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Human-Machine Collaboration in Industrialized Construction: Theories, Approaches, Key Technologies, and Applications

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Deadline for manuscript submissions:

closed (20 November 2022)

Message from the Guest Editors

Submissions for this Special Issue can include, but are not limited to, the following topics:

- Hybrid intelligence, Human-robot collaboration and Knowledge-based systems in industrialized construction;
- Effective information and knowledge management;
- Expert systems for decision making;
- Hybrid collaborative working systems;
- Behavior patterns and trust model of humanmachine collaboration;
- Smart project delivery of industrialized construction;
- Sustainability and decarbonization of humanmachine collaboration;
- Intelligent planning, scheduling, quality assurance, safety monitoring;
- Blockchain-based collaboration;
- Digital twin, BIM, and IoT for industrialized construction:
- Deep learning, federated learning, and natural language processing in construction.

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Industrialized_Construction











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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, 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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