Special Issue

Smart and Proactive Construction Safety Combined with AI, IoT, and Big Data

Message from the Guest Editors

We are delighted to extend an invitation for your contribution to our Special Issue titled "Smart and Proactive Construction Safety Combined with AI, IoT, and Big Data". Despite numerous research efforts focused on occupational health and safety, the construction industry continues to exhibit poor safety levels globally, particularly in the analysis of accident root causes and safety management during preconstruction phases. Our intention is to investigate the root causes of accidents and explore safety management techniques during the pre-construction phase, with a special emphasis on AI, IoT, big data, and other advanced safety technologies. We believe that a comprehensive approach to safety is essential from a life cycle perspective. This Special Issue aims to consolidate cutting-edge advancements in construction safety and management, encompassing various aspects including systems, policies, organizational structures, and technical innovations. We welcome research papers that contribute to the development of construction safety and management. We look forward to receiving your research submissions.

Guest Editors

Prof. Dr. Jaewook Jeong

Dr. Jaehyun Lee

Dr. Jaemin Jeong

Deadline for manuscript submissions

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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

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