ABSTRACT

Security systems on vehicles, especially motorcycles still very minimal and very simple. This led to rampant cases curanmor (motorcycle theft). Therefore, it needs a security system on a motorcycle efficient and have full functionality. However, one of the obstacles found are within the reach of a security system motorcycle with motorcycle owners is limited, causing the system can not be controlled at a certain distance.

Based on these needs, in this final project will be created a system that is mounted on the motorcycle and was able to communicate with the owner of the motorcycle. The system consists of a main device in the form of raspberry-pi. Then, with enhancements such as a GSM modem and webcam module. Then a smartphone or a computer on the side of the user who installed the application Telegram. The user sends a command message via a smartphone or computer and the message is transmitted through the Internet and will be received by the GSM modem and translated by raspberry-pi-pi raspberry who then will work in order to control the motorcycle.

In this system, between the user and the system is able to communicate on two ways communications. Users can give commands to the system then the system is able to execute some commands such as turning off the bike, turn on the alarm, take a picture of the face of the thief, as well as to determine the location of a motorcycle using geolocation technology. And the system can provide notification to the user when the command given by the user successfully executed.

Kata kunci: Raspberry-pi, Internet, Telegram, Geolocation