

## ABSTRACT

Communication between vehicles is an important role in improving the comfort and safety for drivers and passengers. Technological advancements offer the concept of enhancing comfort and safety in driving is Vehicular Ad Hoc Network (VANET). VANET is a technology that integrates the capabilities of a new generation network of wireless vehicle. In VANET the ever-changing network topology and in finding and maintaining a route is a challenge in it. To facilitate communication within the network routing protocols are required. Routing protocols are used to find routes between nodes to send each other message. Routing is responsible for selecting and maintaining changing network topology and finding and maintaining a route is a challenge, position-based routing protocols are more suitable to apply such as GSR, A-STAR, GPSR, GPCR and so on than any other routing protocol. In this final project has been discussed about GSR routing protocol as routing protocol which have been implemented in VANET.

Geographic Source Routing (GSR) supports high node mobility based on geographic positioning and supports the use of the map, in route search from the source node to the destination node GSR using Reactive Location Service (RLS). The average end to end delay is needed to find out how fast it takes to send data from the source node to the destination node due to the ever-changing topology of the VANET.

Based on the result test, the more value of density then the smaller value of average end to end delay, and also the more speed of node value then the more average end to end delay value.

Keywords: VANET, GSR, Average End to End Delay.