ABSTRACT

This Security System based was built on Raspberry Pi, it is equipped with

picamera module, passive infra red sensor module to detect presence of

human around, and gsm modem to send notification SMS. Program for this

system was built with Python programming language and Flask for web

framework.

This system divided into two parts, application and alert. The

Application serves as user interface, such as streaming video, view reports

notification, watch recorded video, setting system configuration. Function of

Alert is to send notification sms, record video, and input data system into

database when human were detected around and the program is activated.

This research focused on the application.

After doing design and implementation, next step is perform testing of

application. Based on testing video streaming had average delay about 210

ms for lowest resolution and fps to 1789 ms for highest resolution and fps,

CPU usage is high at about 98 percent.

Keywords: Raspberry Pi, picamera, Python, Flask, PIR

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