Special Issue

Towards Smart Tech 4.0 in the Built Environment: Applications of Disruptive Digital Technologies in Smart Cities, Construction, and Real Estate

Message from the Guest Editor

The traditional built environment needs a technological transformation in line with the Industry 4.0 requirements to transform into a smart built environment. For this to materialize, disruptive digital technologies must be adopted. Accordingly, the goals of integrated smart cities, construction, and t real estate can be achieved to promote Sustainability in the built environment in line with the United Nations sustainable development goals. Such technologies in line with industry 4.0 requirements have been proposed in various fields and include the big9 technologies such as Al, IoT, UAVs, Clouds, Big Data, 3D Scanning, Wearable Technologies, VR, AR, Robotics, Blockchains, Software as a Service, 3D Printing, Digital Twins, Ubiquitous Computing, Renewable Energy, Autonomous Vehicles, and 5G Communications. However, currently, the research around the adoption and implementation of these smart technologies is limited. This special issue invites and aims to attract contributions in related fields.

Guest Editor

Dr. Fahim Ullah

School of Surveying and Built Environment, University of Southern Queensland, Springfield Central, QLD 4300, Australia

Deadline for manuscript submissions

closed (10 August 2022)



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4



mdpi.com/si/88812

Buildings Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 buildings@mdpi.com

mdpi.com/journal/buildings





an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4





About the Journal

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.

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

Author Benefits

High Visibility:

indexed within SCIE (Web of Science), Scopus, Ei Compendex, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Construction and Building Technology) / CiteScore - Q1 (Architecture)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.9 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).