Civil & Mineral Engineering
UNIVERSITY OF TORONTO

Posting Date: January 18, 2022

Postdoctoral Fellow: Data Science for City Logistics

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 (PDF) position in the recently established Smart Freight Centre. The new hire will become a member of the research team and be responsible for managing and conducting research in "CLUE: City Logistics for the Urban Environment", specifically in Theme 1: Freight Data Warehouse, Data Collection, and Data Science Applications.

CLUE is a four-year, $11 million research program 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 Canada Research Chair in Freight Transportation and Logistics.

CLUE will fill major knowledge gaps about the Canadian urban freight system through the execution of 24 research 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 improve the ongoing vibrancy of business and quality of life for residents in the Greater Toronto and Hamilton Area by conducting innovative, evidence-

based research, decision support, and trend monitoring in order to coordinate transportation infrastructure, land development, regulation, technology tools, training and resources that improve goods movement activities.

The Theme 1 Postdoctoral fellow will work alongside the Project Manager, the Principal Investigator and the co-investigators to conduct independent research and oversee and report on research progress in Theme 1 and its 7 research projects, coordinate and facilitate research activities among the many partnerships, projects and research team members, and assist with the various reporting requirements and outreach events.

Key Duties

The Postdoctoral fellow will balance three primary roles: 1) Conduct collaborative and independent research projects, 2) manage and report on research progress, 3) facilitate research activities among the many partnerships, projects and research team members, and 4) manage and support undergraduate and graduate student researchers. Specific duties include:

- **Conduct** collaborative and independent research on the topic of urban freight transportation and logistics;
- **Manage** the successful execution of CLUE Theme 1, in collaboration with Prof. Matthew Roorda (see clue.utoronto.ca and select Theme 1 for more information);
- **Oversee** the continuing development of the Freight Data Warehouse;
- **Ensure research project goals are met** according to budget and timeline;
- **Liaise** with co-investigators, government, industry and NGO sponsors and stakeholders, to ensure administrative and research requirements are met;
- **Assist** in the preparation of research proposals, research agreements and related paperwork, administrative reports and peer reviewed journal publications related to the research;
- **Contribute** to development and maintenance of the CLUE website clue.utoronto.ca;
- **Contribute** to the organization of research related events (symposia, workshops, meetings).

Qualifications

Candidates require a PhD in transportation engineering, data science, computer engineering, or relevant scientific field, or equivalent combination of education and experience in freight transportation. The candidate must have experience working in teams and managing tasks in large projects. The candidate must have experience in data management, data science, and data visualization. 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

Supervisor: Prof. Matthew Roorda

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 email addresses of three references to Prof. Matthew Roorda (matt.roorda@utoronto.ca) by the closing date. Please use **Application for Data Science in City Logistics PDF** as the email subject.

Closing date: February 18, 2022. The search will continue until the position is filled.

Supervisor: Prof. Matthew Roorda

Salary: $60K + benefits. For details see employee PDF information here https://postdoc.sgs.utoronto.ca/

Expected start date: March-April, 2022 (negotiable)

Diversity Statement
The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ2S+ persons, and others who may contribute to the further diversification of ideas.

Accessibility Statement
The University strives to be an equitable and inclusive community, and proactively seeks to increase diversity among its community members. Our values regarding equity and diversity are linked with our unwavering commitment to excellence in the pursuit of our academic mission.

The University is committed to the principles of the Accessibility for Ontarians with Disabilities Act (AODA). As such, we strive to make our recruitment, assessment, and selection processes as accessible as possible and provide accommodations as required for applicants with disabilities. If you require any accommodations at any point during the application and hiring process, please contact ***matt.roorda@utoronto.ca***.

All qualified candidates are encouraged to apply*;*
however, Canadians and permanent residents will be given priority.