POST-DOCTORAL FELLOW INTERNSHIP: Building Risk Models and Feedback Systems Using Large Volumes of Automobile Telematics Data

Description
This Post-Doctoral position is a MITACS Accelerate internship at the University of Waterloo, Department of Statistics and Actuarial Science and Intelligent Mechatronics Systems (IMS), a leader in the connected car market located in Waterloo, Ontario. The position is for 2 years with an expected start date of January 1, 2017. Salary is commensurate with qualifications and experience.

More and more vehicles are outfitted with telematics devices to collect and transmit real time data on driver behaviour, driving conditions, and vehicle parameters. This project will explore better ways to use the available large volumes of telematics data to monitor and improve driver behaviour and to assess accident risk both instantaneously and over a future time period. We plan to build and validate statistical models that can be used to quantify the expected risk as well as to develop systems using experimental methods that identify effective feedback mechanisms to reduce risky behaviour. Such models and feedback mechanisms will provide insurance companies a competitive advantage allowing them to better assess risk, and thus set insurance rates, as well as to reduce risk and thus improve safety and lower costs for their clients.

Qualification
Candidates must hold a doctoral degree in Statistics or a related field and have excellent computational, communication and writing skills. Familiarity with Hadoop, Mapreduce and Geomesa is desirable. The applicant should be enthusiastic and comfortable working with real data and must be able to work independently as well as in a team setting.

Additional information
Please send a cover letter including research interests, goals, and CV, and have at least two referees send recommendation letters to Dr. Stefan Steiner at shsteiner@uwaterloo.ca. All applications received by Dec. 1, 2016 will receive full consideration.

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