Special Issue

Construction Automation: Current and Future

Message from the Guest Editors

It is becoming increasingly clear that the automation of construction can address various and serious issues related to construction, for example, the low quality of final products, shortages of skilled labour, poor safety, quality, productivity, tight schedules, sustainability, and a circular economy, which are features of building and infrastructure projects in the modern day. Striking the proper human–automation balance requires a deep understanding of the technological tools we have at present or in the foreseeable future and, as such, we have proposed a Special Issue named 'Construction Automation: Current and Future' to gather research works around the cutting-edge automated technologies from the academic and industry perspectives. Within this, the themes of interest include, but are not limited to:

- 3D Printing;
- Automation and Robotics;
- Computer Vision;
- Artificial Intelligence;
- Machine and Deep Learning;
- Digital Fabrication;
- BIM, VR, AR, MR;
- Laser Scan, Reverse Modelling;
- Digital Twin;
- Internet of Things;
- Wearable Sensing and Tracking;
- Safety, Efficiency, Human Cognition, Ergonomics.

Guest Editors

Dr. Lei Hou

Dr. Jun Wang

Dr. Sheng Xu

Deadline for manuscript submissions

closed (10 November 2023)

Buildings

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.4

mdpi.com/si/137891

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

mdpi.com/journal/buildings

Buildings

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.4

mdpi.com/journal/buildings

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).