VANET routing protocols: review, implementation and analysis

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ABSTRACT

Wireless technology is developing very fast. Most of the researchers are working in the field of wireless communication. VANET is an evolving technology in the field of wireless communication and with the advancement it will contribute more to the smart transportation system in days to come. VANET gives a communication framework that has enhanced the traffic service and helped in reducing the road accidents. Data sharing in this system is time sensitive and require quick and vigorous network connection forming. VANET is serving the said purposes but there are some issues and challenges like efficient handling of fast handovers for video streaming applications. Therefore, in this paper we have reviewed and discussed several studies related to the routing protocols to judge which one is the best for video applications in VANET. Moreover, after studying different systems made by the researchers, we have critically analyzed them and found advantages and disadvantages for the future works. Also, simulation is performed to check the delays and throughput comparisons between the routing protocols. Furthermore, with the experiments we have proven that the AODV performance is better than the other ad-hoc protocols in VANET environment.

KEYWORDS:

VANET Routing Protocols; Wireless technology; Wireless communication