GeoMate: a data-driven approach for future geospatial needs in 5G era

The urban environment is rapidly changing – cities are becoming increasingly congested, the transportation modes are changing as bike and scooter demands are growing, and new technologies like delivery robots and autonomous vehicles are being developed and deployed every day.

All of these factors have complex impacts on mobility, which create new challenges in mapping these environments accurately at scale.

Project Description

This project was focused on improving GeoMate's location data on mapping urban environment including but not limited to sidewalk accessibility and road safety. The project sought to determine whether using a 5G-enabled network could help improve overall location accuracy and latency speeds for GeoMate's HD maps. At each stage, results of performance over 4G and 5G networks were compared.

Project Outcomes

By leveraging the ENCQOR 5G network at Communitech, GeoMate was able to enhance their location accuracy and latency speeds on their mapping platform. This has not only helped them improve their maps for sidewalk users, but other stakeholders who can use this data, including autonomous vehicle manufacturers, municipal governments, and last-mile delivery companies.

"Communitech plays a significant role in developing the local tech ecosystem, while ensuring that the growth of their partners brings positive change for the community. Having Communitech's expertise in the Waterloo Region has proven to be an asset for startups looking to make a difference."

Nastaran Saberi
CTO, Co-Founder
GeoMate

With Tech for Good® foundations, GeoMate uses its software, tools and analysis to map and analyze sidewalks in cities. Headquartered in Waterloo, Ont. and co-founded by Amin Gharebaghi and Nastaran Saberi, the company has strong technical foundations thanks to leadership that has more than 30 years of combined experience in geo-science, AI and business.

Website

geomate.ca

Industry

Location intelligence

Number of employees

Nine