ABSTRACT

The Vehicular Ad-Hoc Network is infrastructure less network. It is built up by connecting vehicles in wireless network. Routing packets from one location to other location is very difficult nowadays due to dense network of vehicles, frequent movements of nodes, rapidly altering topology and scattered partitioned network in VANET, so the challenges in this network will increase as roads are fully loaded with vehicles, safety and security of vehicles, speed control etc. Different methods and algorithms had been proposed by different authors for routing packets from one location to other location. All these algorithms have different methods and parameters like greedy approach, junction based packet forwarding, carry and store approach, geographic position base approach etc. The proposed algorithm is also representing routing approach to forward packets using new mechanism.

The proposed system uses two approaches. One is beacon packet forwarding to search path from source to destination node to route packets using multipath carry forwarding and searching. This approach initially send beacon packet to all nodes in its range. Intermediate node will receive that packet and forwards to other nodes in its range towards destination node after updating its local data and packets information required to search path. If same packet is received again by intermediate node then it will discard that. As packet is received at destination location, it will send reply to that packet towards source node by selecting path with parameter stored at all nodes participating in searching path.

While other approach uses a geographic closure node from source node towards destination node to forward packets by GPS position. The Beacon messages are used in this approach with carrying different information. Then this beacon message is forwarded towards destination node to search path of routing packets. When this approach of searching path will fail at that time Geographic location will be used to transmit packets. Route request performs multi-forwarding while route reply only follows unicast direction. The proposed system works on Packet Delivery Ratio, energy required and end to end delay.