

## ABSTRACT

For the purposes shorting time to recognizing a vehicle, does not use digital image in the delivery of data transmission. But a text that is easy and concise. With text form it will be shaped more easily transmitted and identified in the database. Recognizing a vehicle in the form of a text is by identifying the plate number. So if have an image of a vehicle license plate with a certain condition, it will be converted from that image of the license plate to the text form which will make it easy for the next action that wanted to.

In this final task have been designed a *optical character recognition* system that can recognize the license plate characters from the image of a car license plate with a certain condition is taken from a camera digital. The system will recognize the plate number and change into the vectors form which is intended to be an input of classification system Support Vector Machine, which the system will be classifying the vectors of an image into the form of text characters.

From the simulation, the accuration based on the total character overall from license plate tested image is 98,54%. From the testcase that based on the identification a license plate, obtained the accuracy for a license plate from test images is 89.47%.

**Keywords:** Support Vector Machine (SVM), *optical character recognition*, the classification system.