

稿件编号： JCST-1402-3666

Title: Emerging Applications for Cyber Transportation Systems

中文题目： 信息交通系统中的新兴应用

Abstract:

Recent advances in connected vehicles and autonomous driving are going to change the face of ground transportation as we know it. This paper describes the design and evaluation of several emerging applications for such a Cyber Transportation System (CTS). These applications have been designed using holistic approaches, which consider the unique roles played by the human drivers, the transportation system, and the communication network. They can improve driver safety and provide on-road infotainment. They can also improve transportation operations and efficiency, thereby benefiting travelers and attracting investment from both government agencies and private businesses to deploy infrastructures and bootstrap the evolutionary process of CTS.

中文摘要：

车联网和自动驾驶技术的发展将极大地改变现有的交通系统。本文将介绍和评估 CTS (Cyber Transportation System) 系统中的一些新兴应用。在设计这些应用时使用了全局性方法，其中考虑了驾驶者，交通系统和通信网络各自的特性。这些应用将会提高驾驶的安全性，同时提供路上的信息娱乐服务。他们还会提高交通的控制和效率，在为旅客提供便利的同时也能吸引来自政府和私人企业的投资，进而促进信息交通系统的发展。

Keywords:

C.2.0.c Emerging technologies, C.2.2.a Applications, C.2.8.a Algorithm/protocol design and analysis

中文关键词：

新兴技术，应用，算法/协议设计和分析