**Special Issue for Environment and Planning B: Urban Analytics and City Science**

**Urban AI for a Sustainable Built Environment**

Recently, Urban AI has become an emerging field that combines AI, spatial computing, and urban science to address complex challenges. The availability of extensive urban data and the growth of digitized city infrastructures have opened up opportunities for data-driven machine-learning approaches in urban analytics. Moreover, the built environment shapes the living conditions and quality of life for individuals, families, and communities. The built environment, as opposed to the natural environment, refers to human-made structures that include buildings, public spaces, transport facilities, and digital infrastructure, etc. It plays an important role in driving the well-being of people and communities, affecting their health, mobility, and how they interact with each other and the urban environment. In the context of climate change, Urban AI also plays a pivotal role in assessing and mitigating its impact on urban environments. Rising temperatures, extreme weather events, and sea-level rise present critical challenges that Urban AI can address by facilitating data-informed decisions for sustainable infrastructure development and adaptive urban planning strategies. Urban AI encompasses innovative AI techniques applied to relevant problems and issues associated with the built-environment, AI-ready urban data infrastructure, and various urban applications benefiting from AI.

As such, this special issue aims to promote the development of urban AI with multimodal geospatial data collected from satellites, street view imagery, and loT devices to enable evidence-based decision-making for built-environment management and urban infrastructure modelling. Novel research in this direction will address pressing and essential challenges in urban environments, ranging from sustainable urban planning and smart mobility design to built-environment management, public health, urban land use, urban disaster management, and AI-assisted humanitarian mapping to help fight extreme heat and mitigate the impacts of climate change. The topics of this Special Issue include, but are not limited to:

- Urban AI techniques for informed-decision making, including topics such as climate action, traffic congestion, solid waste management, crime safety, health, smart mobility, smart city, and disaster resilience;
- Urban AI workflows integrating Volunteered Geographic Information (VGI) and geospatial big data such as satellite and street view imagery;
- Urban AI for strengthening climate action in the urban environment;
- AI-based techniques for sustainable development in urban environments;
- People-centric smart cities with AI;
- Foundational models in an urban geographic context;
- Conversational agents for urban analytic tasks;
- Vision-language models for urban analytic tasks;
- Human-environment interaction in the urban environment;
- AI-based techniques for understanding urban human dynamics;
- AI assistants for mapping and cartography for the urban environment;
- Ethical, legal, and privacy considerations of Urban AI.

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