



6 Fully Funded PhD Positions Available

The UBC's Centre for Transportation and Land Use Research (CeTLUR) Lab (<https://cetlur.ok.ubc.ca/>), a part of UBC's Faculty of Applied Science, has opening for 6 PhD students. Research at the CeTLUR Lab revolves around the general area of travel demand forecasting, with a particular focus on the investigation of transportation and land use interactions, travel behaviour analysis, activity-based travel modelling, shared, autonomous, and electric mobility, emissions and energy consumption, and survey design and methods. It contributes by developing state-of-the-art agent-based urban system microsimulation tools, econometric models and machine learning techniques to generate evidence to assist in developing sustainable transportation and land use-related policies and infrastructure investment decision-making.

The CeTLUR Lab is seeking 6 PhD students to contribute in one or several research topics aligned with the lab's research activities. Desired research interest areas are listed, but are not limited to:

1. Developing travel demand forecasting models to investigate ways to decarbonize Canada's transportation sector
2. Agent-based microsimulation modelling for forecasting travel demand
3. Agent-based regional traffic assignment modelling
4. Econometric modelling for travel behaviour analysis including activity-based modelling and investigating the usage of shared, electric and autonomous mobility
5. Forecasting for passenger and freight transportation
6. Survey design such as activity-based survey and stated experiment survey

Research Opportunities at the CeTLUR Lab

CeTLUR Lab is a hub for inter-disciplinary research and has active collaborations with researchers across disciplines in the two UBC campuses, as well as in Canada and internationally. The lab also partners with local, regional and provincial government agencies, transit agencies and consulting groups for research projects. The PhD students will have ample opportunities to develop first author research publications, attend conferences, and collaborate with industry partners and scholars locally and internationally.

Position Information

- The start date will be September 2022 or January 2023 or as soon as possible thereafter.
- The candidate must hold a master's in Civil Engineering or a related field.
- Students with BS in Civil Engineering, interested for a master's leading to PhD can also apply.
- Experience in survey design, travel behaviour analysis, and travel demand forecasting is required.
- Knowledge of econometric and agent-based modelling for urban systems would be beneficial.
- Skills in C++, Python, R, GAUSS, Stata, and/or other programming language/statistical software would be an asset.

Applications

Please apply by sending your CV, official transcripts and/or any publications/writing examples you already have. Please send all documents directly to: **Dr. Mahmudur Fatmi** (mahmudur.fatmi@ubc.ca), Assistant Professor, UBC - Okanagan. The subject line of your email should be: **CeTLUR_PhD_Last Name**.