**ABSTRACT**

Here we discuss a smart parking assistance for the people who use a multi story& large parking spaces in metropolitan cities. In this busy world everyone needs everything to be faster. Finding a free parking slot in a parking area is very difficult and there are scenarios where people usually lose path in parking lots in the process of finding their vehicle. To overcome the above problem, we can use a unique method called SMART PARKING & TRACKING methods to obtain faster parking and reduce the traffic, congestion and time consumption inside the parking area. In addition, it provides easy access to track the vehicle on return.

To automate the SMART PARKING ASSISTANCE we need to capture the image of the number plate for every vehicle and print it on the token & at the entrance the graphical guidance path is displayed to the driver, so he can easily drive to the particular parking slot. To track the vehicle, we can make use of IMAGE PROCESSING concepts where we scan the image using devices like camera connected to kiosk, we obtain the path view that is generated so that the driver can easily find his vehicle in the lot. We are developing a web application where the user can book a parking slot and park the vehicle within a time frame of 30 minutes. The booking will get refreshed after the turn around time.

The drivers are allowed to access this cyber-physical system with their personal communication devices. Furthermore, we study state-of-the-art parking policies in smart parking systems and compare their performance. The experiment results show that the proposed reservation-based parking policy has the potential to simplify the operations of parking systems, as well as alleviate traffic congestion caused by parking searching.

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