Abstract

Vehicles move on the roads sharing information between themselves and with the Internet through the access points. In this paper, a collision avoidance system for Vehicular Ad-hoc Networks is provided and a comparative study is done between without CA system and with CA system for vehicular safety critical application. In a Vehicular Ad Hoc Network (VANET), the wireless Collision Avoidance (CA) system issues warnings to drivers before they reach a potentially dangerous zone on the road. CA system immediately generates an emergency warning message to vehicles behind, before they reach the accident zone. There by improving road safety and travel comfort by enabling the inter-vehicular communications. Various metrics like packet delay, packet delivery fraction, overhead are used for evaluating the performance of emergency messaging via wireless CA system.

References

- F. Bai, T. Elbatt, G. Hollan, H. Krishnan and V. Sadekar "Towards characterizing and classifying communication-based automotive applications from a wireless networking perspective"; in Proc. 2006 IEEE workshop Automotive new


Index Terms

Computer Science

Wireless
Keywords

Wireless Collision Avoidance system  VANET  Dedicated short range communication.  Rear end collision