Abstract

Rapid urbanization of cities and metro areas has resulted in increasing number of vehicles movement, as a result of that traffic jam tends to form very often at multiple locations.

To find the best effective solution of traffic congestion and the problem of coordination among neighboring vehicles we simulate the group oriented driving approach, vehicles form group with their neighbor vehicle by calculating inclusion function to form a group. This paper presents effectiveness of group oriented traffic approach. Result shows that average speed of vehicles are improved over the random movement of vehicles. Group oriented approach (GOD) is also decreasing fluctuation of average speeds compared to random vehicle movement. The simulation has been run multiple times to find out effectiveness of GOD accurately. We observed achievement of 66% reduction in fluctuation of speed of cars when they form the group.

Index Terms

Computer Science

Information Sciences
Keywords

AOT, A-OTTM, RFID