Exploring Artificial Intelligence as a Transformative Tool for Urban Management

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Abstract : In the digital age, artificial intelligence (AI) is having a significant impact on the rapid changes that cities are experiencing. This study explores the profound impact of AI on urban morphology, especially with regard to promoting friendly design choices. It addresses a significant research gap by examining the real-world effects of integrating AI into urban design and management. The main objective is to outline a framework for integrating AI to transform urban settings. The study employs an urban design framework to effectively navigate complicated urban environments, emphasize the need for urban management, and provide efficient planning and design strategies. Taking Gangtok's informal settlements as a focal point, the study employs AI methodologies such as machine learning, predictive analytics, and generative AI to tackle issues of 'urban informality'. The insights garnered not only offer valuable perspectives but also unveil AI's transformative potential in addressing contemporary urban challenges.

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