Invention: This technology is a novel algorithm aimed at providing vehicle drivers with the best navigational experience. The goal of the algorithm is to maximize success by recommending a sequence of locations to a driver based on their current location. The technology also measures pick-up location probability, along with an optimal route, to inform the driver of the likelihood of receiving business by picking up a passenger based on their location and route.

Background: Emerging technologies toward a connected vehicle-infrastructure-pedestrian environment and big data have made it easier and cheaper to collect, store, analyze, use and disseminate multi-source data. The connected environment also introduces new approaches to flexible control and management of transportation systems in real-time to improve overall system performance. Intelligent Transportation Systems aim at providing drivers with effective instruction to counter the troubles they may face while also predicting other detractors, helping them plan ahead and reach their destinations on time. For the amount of time individuals and commercial drivers spend on the road, such an invention is needed to make for efficient and cost-effective use of their time.

Applications:
- Intelligent navigation system

Advantages:
- Addresses need for planning and accounting for time
- Addresses need for location-based information
- Translates location-based information into the ultimate navigation experience
- Time effective
- Reduces operation costs
- Provides precision technology
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