ABSTRACT

Road users in big cities in Indonesia nowadays, need information about the discipline of driving and riding. In modern world, the technology and programs are expected to become more sophisticated and modern to monitor the drivers and riders on the road. To identify the undisciplined road users, the author took samples of license plates. Identification and recognition the license plates become a major application in traffic sector. The aim is to extract and recognize the image of the license plate of the vehicle so that it can be used as an access control system.

In this final project, the author used the K-NN as a method for classifying characters and Principal Component Analysis (PCA) as a pattern recognition method that can reduce the object feature without detract or allay the significant feature of the object with high accuracy results. The process for identification of license plate is by collecting sample of images and data in one place, then move into the next process such as the initial processing, to feature extraction and finished by classification.

The end result of this assignment is obtained for the entire system accuracy of 60.00% or 27 data successfully detected and identified from a total of 45 data. The accuracy of character segmentation is about 99.10% or obtained from 331 characters successfully segmented from a total of 334 characters successfully segmented. Classification accuracy of 88.92% was obtained from 297 characters correctly classified premises of 334 characters and detection plate position accuracy is about 97.78% or 44 data successfully detected from a total 45 data.

Keyword : identification license plate, Principal Component Analysis, KNN