Q1 (*Architecture*)

Contact Us