

## **ABSTRACT**

*Nowadays park system process record-keeping of car number manually. Human factor being bad sight can caused mistake of record of plat number. This is one of caused serving park system need more time. To get an automatic in system park will be done by record-keeping of police number as subsystem of automatic park system management with processing digital image. From here can be obtained by vehicle data in the form of plate number. It is easier to get data in database, if the data is text.*

*From technology image processing, hence data in the form of contain of picture an character can be taken by its information and converted to in the form of text. Between background color and text color in plate number are contrast, it is used for image processing, for example plate number which consist of black (as background color) and white (as text color). The result of image processing realized in codes. They will become input of neural network model of ART 2 and LVQ for recognize character.*

*Different with signature or fingerprint that have unique pattern, character of number and alphabet, have similar pattern with others. From experiment, the result of recognition with NN-LVQ better than NN-ART2. Test with image from file, maximal 5 characters that is recognized, with decomposition wavelet packet feature extraction metode and NN-LVQ. And test with image from webcam maximal 4 characters that is recognized with histogram 4 quadrant feature extraction metode and NN-LVQ . For testing with ART 2, only 1 character that is recognized.*

*Keyword : Image Processing, Neural Network ART 2, LVQ, Plate Number*