Abstract

The Smart Home bug has bitten nearly everyone. In this project, we develop a way to form a communications interface between the different smart devices in your home or small office. This eliminates, from future developers the issues of Compatibility, Network Communication, Protocol management, thereby focusing only on the core functionality. We present to you a base interface which deals with the underlying protocols, communication over different interfaces and compatibility between the different components: namely your Raspberry Pi, Sensors, cameras and other peripherals and your base computers. The developer focuses solely on the functionality of the system without the usual headaches.

References


5. Markus Jung, Jurgen Weidinger, Wolfgang Kastner, Alex Olivieri, “Building automation and smart cities: An integration approach based on a service-oriented architecture”, The IoT6 project is supported by funding under the Seventh Research Framework Program of the European Union, with the grant agreement FP7-ICT-2011-7-288445.


Index Terms

Computer Science  Automated Systems

Keywords

Raspberry Pi 2, Arduino, Debian based Ubuntu Server, GPIO, TCP Hole Punching, IOT, Human Interface Devices, Home Automation..