# ABSTRACT

*At this time technology is growing rapidly in various fields, for example smart house. There are so many technologies developed in this field, this is for added convenience and time efficiency in the execution of something. One of that is the development of house lamp controling systems, including using the remote. However, the technology is extremely wasteful because it requires 1 lamp 1 remote.*

*This system is an application used to facilitate homeowners to be able to turn on the lights and turn off the lights. It is useful to reduce the cost of payment of electricity bills, and save natural resources are limited. In this system, designed an application that is accessible from android to control house lamp, use raspberry-pi. Basicly that is use the GPIO raspberry-pi as a replacement switch, use webiopi methods to access GPIO raspberry-pi.*

*The results of this study, is from 5 smartphone with respectively 100 times the experiment can result in 100% able to function, but still produce the greatest average delay 0.957s. Delay is counted after replaceme the IC becomes optocoupler and replace the capacitor capacitance to 10 μF. Replacement IC occurs because of an error control when access the lamp. And the capasitor capasitance replacement is because of the delay effected from the capacitance of the capacitor.*