
Summary of Qualifications

- Master's graduate student majoring in Transportation Engineering.
- Developed detailed report on "Design Manual adjustments for Connected and Automated Vehicles under varying levels of volume and market penetration rates" as part of MEng. Project under the supervision of City of Toronto and Ryerson University.
- Developed deep understanding of design manuals including Ontario Traffic Manuals, Geometric Design Guide for Canadian Roads, Highway Capacity Manual and Ministry of Transportation of Ontario publications while working on final MEng. Project and during coursework.
- Analyzed and visualized NYC UBER pickup data using Python, as part of directed studies project.
- Hands on experience in Synchro, VISSIM and Highway Capacity Software, working on these tools as a part of coursework and final thesis report.
- Handled cost-of-materials estimations, report-writing, document tracking, project documentation, invoice/agreement verification and building permit applications.
- Proven good problem-solving ability and possess the necessary analytical skills to solve problems effectively, during the coursework and the project work.
- Valid Ontario driver's license.
- Registered with Professional Engineers Ontario (PEO) and waiting for EIT.

Technical Skills

- Experienced with PTV VISSIM, VISUM, PTV VISTRO, Python-Biogeme, Synchro/SimTraffic, Highway Capacity Software and AutoCAD.
- Familiar with PTV VISWALK, EMME, Aimsun, ERDAS imagine, and IBM SPSS software.
- Programming/Scripting Languages: Python
- Hands on experience in Python and QGIS for data analysis.
- Computer Skills: Microsoft Office Suite, Google Sketchbook, Adobe Creative Cloud.

Work Experience

Researcher on Autonomous Vehicles City of Toronto & Ryerson University

SEPTEMBER 2018 – APRIL 2019

- Developing a report on "Design Manual" adjustments for connected and autonomous vehicles under varying levels of volume and market penetration rates.
- Developing an AV technology roadmap with the City of Toronto as a part of final MEng project. The roadmap assesses potential and likely impacts of CAV and AV technology on Ontario Traffic Manual and on City of Toronto's Infrastructure Planning and operations furthermore it offers applicable recommendations.
- Presenting the recommended changes in the design manuals for AV's to the City of Toronto executives.

Site Engineer

Jai Sai Developers

JULY 2016 – AUGUST 2017

- Planned scheduling and execution of construction activities at the residential apartments site as per provided drawings and design approval.
- Attended and participated in client and public meetings.
- Co-ordinated construction activities with engineers from regional development authorities & personals.
- Implemented safety program through training sessions to enforce onsite safety assurance.

Civil Engineer – Internship

GR Infraprojects Ltd.

JUNE 2015 – AUGUST 2015

- Underwent Summer internship on Construction of 4-lane Railway Over Bridge.
- Monitored sub-contractors in the completion of daily operations to ensure project progress and optimal performance.
- Responsible for estimating quantities and cost of materials, equipment, and labor to determine project feasibility.
- Facilitated project by conducting meetings, recording meeting actions and performing follow-ups.

Education

Master of Civil Engineering

Ryerson University

SEPT 2017 – APRIL 2019

Core courses:

- Transportation Planning
- Traffic Operation and Management
- Advanced Highway Design
- Construction Project Management
- Directed studies: UBER pickup analysis for New York City
- Travel Demand Modeling
- Urban Transport System
- Urban Satellite Remote Sensing
- Statistics

Bachelor of Technology (Hons.), Civil Engineering

Rajasthan Technical University

AUGUST 2012 – MAY 2016

Volunteering Experience

- ITS ACGM 2018, Niagara Falls, ON JUNE 2018
Volunteered in the latest Intelligent Transportation Systems Society of Canada Conference. The Conference was called “Mobility 2030: bridging innovation and a green future”.

Memberships

- ITE (Institute of Transportation Engineers) DEC 2017 - Present
- YPT (Young Professionals in Transportation Engineering) JULY 2018 - Present
- TAC JULY 2018 - Present
- Ontario Society of Professional Engineers FEB 2019 - Present