

高速公路異常狀況偵測方法之研究

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摘要

As wireless access techniques are being improved and popularized, diverse vehicular products of electronic communication are increasing sharply year after year. Therefore, the price of products is decreasing along with the growth of them. Accordingly, there are a lot of researches on telematics with alerting cars to traffic accidents. Most of them have focused on how to reduce broadcast storm of alerting messages and how to efficiently route alerting messages. Due to the wide-spreading of GPS (Global Positioning System), there is a trend that using GPS to achieve the above objective. The problem of detecting abnormal traffic conditions has been ignored. In this paper, this problem is studied. In this paper, we assume a car with GPS will periodically report its GPS coordinates and velocity. With this information, the proposed system can detect traffic jam, road construction, and congestion at interchanges. A user interface has been developed in Android to alert drivers to the above abnormal traffic conditions. Another management interface for National Freeway Bureau has also been developed to help broadcast the abnormal traffic conditions to drivers.

關鍵字：GPS, Abnormal Traffic Conditions, VANET