Special Issue

Advances in Urban Planning and Design for Urban Safety and Operations

Message from the Guest Editors

Urban planning and design are pivotal in enhancing urban safety and operational efficiency, necessitating the integration of advanced technologies and methodologies, especially innovative applications of artificial intelligence. This necessity has heightened global attention in urban planning sectors towards adopting innovative information technologies, particularly integrating urban modeling and incorporating the value of urban large-scale models. As cities worldwide strive to manage complex urban systems and ensure safety, the role of cutting-edge technology in urban operations has become more crucial than ever. Despite significant progress, there is a notable disparity in the integration and application levels of these technologies compared to other sectors. Thus, this Special Issue aims to bridge this gap by offering a platform for practitioners and researchers to disseminate their findings on the latest advancements in information technology for urban planning and design. We welcome state-of-the-art reviews and novel research that push the boundaries of how technology can enhance urban safety and streamline city operations.

Guest Editors

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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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