MEng Project Description – Human Factors and Applied Statistics Laboratory

Project topic: Effect of Driving Automation Systems on Driving Performance
Faculty supervisor: Prof. Birsen Donmez
Number of students needed: 1~2

Project description:
Many consumer vehicles now have driving automation features that can control the vehicle's steering, acceleration, and braking. However, these features are only meant for assistance and they are not perfect. Drivers still need to pay attention to the roadway at all times and be ready to take over full control of the vehicle when necessary. Therefore, drivers are expected to maintain certain driving performance level.

The Human Factors and Applied Statistics Laboratory (HFASt Lab) is looking for **two** Master of Engineering students to help design a focus group/interview study, and collect and analyze data from the study. The purpose of the study is to investigate how the use of driving automation systems could influence driving performance. The results will be used to inform driving policy/regulation updates, as well as direct the upgrade of driving automation systems to enhance the safety of automated vehicles.

Qualifications:

- Currently enrolled in an MEng program at UofT
- Strong communication skills (listening, speaking, and note taking)
- Experience facilitating focus group/interview sessions a strong asset
- Experience analyzing qualitative data (including but not limited to NLP) a strong asset
- Driving experience and knowledge about driving automation systems a strong asset

Preference will be given to students who can start Fall 2023. Interested students should contact Prof. Birsen Donmez (donmez@mie.utoronto.ca) and Mark Wei (mwei@mie.utoronto.ca).