

Plate Number Recognition Using Segmented Method With Artificial Neural Network

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Abstract-- Plate number recognition is a system designed to read information of vehicle plate number automatically from digital images for many purposes; such as over speed control, parking areas, traffic control, and top governmental agencies etc. This system can be categories into 3 stages: License plate detection, character segmentation, and character recognition. In order to have successful recognition of characters, a license plate number has to be segmented. Segmentation is a process of partition an image into smaller parts. Character recognition is the last stage, were the license plate characters were read from the segmented characters. Three different type of networks were used in this article, (pattern net, perceptron and multi-layer neural network). simulation result indicated that pattern net has a very good performance in recognizing the license plate image compared to other two types of networks. Also, has an advantage of less training time compared to other types of neural networks.

Keywords-- License Plate Number, Neural Network, Image Processing, Machine Learning