

MEng Project Description – Human Factors and Applied Statistics Laboratory

Project topic: Investigating driver interaction with automated vehicles

Faculty supervisor: Prof. Birsen Donmez

Student PI: Dina Kanaan

Number of students needed: 2

Project description:

Automation has been introduced to various elements of the driving task, including steering, accelerating, and braking, in an effort to enhance driving safety. However, driving automation is not perfect and still requires drivers to monitor the roadway environment, supervise the automation, and resume physical control of the vehicle when necessary. This limited implementation of driving automation has been associated with problems like increased driver distraction and inattention, which have contributed to multiple fatal crashes in automated vehicles.

The Human Factors and Applied Statistics Laboratory ([HFASt Lab](#)) is looking for **two** Master of Engineering students to conduct projects that aim to investigate driver interaction with automated vehicle technology and inform the design of interfaces that support drivers and enhance the safety of automated vehicles.

Required qualifications:

- Strong programming background (Python or MATLAB preferred)
- Strong written and oral communication skills

Interested students should contact Prof. Birsen Donmez (donmez@mie.utoronto.ca) or Dina Kanaan (dina.kanaan@mail.utoronto.ca) by **January 20, 2021**.