

عنوان مقاله:

Innovative approaches to transform urban underground spaces for a sustainable future using artificial intelligence

محل انتشار:

سومین کنفرانس بین المللی شهر هوشمند، چالش ها و راهبردها (سال: 1402)

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خلاصه مقاله:

Urbanization and population growth pose unprecedented challenges to cities, necessitating innovative solutions to optimize limited space and promote sustainability. This study outlines a comprehensive implementation plan for transforming urban underground spaces using artificial intelligence (AI) to achieve a sustainable future. The multifaceted approach covers project initiation, data collection and analysis, AI-driven design optimization, technology infrastructure implementation, energy efficiency, traffic optimization, predictive maintenance, safety monitoring, sustainability initiatives, community engagement, and ongoing monitoring and adaptation. By integrating AI into the planning and development of underground spaces, cities can enhance efficiency, reduce environmental impact, and create resilient, people-centric environments. The phased plan ensures a systematic and inclusive approach, fostering collaboration among stakeholders and leveraging AI's capabilities to shape the future of urban underground spaces. This transformative initiative not only addresses current urban challenges but also sets the foundation for intelligent, sustainable urban development practices.

کلمات کلیدی:

.Urban Underground Spaces, Artificial Intelligence, Urban Development, Sustainable Future, Smart Infrastructure

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