PROJECT REPORT

CHASSIS PLATE NUMBER RECOGNITION USING FUZZY ALGORITHM

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2020

APPROVAL AND RATIFICATION PAGE

CHASSIS PLATE NUMBER DETECTION

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ABSTRACT

Number plate detection and recognition systems are widely used in various systems for detecting characters and numbers in vehicle license plates. This research will try the similar approach on chassis number plates instead of its common use in vehicle license plates.

The data used in this research consists of 92 chassis number images that are taken from google and various websites. And from the 92 data, the features of 55 image data are successfully extracted. There are 2 approaches in processing the image. The approach will start from extracting the fuzzy edge detection features from the images by using the fuzzy algorithm. And the results will be segmented and divided into training and testing datasets for the neural network. After which the neural network will be used to recognize the characters and numbers inside the plates.

The result of this approach are as follows, the neural network gained a higher percentage of accuracy with different samples: 48/94 or 51% for numbers and 22/49 or 44% for alphabet sample images. This shows that detections in chassis plates have various difficulties compared to the usual license plate detection and recognition system.

Keyword: plate detection, fuzzy algorithm, neural network

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