

A Pervasive System Architecture for Smart Environments in Internet of Things Context

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Abstract : Nowadays, technology makes it possible to, in one hand, communicate with various objects of the daily life through the Internet, and in the other, put these objects interacting with each other through this channel. Simultaneously, with the raise of smartphones as the most ubiquitous technology on persons lives, emerge new agents for these devices - Intelligent Personal Assistants. These agents have the goal of helping the user manage and organize his information as well as supporting the user in his/her day-to-day tasks. Moreover, other emergent concept is the Cloud Computing, which allows computation and storage to get out of the users devices, bringing benefits in terms of performance, security, interoperability and others. Connecting these three paradigms, in this work we propose an architecture for an intelligent system which provides an interface that assists the user on smart environments, informing, suggesting actions and allowing to manage the objects of his/her daily life.

Keywords : internet of things, cloud, intelligent personal assistant, architecture

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