## ABSTRACT

Development of information technology is very rapid unwittingly changing the basic behavior of the community. On the field of transportation, the behavior of the people who once depended on the map as a direction guide, can now use a digital map that is easier and concise.

Digital map that available now is not only serves to indicate the direction of the road, but also be able to receive feedback from the user if there is a congested road in real-time. Technology that can be applied to this software is the VANET (Vehicular Ad-Hoc Network). VANET is an Ad-hoc network that connects the nodes in the form of vehicles. VANET technology is derived from technology MANET (Mobile Ad-hoc Network).

To ensure the roads used by the users free of congestion, it takes a search algorithm that can divide the traffic load of the vehicle. Therefore, in this final project will be carried out research on the development of the vehicle load balancing scheme on VANET technology. The expected result is able to determine the effect of vehicle load balancing scheme on VANET network. The vehicle mobility will be simulated using VanetMobiSim. The QoS (packet delivery ratio, end-to-end delay, and througput) of the simulation will be maeasured using Network Simulator 2.

Key Words: VANET, load balancing scheme, VanetMobiSim, QOS