Intelligent and Computer Technologies Application in Construction

Message from the Guest Editors

The construction industry has long been an engine of global economic growth. Despite the boom, the construction industry is faced with many challenges, such as lagging productivity, labor sustainability, and environmental sustainability.

Intelligent construction provides a solution to these challenges. In the past two decades, we have witnessed significant efforts in leveraging intelligent and computer technologies to enhance the construction project delivery process. Intelligent construction is a complicated topic related to the whole life cycle of a project. With the advancement of intelligent and computer technologies, there is still room for researchers and industry practitioners to further facilitate digital and intelligent transformation in construction.

This Special Issue aims to provide a platform to explore state-of-the-art knowledge, practical implementation, and cutting-edge innovations in the area of intelligent and computer technologies’ application in construction.

For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/buildings/special_issues/Intelligent_Construction
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.