A Survey on-Advancing Urban Sustainability through Smart City Integration

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Abstract*: The three essential elements of smart city development that are highlighted in this project are air pollution monitoring, video surveillance, and optimised street lighting. Energy economy and safety are improved when intelligent sensors and controls are integrated into street lights. Proactive security measures are guaranteed by advanced video surveillance combined with AI analytics. IoT-enabled air pollution monitoring allows for the real-time collection of data for focused interventions. Savvy streetlamps outfitted with sensors and versatile controls offer energy investment funds and upgraded wellbeing by changing lighting levels in view of constant circumstances. Video reconnaissance frameworks, enabled by man-made intelligence calculations, give proactive observing and reaction abilities, guaranteeing public wellbeing and security. Moreover, air contamination observing utilizes IoT sensors to gather constant information on air quality boundaries, empowering designated intercessions to alleviate contamination levels. When these systems are integrated, sustainable urban growth is promoted, resource utilisation is optimised, and quality of life is enhanced.*

Keywords: Urban Sustainability, Proactive security, Intercessions

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