Design, Fabrication and Construction in the Post-heuristic Era

Guest Editors:

Dr. Guy Austern
Faculty of Architecture and Town Planning, Technion, Haifa 3200003, Israel

Prof. Dr. Yasha Jacob Grobman
Faculty of Architecture and Town Planning, Technion—Israel Institute of Technology, Haifa 3200003, Israel

Dr. Tanya Bloch
Faculty of Civil and Environmental Engineering, Technion - Israel Institute of Technology, Haifa 3200003, Israel

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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 eco-system. 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/0011OV4766

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Special Issue

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

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.

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