APS1803Y Multidisciplinary MEng Project

(Equivalent to MIE8888Y and CIV1002Y)

The Evaluation of the Automated Transit Shuttle Pilot in Toronto (in partnership with the City of Toronto)

Supervisors: Prof. Amer Shalaby, Civil and Mineral Engineering
Prof. Baher Abdulhai, Civil and Mineral Engineering
Prof. Birsen Donmez, Mechanical and Industrial Engineering

MEng Project Details:

The City of Toronto is deploying a pilot test of an automated shuttle on a public road in the City of Toronto. The automated shuttle service connects a residential neighbourhood in the West Rouge area with the Rouge Hill GO station. This temporary trial uses a low-speed automated vehicle that is mostly self-driving. A human attendant will always be on-board to take over driving if needed. To learn more about this pilot project please visit this link HERE.

The University of Toronto is collaborating with the City of Toronto to undertake the analysis of the automated shuttle performance (e.g., safety, efficiency, comfort, and service reliability), interactions with existing traffic, and interactions with other road users (passenger cars and pedestrians).

A research assistant (RA) position is open for a MEng candidate for a monthly stipend. The candidate is expected to conduct the analysis of the shuttle performance using data collected from the shuttle, and community and user experience surveys. The candidate will help preparing reports and presentations delivered to the City of Toronto.

Qualifications and related skills:

- Very good understanding of statistics and ability to perform descriptive data analysis
- Very good programming skills: proficiency in python scripting is an asset
- Experience with data analysis and visualisation
- Excellent technical writing and communication skills

Start date: Winter 2021

Application deadline: December 7, 2021

Application details: Please submit CV, transcript, and a single paragraph describing your intertest in the project in one file in a single email to Birsen Donmez at donmez@mie.utoronto.ca and Toka Muhmmad at toka.muhammad@utoronto.ca.

Research area: Data analytics, transportation engineering, human factors.