ABSTRACT

Manual switches are still used by almost all electronic devices nowadays. In

addition, some electronic devices have their own controller in order to use the devices

from a distance. Despite all that controller thing, there are still some problems when

the user wants to control more than one electronic devices. This problem happens

because the controller function on one device only, so more devices means more

controller needed.

In order to solve that problem, a system need to be designed to be able to control

many electronic devices by one controller only. The control device can utilize the

communication media currently used on all android smartphones, namely the

Bluetooth communication media. For this reason, through the integration of Bluetooth

on Android smartphone devices and the hardware and software used, ideas were

generated for designing Bluetooth-based electronic device control devices on Android

smartphones. And the authors also add a speech recognition system to this control

device to control the electronic devices.

The prototype design used in this study uses Arduino Uno, Bluetooth module,

Relay and Android Smartphone. The system development in this research work

according to the concept of the Internet of Things (IoT). Users can control electronic

devices directly.

Keywords: Smarthome, Smartphone, IoT, Arduino Uno, Speech Recognition.