Special Issue

Intelligence and Automation in Construction Industry

Message from the Guest Editors

The labor-intensive nature of construction, the implementation of artificial intelligence, robotics, and smart technologies has the potential to significantly reduce labor costs while simultaneously enhancing productivity and quality. Crucially, these technologies can contribute to a safer working environment by automating hazardous tasks. The primary aim of this *Special Issue* is to explore the recent developments and challenges associated with the application of intelligence and automation in construction. Topics include, but are not limited to, the following:

- Robotics for Construction
- Computer vision-based construction quality inspection
- Planning of intelligence and automation techniques
- Smart construction management
- AI-driven decision support systems in construction
- Human–Machine collaboration
- Intelligent algorithms for construction data analysis
- Investigation of the challenges in smart construction

Guest Editors

Dr. Jingjing Guo
Prof. Dr. Qian Wang
Dr. Weiwei Chen

Deadline for manuscript submissions

closed (30 August 2025)

Buildings

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.4

mdpi.com/si/193332

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 15.1 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).