Abstract

Pakistan is one of the over-populated countries in the world, and the maximum number of people prefer using their own vehicles as conveyance. Since roads in Pakistan are overloaded with different types of vehicles, people usually face a parking problem in parking cars and other transport on a regular basis. Parking has now become a major issue of the country. This paper is an attempt to propose a design of an automated car parking system directed by an android application, that maintains the number of cars to be parked on designated area by automating the parking & un-parking of the vehicles with the help of instructions of an android application. This automated car parking system aims to reduce the involvement of humans in directing people to park their vehicles by mechanizing this process. This system would be very useful in reducing the time required for searching the available parking space within parking area.

**Index Terms**

Computer Science  
Automated Systems

**Keywords**

Automated car parking system, Android Application, Image Processing, Raspberry PI3 Module