



Mechanical & Industrial Engineering  
UNIVERSITY OF TORONTO

**Physiological and attentional demands of on-street parking-** *Effects of searching for on-street parking on driver performance*

This research will investigate how searching for on-street parking affects driver physiology, performance and visual attention allocation. Participants will drive an actual vehicle instrumented with sensors and computers in a busy urban centre (downtown Toronto). Participants will also be outfitted with physiological sensors including a head-mounted eye tracker, EEG, ECG, and GSR sensors. The analysis of the physiological and vehicle data is expected to draw conclusions on increased mental workload/stress of drivers while searching for on-street parking as well as its effects on their driving performance. The undergraduate research student will work closely with a MAsc student on this study and help recruit volunteers, run the experiment, and process data for analysis. Ideally the student should have good programming skills (e.g., MATLAB/ Python) and a strong interest in data analysis and statistics. A driver's license is a plus but not a requirement.

**Category:** MEC, IND, or other (e.g. first year, EngSci, etc.): All

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