Google Maps and DeepMind enhance AI capabilities to improve route calculations

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The exclusive feature for the ease of finding locations and routes all across the globe is provided as a service by the top-most technical industry of the world, Google. It has been an approximate period of one and a half decade that Google Maps aimed to provide the facility for the people across the

world to navigate their position and find routes in order to acquire their destinations perfectly.

Time to time, Google has improved its services by utilizing the technological evolutions more efficiently which has generated a very beneficial output whether regarding the enhancements in the navigation services or the feedbacks that the public has given them.

In almost 15 years of services, the Google Maps has attained many milestones like providing live navigation and route as their initial achievement, then they came up with the capability of tracking the traffic on the roads whether it is heavy or light. Another advancement occurred which shows the estimated travel time as well as the arrival time for reaching any destination.

Google in collaboration with the Alphabet's AI Research Lab DeepMind has now made another breakthrough for the Google Maps service capability enhancement. They have put in action the advanced machine learning algorithm i.e. graph neural network, as this algorithm comprises biases related to relational learning in order to assure a framework that provides actual routes and real-time road situations.

The Google Maps product manager Johann Lau has indicated that this particular algorithm and technique make sure the prediction of the heavy traffic circumstance that could may occur while the journey. He further added that this predictive algorithm technique will soar the accuracy level of Google Maps and according to the previous analytical report, Google Maps has a consistent accuracy of about 97%. Another betterment attained by Google for the sake of providing optimal approach for the users of Google Maps is that it efficiently focuses on the quality of the roads way to the destination. The advancement detects whether the road is paved, unpaved, damaged, covered with dust or mud, etc. In addition to this, it also recommends to take possibly best route for the journey as it sufficient

to drive through a highway than taking the route which has multiple stops. If any problem with regard to the heavy traffic on the route occurs, the Google Maps feature will impulsively provide suggestions to acquire the relatively lower traffic route.

The DeepMind has disclosed that their experiments have enhanced predictive powers as they have included the tracking of adjacent roads and relatively narrow paths that connect to the main roads. This would definitely provide more details about any sort of intensive traffic if arising from these narrow paths and adjacent roads, making the services more reliable and robust. They further added that the predictive model has an ability to detect the delays that may take place while turning and merging as well as the total traveling time in the situation of stop-and-go traffic. All these generalizations result in making the graph neural network powerful and substantial which ultimately influences the capabilities of the Google Maps service.

For the initialization of these techniques and advancements, Google has implemented them in many of the states across the world including, Washington DC, Sydney, Tokyo, Jakarta, Berlin, and Sao Paulo. These capabilities have boosted the synchronal ETA's up to 50%.

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