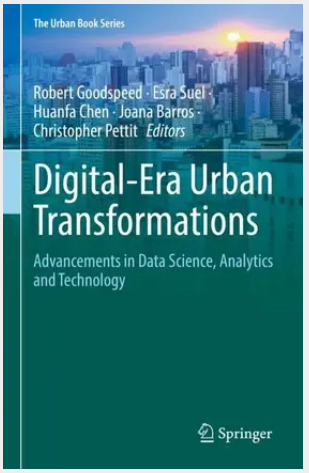
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Digital-Era Urban Transformations

Advancements in Data Science, Analytics and Technology



The diffusion of information technologies to nearly all facets of our society means we are living fully within a new that could previously only be imagined. The digital mediation of transactions, the rise of new global digital infrastructures, even the proliferation of low-cost sensors and satellites, are fundamentally reshaping what can be known about cities —and therefore what possibilities are unlocked for new urban analysis and planning tools. Published in conjunction with the 19 Computational Urban Planning and Urban Management (CUPUM) conference, held at the University College London in June 2025, the volume contains 17 chapters exploring new applications of a wide range of contemporary technologies, including artificial intelligence, satellite data, big data analysis, and urban sensing. These are applied to diverse problems including resilience to urban heat, preparing for natural disasters like tsunamis, grappling with urban decline, or reducing GHG emissions, or the creation of novel Planning Support Systems.

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