Special Issue

Behaviorally Informed Modeling and Simulation for Urban Disaster Response, Sheltering, and Resilience

Message from the Guest Editors

Modeling and simulation have become increasingly important tools for understanding urban disaster response and strengthening the resilience of urban systems. In disaster scenarios, human behavior such as decision-making, information acquisition, and response actions plays a central role in shaping risk exposure, response efficiency, and recovery trajectories. Models that do not adequately account for these behavioral mechanisms may struggle to fully represent the dynamic processes of disaster response and resilience evolution in real urban contexts. This Special Issue aims to bring together behaviorally informed and application-oriented research on urban disaster response and resilience, with particular interest in pedestrian evacuation, crowd dynamics, emergency sheltering, decision-making under uncertainty, virtual reality experiments, digital twins, and data-driven simulation.

Guest Editors

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Message from the Editor-in-Chief

Urban Science is a scholarly international journal which provides a platform for the exchange of theories, ideas, methods, analyses, and comparative studies of urban and regional development. It is a peer-reviewed, open access journal that publishes high quality original articles, theoretical essays, critical reviews, research notes, and shorter communications. Its broad definition of "science" includes both quantitative and qualitative methods of social, environmental, and spatial analysis. There is no restriction on the maximum length of the papers.

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