

SOME OPTIMIZATION OF MATLAB-BASED NUMBER PLATE RECOGNITION ALGORITHM

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***Summary:** In this paper some optimizations of a simple MATLAB-based technique for Automatic Number Plate Recognition (ANPR) are discussed. Digital image segmentation, after resizing image and removing noise, is applied, while some edge detection algorithms and some morphological techniques are also used. Additional spatial filtering, Hough transformation and dynamic threshold filtering are applied to compensate the variables that can affect the ANPR's ability to produce an accurate read, such as time of day, weather and angles between the cameras and the license plates. Free Optical Character Recognition (OCR) software is used to output results, presenting detected number plates.*

***Keywords:** Automatic Number Plate Recognition (ANPR), digital image processing, Hough transformation, Optical Character Recognition (OCR)*