Special Issue

Design, Fabrication and Construction in the Postheuristic Era

Message from the Guest Editors

Recent advances in machine learning herald the end of the age of the traditional algorithm. Applied data science has reached the building industry, where it can participate in the design and production of the built environment. This Special Issue will focus on machine learning and data-driven applications which are set to revolutionize the building industry. We are looking for new design and evaluation methods based on these technologies. We are interested in how these new methods fit into the building information modelling ecosystem. We want to explore how learning can be used for the more physical aspects of fabrication, manufacturing, and construction. We invite you to contribute original papers describing post-heuristic methods and how they will change the way buildings are designed and built. For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/buildings/special_issues / 00110V4766

Guest Editors

Dr. Guy Austern

Prof. Dr. Yasha Jacob Grobman

Dr. Tanya Bloch

Deadline for manuscript submissions

closed (10 May 2024)



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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

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