

IOT, SMART CITIES, AND INTELLIGENT INFRASTRUCTURE: A FRAMEWORK FOR SUSTAINABLE AND DATA-DRIVEN URBAN DEVELOPMENT

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Rapid urban growth has brought many challenges when it comes to energy consumption, transportation, waste administration, public safety, and environmental sustainability. The introduction of catalyzing urban environments-brainchild of the IoT. The IoT presents the possibility to create brain-like (smart) cities through real-time sensing, communication, and intelligent decision-making capability. The paper provides a state-of-the-art presentation of IoT-enabled smart city systems, making a call for a layered, intelligent infrastructure framework composed of sensing, communication, data analytics, and governance, all to ensure improved efficiency, sustainability, and citizen services through real-time monitoring and adaptive control. Key applications, challenges, and scoping the future of research are also discussed.
