

# Accepted Manuscript

A vehicle control system using a time synchronized Hybrid VANET to reduce road accidents caused by human error

Dahlia Sam, Dr.V. Cyril Raj, T. Esther Evangelin

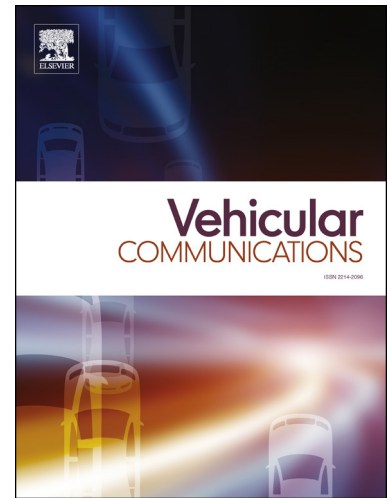
PII: S2214-2096(15)30013-9  
DOI: <http://dx.doi.org/10.1016/j.vehcom.2016.11.001>  
Reference: VEHCOM 57

To appear in: *Vehicular Communications*

Received date: 30 October 2015  
Revised date: 29 September 2016  
Accepted date: 8 November 2016

Please cite this article in press as: D. Sam et al., A vehicle control system using a time synchronized Hybrid VANET to reduce road accidents caused by human error, *Veh. Commun.* (2016), <http://dx.doi.org/10.1016/j.vehcom.2016.11.001>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



## **Highlights**

- This paper elaborates a vehicle control system that integrates a pedestrian unit with the vehicular ad hoc network (VANET) to create a Hybrid VANET. The new control system known as the TSH vehicle control system aims at reducing the major cause of road crash around the globe i.e. human error. The pedestrian body unit constantly broadcasts its presence to the vehicles in its communication range. On receiving a pedestrian message, the TSH vehicle controller checks its GPS coordinates, the pedestrians' position, its speed, acceleration and distance. If there is a possibility of accident occurring, it will send a control signal to the AEBS (Advanced emergency braking system). In this way the accidents can be avoided to a great extent.

Download English Version:

<https://daneshyari.com/en/article/4957814>

Download Persian Version:

<https://daneshyari.com/article/4957814>

[Daneshyari.com](https://daneshyari.com)