

Posting date: November 17, 2020

Postdoctoral Fellow

Faculty / Division: Faculty of Applied Science and Engineering

Department

Civil & Mineral Engineering

Campus

St. George (downtown Toronto)

Description

The Department of Civil & Mineral Engineering, University of Toronto invites applications for a Postdoctoral Fellow position in the recently established Smart Freight Centre. The new hire will become a member of the research team and be responsible for research management in “CLUE: City Logistics for the Urban Environment”, specifically in Theme 3: City Logistics Pilot Studies.

CLUE is a four-year, \$11 million collaboration funded by NSERC and a collaboration of three universities, six private-sector partners, four public sector partners and two non-governmental organizations. The Principal Investigator is Dr. Matthew Roorda, Professor, Civil & Mineral Engineering, University of Toronto, and the Chair of the Smart Freight Centre.

CLUE will fill major knowledge gaps about the Canadian urban freight system through the execution of 24 projects organized under four broad themes:

- Theme 1: Freight Data Warehouse (FDW), Data Collection and Data Science Applications
- Theme 2: Logistics Network Design for New E-commerce Delivery Models
- Theme 3: City Logistics Pilot Studies
- Theme 4: Safety, Environment and Labour Force Dynamics

The Smart Freight Centre is a multi-university multi-disciplinary research centre that conducts research and implementation projects relating to urban goods movement and freight transportation. Its objective is to conduct innovative, evidence-based research, decision support, and monitoring in order to coordinate transportation infrastructure, land development, regulation, technology tools, training and resources that improve goods movement activities.

The Theme 3 Postdoctoral Fellow’s expertise in city logistics and strong communication and project management skills will enable him/her to oversee the pilot projects and manage undergraduate and graduate student researchers working on Theme 3 pilot projects. Projects are expected to include an off-peak delivery pilot project, cargo tricycle delivery pilot, autonomous vehicle (AV) delivery pilot, and a curbside loading zone pilot. Other research opportunities in freight transportation and logistics may arise.

The Postdoctoral Fellow will work alongside the Project Manager, the Principal Investigator and the co-investigators to oversee and report on research progress in Theme 3, collaborate with peers leading the other three themes to coordinate and facilitate research activities among the many CLUE projects, and contribute professionally to the delivery of the various reporting requirements and outreach events.

Key Duties

The Postdoctoral Fellow will balance three primary roles: 1) manage and report on research progress, 2) facilitate research activities among the many partnerships, projects and research team members, and 3) manage and support undergraduate and graduate student researchers. Specific duties include:

- Manage the successful execution of CLUE, in collaboration with Prof. Matthew Roorda;
- Ensure project goals are met according to budget and timeline;
- Lead undergraduate and graduate students to achieve success in their research;
- Liaise with co-investigators, government, industry and NGO partners throughout the CLUE project and coordinate research effort with sponsors;
- Assist and lead the preparation of research proposals, technical reports and peer reviewed journal publications related to the research;
- Present research findings to stakeholders within and outside of the project team;
- Manage large datasets that include confidential data;
- Contribute to development and maintenance of a website that will streamline access to CLUE research outcomes;
- Contribute to the organization of events (symposia, workshops, meetings).

Qualifications

Candidates require a PhD degree in engineering or relevant scientific field, or equivalent combination of education and experience. The candidate must have experience working in teams of researchers, and specifically assigning, and managing tasks in large interdisciplinary projects. The candidate should have experience in freight and goods movement. The candidate must have excellent inter-personal and communication skills, and a demonstrated ability to work independently and in a group setting.

Appointment Type: Grant - Term

Schedule

Schedule: 1.0 FTE

Application Instructions

All individuals interested in this position must submit a single electronic file consisting of a cover letter, detailed CV, a one-page statement of research interests highlighting research

experience, and the names and addresses of three references to Prof. Matthew Roorda (matt.roorda@utoronto.ca) by the closing date. Please use **Application for Freight Transportation Postdoctoral Fellow** as the email subject.

Closing date: December 15, 2020. The search will continue until the position is filled.

Supervisor: Prof. Matthew Roorda

Expected start date: January-March, 2021 (negotiable)