

## ABSTRACT

Telecommunication technology nowadays has touched almost all sectors of life. This development is claimed to have increased performance in terms of effectiveness and efficiency as well as safety. One of the sectors that is of concern to improve its performance is the security sector, especially door security. Because the door is the initial access in entering a place. This study aims to design a home security system with control of house doors using the telegram application. The components used in this study are the PIR sensor as a human sensor device, magnetic door sensor as a door sensor, ESP8266 nodemcu microcontroller, solenoid door lock as an electronic door lock, buzzer as a voice aid, SG90 servo, and access point. This system uses a method by reading the PIR sensor and magnetic door sensor which will provide notification to the user's telegram application regarding the security conditions of their door. The research was tested with the scenario "no person", "there is a suspicious person", "there is a thief", "open the door" control via telegram, and "close the door" control via telegram. The results of this study obtained a system that has an error of 0%.

Keywords: control system and monitor, NodeMCU ESP8266, house door security, telegram.