ABSTRACT

Currently, majority of Indonesia's parking system still using manual system which uses human to identify the car's license plate. Each car have an official license which different from the other on the plate. This final task designed a system that will replace the human labor in this parking system.

Video will be provided by the server and then retrieved some frames to detect the license plate on the vehicle. License plate have a national standard size so it can be recognize by looking for a comparison between the height and width. This result will be segmented by region each character. Segmented characters will be classified by using LVQ method.

The end result of this final task is obtained an accuracy of 97.50% for detection plate or 39 were detected from the 40 test data. Accuracy of 95.05% for character segmentation obtained from 269 characters segmented correctly of 283 characters. Classification accuracy of 94.42%, obtained from the 254 characters that are classified correctly than 269 characters segmented with network specifications 500 maximum epoch, 50 hidden layers and using 42x24 test images sized. Accuracy of 67.50% for the entire system or 27 data successfully detected and identified from a total of 40 test data.

Key word : LVQ, License Plate, Information Signal Processing, ANN.