

Congestion Control Scheme for Vehicular Ad-Hoc Network (VANET)

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Abstract: *Vehicular ad hoc network (VANET) is one of the most modern and promising technologies for revolutionizing the transportation system where vehicles can communicate via a wireless medium. The IEEE 802.11p includes communication between vehicles (V2V) and between vehicle and roadside infrastructure (V2I). VANET provide the communication framework for dissemination of safety critical message such as beacons and emergency messages. Technological involvement increasing number of wireless devices which also creates more congestion in the wireless environment and greatly effect on the throughput, increases high-error rate, long-latency and data loss in congested environment which may leads to major vehicle accidents. So, the scheme which controls congestion is necessary to regulate the traffic level at an acceptable level. The proposed scheme includes study existing 802.11p standard and develop an algorithm on MAC to modify parameters like transmit power, contention window and packet interval to reduce the congestion due to heavy broadcast traffic in the network for VANET.*

Keywords: VANET, Congestion, MAC

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