AUTOMATIC NUMBER PLATE RECOGNITION USING PYTHON-OPENCV AND TENSORFLOW

A PROJECT REPORT

Submitted by

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in partial fulfillment for the award of the degree

of

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IN

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RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY

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PRIYADARSHINI COLLEGE OF ENGINEERING, NAGPUR

Department of Computer Science and Engineering

CERTIFICATE

Certified that this project report **"AUTOMATIC NUMBER PLATE RECOGNITION USING PYTHON-OPENCV AND TENSORFLOW"** is the bonafide work of "**ANKIT JAMBHULKAR , HIMANSHU PATIL , ANIKET PATIL"** from 8th Semester carried out the project work under my supervision.

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DECLARATION

I hereby declare that the project entitled "Automatic Number Plate Recognition Using Python-Opencv And Tensorflow" submitted for the B. E. (Computer Science and Engineering) degree is our original work and the project has not formed the basis for the award of any other degree, diploma, fellowship or any other similar titles.

Name & Signature of the Students

Semester: 8th

Place:

Date:

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ABSTRACT

Automatic number plate Recognition is an image processing with OpenCV technology .The main objective is to design an efficient automatic authorized number plate identification system. This system is implemented on the entrance for security control of the various places like mall parking, shopping areas, college campus etc. The developed system primarily detects the moving vehicle at the entrance and then captures the vehicle number plate image. Vehicle number plate region is extracted using the image and video segmentation in an image. Optical character Recognition technique is used for the character recognition. The resulting data is then used to store on a database so as to come up with the specific information like the vehicles number plate time taken and frequency of the data. This system is implemented and simulated by using the technologies like OpenCV, Tensor flow, mongo DB and its performance is tested on real images and videos. It is observed from the experiment that the developed system successfully detects and recognizes the vehicle number plate on real images and videos. After taking note of vehicle number by the number, the data will be logged in excel shit with time stamp so that monitoring unit will come to know when and what time that particular vehicle is detected.

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