

ABSTRACT

Now a day, along with smartphone the engineers has invented an interesting feature, with the introduction of 'Speech Recognition' feature which is allows the user to use the smartphone only with voice/speech commands.

Not losing with the smartphone, the 'Internet of Things' (IoT) also can be utilized in various fields. IoT using microcontroller like Raspberry Pi to support the daily activities of modern society.

In this Final Project, the integration both of these technology is meant to be the solution to facilitate people's daily activities. Using the speech recognition feature on android-based smartphone and the availability of the internet service, it can be used to sent voice/speech command to the Raspberry Pi back at home. Without the need to be done manually, with the most optimum speed of response time that only takes 571ms, Raspberry Pi will take the role as the command center to control the lights and the door from a distance, along with the camera in order to monitoring the conditions around the house without cause anxiety by leaving the house in a hurry or for a long time.

Keywords: *Home Automation, Smartphone, Android, Voice Recognition, Raspberry Pi, the Internet of Things.*