Digital Technology-Empowered Innovation and Application for Building Engineering Education

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Message from the Guest Editors

Higher education is the key step in talent cultivation, and engineering teaching is the specific practical link in the implementation of higher education. Entering into the era of new-generation information technology and digital twin, virtual reality, and real-time visualization technologies, enhanced educational innovation is emerging rapidly. The transformation of traditional teaching into digital education is an inevitable trend in modern engineering teaching.

The main aim of this Special Issue is to exhibit and report the recent challenges, attempts, and developments in digital technology-empowered innovation and applications for engineering education. Topics include, but are not limited to, the following:

[Types of articles]

Technical papers/case studies/project reports/reviews and state-of-the-art discussions

[Type of engineering education]

Construction engineering/civil engineering/building engineering/structural engineering/seismic engineering

[Type of Digital Technology]

Virtual reality and augmented reality technology/artificial intelligence/machine learning technologies/big data technology

Special Issue

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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.

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