RASPBERRY PI-BASED SMART HOME AUTOMATION SYSTEM FOR INTERNET OF THINGS

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Abstract

The home automation system can be applied to many areas including home security, lighting control, flame detection, smart heating, motion sensor and door control to provides its homeowner's comfort, security, energy efficiency (low operating costs) and convenience at all times. The Internet of Things (IoT) is anticipated to enable a variety of smart home services in which each service provides a set of home automation solutions. This proposed study consists of developing an automated home monitoring using Raspberry Pi that provides a customizable and cost-efficient platform for a smart home. In this work, we develop and implement a smart home concept using sensor and actuators which are connected to Gateway via Wi-Fi communication protocol. Raspberry Pi and Arduino Unois the power behind this study as it provides an interface between the sensors and actuators.

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