

ABSTRACT

One of the ways to identify a car is with the license plate. Record keeping of license plate is very needed in system park and enter tol, but it is still typed manually. In order to facilitate the user then it should be developed a system that could recognize a license plate automatically. Recognition is conducted at digital image in the form of number plate images. The digital image will be identified by the need of its purpose to recognizing information on it.

In this final project, developed an application system that able to identify character on image automatically which be done by detection the number plate in front of camera and capture the scene to get the digital image and then recognize the characters on that license plate. This automatically recognition will be done by detect any changes that happen in front of camera, then the camera will take an image and detect if there's a license plate, the detection of changes use linear dependence model detection and for recognizing the character is using artificial neural network of backpropagation.

This research built using Borland C++ Builder and Matlab 6.5. The experimen show that maximum accuracy of conversion system is 100 % for train character recognition, in the character level the accuracy is 77.36 % for train image recognition which half of its characters are the data for training and 72.47 % for test image recognition.

Keywords : *Backpropagation, Image, Artificial Neural Network, License plate.*