

NO PARKING VEHICLE DETECTION

A PROJECT REPORT

Submitted by

AKHIL MS

AJITH KRISHNA

*in partial fulfillment for the award of the degree
of*

MASTER OF COMPUTER APPLICATIONS



**HAJI C.H.MOHAMMED KOYA MEMORIAL COLLEGE FOR
ADVANCED STUDIES (AFFILIATED TO KERALA UNIVERSITY)**

CHAVARCODE

PALAYAMKUNNU P.O., 695146

THIRUVANATHAPURAM DISTRICT,

KERALA

**UNIVERSITY OF KERALA,
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DECEMBER 2019

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BONAFIDE CERTIFICATE

Certified that this project report “**NO PARKING VEHICLE DETECTION**” is the bonafide work of **AKHIL M S** who carried out the project work under my supervision.

Reg. No: 95517801007

Mr. Rajesh S

Associate Professor

HEAD OF THE DEPARTMENT

Mrs. Nisha A

Assistant Professor

INTERNAL GUIDE

EXTERNAL EXAMINER

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ACKNOWLEDGEMENT

I would like to express my gratitude to God for giving me good health and better courage to accomplish this project successfully.

I express my deep sense of gratitude to **Prof M. Sirajudeen**, Director of Department of MCA, HAJI C.H.MOHAMMED KOYA MEMORIAL COLLEGE, Metca Land, Chavarcod, for providing me an opportunity for doing this project work.

Special thanks to **Mr. Rajesh. S**, Associate professor and Head of Department of MCA, for providing all possible facilities to make this project be a success.

I take this opportunity to express my sincere gratitude and indebtedness to my internal guide **Mrs. Nisha A**, Assistant Professor, Department of MCA for her expert and valuable guidance, inspiration and fruitful discussions rendered throughout for successful completion of the project.

With great pleasure I may record my deep gratitude to all staff members of MCA Department for the immeasurable help rendered to me during the course of the project.

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ABSTRACT

No-Parking Vehicle Detection (NPVD) system is one type of intelligent transportation system (ITS). It is a type of technology in which the software enables computer system to read automatically the license number plate of vehicle from digital pictures. Reading automatically the number plate means converting the pixel information of digital image into the ASCII text of the number plate. This paper discusses a method for the vehicle number plate recognition from the image using mathematical morphological operations. The main objective is to use different morphological operations in such a way that the number plate of vehicle can be identified accurately. This is based on various operation such as image enhancement, morphological transformation, edge detection and extraction of number plate from vehicle image. After this segmentation is applied to recognize the characters present on number plate using KNN Algorithm. This algorithm can recognize number plate quickly and accurately from the vehicles image.

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