A

Project Report

On

AUTOMATIC NUMBER PLATE RECOGNITION SYSTEM USING KNN MACHINE LEARNING ALGORITHM

Submitted to

Department of
Computer Science and Engineering

By

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the project entitled **"AUTOMATIC NUMBER PLATE RECOGNITION SYSTEM USING KNN MACHINE LEARNING ALGORITHM"** is submitted by RUPIREDDY AKSHITHA(206Y1A0585), PARSHA TEJASWI(206Y1A0569), SUNDILLA JYOTHI(206Y1A0595) and GURRAPU RISHIKA(206Y1A05A7) to the department of Computer Science and Engineering during academic year 2022-23.

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ABSTRACT

Number plate recognition is an image processing technology which uses number (license) plate to identify the vehicle. The objective is to design an efficient automatic authorized vehicle identification system by using the vehicle number plate. The system can be implemented on the entrance for security control of a highly restricted area like military zones or area around top government offices e.g. Parliament, Supreme Court etc. The developed system first detects the vehicle and then captures the vehicle image. Vehicle number plate region is then converted into grayscale. The number plate is then extracted. Then, using KNN (K- Nearest Neighbors) algorithm is used to recognize the digits and the alphabets. This data can be used to find vehicle's owner, place of registration, address, etc. The system is implemented using Python, and its performance is tested on real images.

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