Abstract

Over the last few years a new field of technology i.e. Vehicular Ad-hoc Networks (VANET) has been generated through Wireless Sensor Networks (WSN) and it attracts very large number of researchers. Now VANET has become a very interesting and developing area in the WSN, because it provides traffic and road safety by connecting vehicles travelling on the road. Also it provides communication between moving vehicles to the other vehicles. In VANET, data is transferred from one vehicle to another, so the security is a major issue, because any successful attack in VANET can cause large destruction. Routing between the moving vehicles is very challenging and quite interesting. This paper includes the Position Based Routing (PBR) protocol to provide the connection between moving vehicles on the road for the purpose of safety, communication and also for the driver’s comfort. In this we are evaluating the GPSR (Greedy Perimeter Stateless Routing) which is very popular Position Based Routing in VANET. In order to evaluate the realistic simulation environment for vehicles we are using NS2 (Network Simulator 2) and SUMO (Simulation for Urban Mobility). The performance is measured in the form of some parameters like Network throughput, Packet delivery ratio (PDR), NRL (Network
Routing Load) and Average end to end delay.

References

5. Hannes Hartenstein, Dieter Vollmer and Holger Fubler, “Location-Based Routing for Vehicular Ad-hoc Networks”, MOMICOM’02, September 23-28, 2002, Atlanta, Georgia, USA.

**Index Terms**

Computer Science  
Networks

**Keywords**

VANET, Greedy Perimeter Stateless Routing, Position Based Routing, SUMO and NS2.