Towards the Internet of Cities: A Research Roadmap for Next-Generation Smart Cities

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ABSTRACT
In this paper we outline the long-term vision for an Internet of Cities Infrastructure, an interdisciplinary effort towards creating the scientific underpinnings for designing, developing, and managing next-generation smart city applications. Due to the large number of involved stakeholders and their possibly conflicting requirements, along with limited available knowledge and data, effective and efficient creation and subsequent operation of smart city applications is currently not possible. By holistically approaching the challenges of creating and operating such applications, we will create methodologies, frameworks, and approaches to enable the Internet of Cities, a global network of smart cities and their applications that securely and collaboratively work together to improve the quality of life of their citizens, as well as greatly improve cost and energy efficiency of city operation and infrastructure.

Keywords
Smart City; Internet of Cities; Smart City Infrastructure