

A Redistributed Approach for Preventive Vehicle Routing using Envoy Multi Proxy Process

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Abstract: Advanced vehicle steering systems use time period traffic data to route traffic and to avoid congestion. Unfortunately, these systems will solely react upon the presence of traffic jams and to not stop the creation of reserve congestion. This paper presents a redistributed approach for preventive vehicle routing that's significantly helpful in large-scale dynamic environments.

Keywords: MANETs, Bandwidth.

1. Introduction

Usually the demand for mobility arises due to increase in population rate. During the last years the burden caused by growth of traffic intensity and frequency of traffic jams on major roads, highways and in urban areas has been stigmatized. A traffic-jam is a dynamic phenomenon in which every motorist is slowed down by his predecessor. Route steering in transport roadways has become a crucial and rising technique of congestion alleviation. Many traffic networks around the world have experienced a growing rise in commuting time due to increasing levels of traffic. The increased seen in many major cities represents a serious problem for roadway operators and commuters everybody.

Nowadays, peoples are consuming the vehicles with the help of road facilities. The large number of vehicles and also the restricted capability of the road networks create routing traffic a very difficult problem.

A. Objective of the study

- It is to overcome the challenges which may eventuate during forecast information. Moreover, it will helpful for drivers to reach their destination faster compared with other drivers who use other services.
- In general terms, our main focus is to design a flexible, and, at the same time, robust traffic routing algorithm that will support self-interested agents in the context of dynamic network traffic conditions.

B. Vehicle routing module

This modules has several layers representing road / street layout, routes collection, infrastructure agent placement, landmarks, etc. All information related to this layers will picked

up from map plotter module.

C. Infrastructure agents & sensor communication module

Application has to make a car run as well render/ listen various issues like triggering infrastructure agent, message communication, mouse click, button click, etc.

D. Jade container communication services

As a part of JADE consolidation, every GUI works have to be assigned to JADE. This module acts an interface between GUI and JADE creating it potential to pass the all messages.

E. Vehicle routing storage module

To plot road/ street, route, sensor, etc., Several data has to be collected from the user.

To store /load and update this information, a module is coded during the method it makes very convenient each for application and for the user to use.

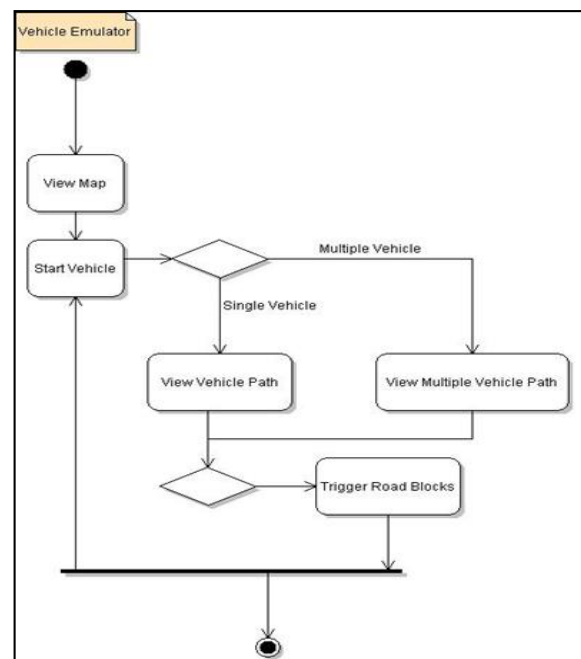


Fig. 1. Dataflow Diagram

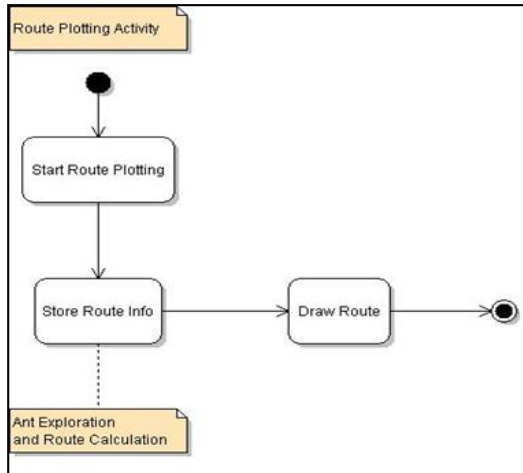


Fig. 2. Activity diagram

2. Conclusion

In this paper, we have described a routing strategy for anticipatory vehicle routing using delegate MASs. This routing strategy can more efficiently route vehicles by using forecast information. This anticipatory vehicle information is collected and distributed in a decentralized fashion, unlike other approaches that involve forecast information, where collection and distribution of information is performed as a central service. The centralized nature of this technique which is used in the traffic domain and ensures that quantifiability to met than in centralized systems.

References

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