## UNIVERSITI TEKNOLOGI MARA

## VEHICLE PLATE NUMBER RECOGNITION USING OPTICAL CHARACTER RECOGNITION(OCR) ALGORITHM

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#### Abstract

During the COVID-19 pandemic crisis in the middle 2021, the whole globe is shaken by the effect of the global pandemic. In order to reduce and combat the spread of the plague, many roadblock and inspection point had been placed in every entry point in every states. The implement of roadblock and inspection point is to control and know the amount of vehicles entering and exiting the states or district. The roadblock is attended by police officers who will inspect the vehicle passing thru. The drivers will require to have a permit in order to cross the states. The inspection will take a short duration between 1 to 2 minutes. If no problem arises, the vehicle can go thru the inspection point. In a busy day, the waiting line could reach to half an hour depending to which states or district. Therefore, it is convenient to implement an automatic detection system that can help recognise vehicle plate number. A model been proposed to help to recognize the Vehicle Plate Number. The proposed method consists of preprocessing and feature extraction stages. The vehicle plate number image will be resizing and convert into a grayscale image and converted again into binary image in the pre-processing step. The model will be developed by using Optical Character Recognition (OCR) classifier. To recognize it, the image of vehicle plate number will be used as a dataset. This system then will help the user to recognize vehicle plate number without manually inputted the data in. The highest success rates obtained from the system is $85.4 \%$.


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