

# A Proposal of Low Cost Home Automation System Using IoT and Voice Recognition

## **Abstract**

Home Automation System is becoming more popular day by day due to its numerous benefits. This project proposes an idea in the design of low cost home automation system by using the Internet of Things (IoT) and voice recognition. The layout of the home divided into four areas and each area has own function and system. The Raspberry Pi 3 (RPi) Model B+ used as the main controller for the processing and transmitting the input data. IoT provided huge storage for data collection from sensors and home appliances. An Android application is developed to monitor the home environment and remotely control the home devices by using the button or voice. The speaker-independent recognition system by using Google Voice to Text on Android embedded in this project for physically challenged people to control the electrical appliances without moving. All the data will be stored in Firebase and can be retrieved at any time by the application and the RPi board. There is a side view of a prototype model with two floors and divided into four home areas. This Low-Cost Home Automation System using IoT and Voice Recognition is successfully achieved the project's objective.