# ABSTRACT

Government regulation on odd even licence plate number system in some streets in Jakarta is an effort to reduce congestion. This Regulation refers to Governor Regulation No. 164 of 2016 concerning Traffic Limit with Even Odd Number System. However, in its application there are still many violations and the authorities have to conduct continuous supervision. Therefore, it requires a monitoring tool that can be used to monitor and find violations for follow-up. The tool is a camera that is connected to a mini-PC raspberry pi and works to detect and recognize vehicle license plate image. This tool will scan the number plate image and group it by date to find the violating vehicle. The design of this tool using Haarcascade method to detect and capture the image of the vehicle. At the end of the design of this tool, the system will work to detect and capture vehicle license plate image automatically and recognize whether the license plate is odd or even. Then the system will match the odd number plate character or even by date on that day. Based on this final assignment test, the best accuracy for the odd number number plate determination is 90% while accuracy of character accuracy is only 20% with the average of 4.4 second computation time.

*Keywords : Haarcascade*, *realtime*, *raspberry pi*, camera.