## VEHICLE IDENTIFICATION AND PARKING OCCUPANCY PREDICTION

## **ABSTRACT**

Parking issues have been receiving increasing attention. An accurate parking occupancy prediction is a key prerequisite to optimally manage limited parking resources, thus acknowledging the drivers about the parking availability in a particular area. This project is mainly aiming to reduce the problem of parking issue in this college. Also, through image processing number plate, the vehicle of outsiders is recognized and will alert the authorized staff about their entry and will give a specific time period to such vehicles to move out from the parking area. Thus, this project will deliver a significant impact in maintaining the parking spaces efficiently and can be very effective in preventing malicious activities inside the campus. ANPR technology is used for identifying the number-plate. Tensorflow library is used for training ML model and EasyOCR module is used for optical character recognition. Another feature involves predicting the future parking occupancy rate so that we can get idea on the availability of parking spots. ARIMA model is used for improving the predicting accuracy.

Date: 30/05/2022 Group 7

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