

ABSTRACT

Around Telkom University, there are lots of boarding houses occupied by students. Some students bring vehicles such as motorbikes for transportation to campus. The lack of security around the boarding house makes it undesirable, the security of the boarding house area through CCTV is really needed and functions to monitor and protect the boarding house from unwanted events. Through CCTV, we can monitor anyone who enters and passes through the boarding house.

This Realtime license plate detector functions to secure boarding house security by identifying license plates from live video streams in real time, which later when the license plate is detected will be entered into a telegram notification. To find out whether the motorbike is the owner of the boarding house occupant, the data needs to be entered into the SQLite database using the DBeaver tool. So that it can detect license plates, it requires a library, namely OpenCV (Computer Vision) so that it can integrate with a camera. So that laptop devices can capture and modify images recorded by the camera. OpenCV (Open-Source Computer Vision) is an open-source library developed by Intel that focuses on simplifying programming related to digital images. And will use the programming language Python.

Therefore, the results of this Final Project can detect number plates at a distance of 20cm, 50cm, 80cm, 100cm and 150cm. For number plates that are successfully detected at a distance of 20cm, 50cm and 80cm. And for the accuracy results that have been carried out, 10 times of the 3 number plates were tested. 85,83% for numbers that were successfully detected, and 54,7% for letters that were successfully detected. For plates that are successfully detected and sent to the Telegram App 100%.

Keywords: *Vehicle number plates, OpenCV, Telegram Bot.*