# A Space Management System for Outdoor Parking Lots

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#### **ABSTRACT**

At present the public and private car park charges for the management of vehicles, mostly in the import and export location, the establishment of manual or automatic toll collection stations, with large electronic billboards, showed that the number of empty parking spaces, as can enter the parking lot of control conditions. After the vehicles approach the guidelines and not fit to establish a proper mechanism, resulting in people driving into the parking lot, often based on intuition only to find parking spaces. This way is not only to allow motorists who have troubled to find parking spaces in profligate ways are inefficient, but also wasting valuable time by driver. In this study, based on computer vision technology, equipment for video capture by shooting the screen, automatically determine the idle parking spaces at car parks and in line with the import and export position will do all empty parking spaces proposed to sort, and print tickets in the parking. To help drivers entering the car park can immediate access to the latest parking information in the shortest possible time, that in the car park where there are empty spaces, and the direction of where and how to inform the proposed parking spaces directions. Through this research and development of the system will be reduced looking for parking space of time by drivers, thereby enhancing car park management performance.

Keywords: image analysis; background subtraction; parking lot management system

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