

ABSTRACT

Oftentimes when we leave home to go to work, take the kids school or go to hometown to celebrate Idul Fitri, Christmas and New Year make us worry about the condition of our house. Therefore, the home equipment controlling application is helping the residents to control and monitor the condition of his house. In this research, the authors make CYHome Application (Controll Your Home). CYHome is an application that help residents to control home equipment and monitor in real - time.

This application help user to be able to open or close doors, turn on or off the light, watching the home condition in real - time and playing a video recorded by a ip camera in the database. There are voice command feature in CYHome application, where user speak the exist orders on applications for controlling home equipment.

When user speak commands to the CYHome application, the spectrograms of speech user say will be divided and sent to eight different google servers located around the world and then processed using the method of neural network. The results of processing the application server will be accepted and matched with a database application to be forwarded to the hardware as a command.

From the results of alpha testing, CYHome application can be used as a remote control home equipment using voice command with a short and clear pronunciation, a stable Internet network and environmental noise below 90 dB. Then the beta testing results indicate that the application has CYHome user satisfaction score is 4.01, user manual score is 3, easy to understand score is 4.2, easy to use score is 4.3, voice command feature score is 4.1, alternative feature score is 4.23, and application design 3.73 of a scale of 0 (very dissatisfied) to 5 (very satisfied).

Keywords : *Smartphone, Speech Recognition, IDE, Android.*