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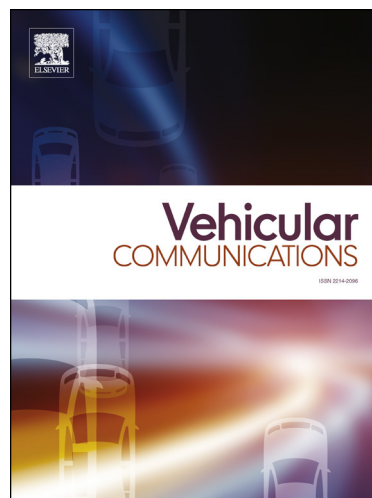
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iParking - A Real-Time Parking Space Monitoring and Guiding System ¹

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Abstract

Shortage and imbalance of parking spaces have become serious problems in recent years. Drivers may choose nearby illegal area for parking when available parking spaces are all out of sight. To mitigate problems such as illegal parking, iParking, a real-time parking space monitoring and guiding system, is proposed in this paper. The paper lays emphasis on roadside parking. In the proposed system, the availability of parking spaces is recognized through image analysis, where the images come from the event recorders embedded in cars on the roads. Upon receipt of a parking request, the system searches for a nearest parking space, and then directly navigates the requesting driver to the available parking space. The system is expected to benefit all drivers and the government, and to improve safety and traffic on the roads

Keywords: cloud computing, image recognition, parking space management, wireless transmission

1. Introduction

Recently, parking problem has become people's harassment. It is shown from statistical data in Ministry of Transportation, Taiwan that the number

¹This paper is an extended version of our conference paper in the 3rd International Conference on Internet of Vehicles (IOV), 2016 [1].

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