

Title: An Open and Interoperable Infrastructure of Smart City Settings

Abstract: The massive proliferation of internet-enabled computing devices (smart things) and advancements in wireless technologies have laid the foundation for Smart Cities – linking infrastructure to innovations to provide smart services including those related to healthcare, transportation, industrial automation, emergency response, and law enforcement. However, the Smart City initiative remains far-fetched due to lack of flexibility, customization, interoperability, tools and innovations that facilitate the development of smart applications and services. While the wide adoption of Internet of Things (IoT) opens opportunities to create a new generation of smart applications and services in various domains, it introduces many new challenges that require a paradigm shift to address the ever-increasing level of heterogeneity and system dynamics involved. This talk will present a visionary overview for an open and interoperable infrastructure for IoT environments in general and Smart City scenarios in specific. The infrastructure facilitates seamless interactions between smart objects (including people) through an open stack of interoperable and innovative techniques that provide the necessary support to facilitate physical resource management, data gathering, storage, processing, and intelligent decision making. It also provides agile service discovery and integrated sensor data analytics while preserving user privacy through dynamic data access control.



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