

Interoperable Platform for Internet of Things at Home Applications

Authors : Fabiano Amorim Vaz, Camila Gonzaga de Araujo

Abstract : With the growing number of personal devices such as smartphones, tablets, smart watches, among others, in addition to recent devices designed for IoT, it is observed that residential environment has potential to generate important information about our daily lives. Therefore, this work is focused on showing and evaluating a system that integrates all these technologies considering the context of a smart house. To achieve this, we define an architecture capable of supporting the amount of data generated and consumed at a residence and, mainly, the variety of this data presents. We organize it in a particular cloud containing information about robots, recreational vehicles, weather, in addition to data from the house, such as lighting, energy, security, among others. The proposed architecture can be extrapolated to various scenarios and applications. Through the core of this work, we can define new functionality for residences integrating them with more resources.

Keywords : cloud computing, IoT, robotics, smart house

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