Funded MSc Opportunity. The Arctic Landscape Ecology Lab at the University of Victoria is seeking an MSc student to lead a project on community-based monitoring of landscape change.

Permafrost landscapes are undergoing rapid transformation, impacting infrastructure, hydrology, vegetation, and local livelihoods. In many regions the rate of change is so rapid that maintaining accurate inventories of permafrost disturbances presents a significant challenge. This MSc project focusses on developing a protocol that will enable individuals such as park rangers, highway inspectors, hunters, and utility maintenance crews to record observations of anomalous conditions. The first part of this project will involve a review of existing observer-based networks and their suitability for qualitatively documenting permafrost conditions. This results of this review will be used to design a pilot protocol and web-reporting interface for recording anomalous permafrost conditions. In the second part of this project, the successful applicant will evaluate the impacts of permafrost thaw on northern communities by comparing inventories of permafrost disturbances with spatial data on cultural heritage resources, and community infrastructure.

Interested applicants should hold an undergraduate degree in geography, environmental science, or a related field, and have a solid foundation in geomatics. Applicants must be self-motivated, have strong communication skills, the ability to manage multiple tasks, and be willing to travel to remote locations, potentially for extended periods. Preference will be given to students with previous experience working in northern communities and a background in GIS. The student will be supervised by Dr. Trevor Lantz and based in the School of Environmental Studies at the University of Victoria. Stipend funding of $21,000 per year is guaranteed for two years and support for travel to communities in the Western Canadian Arctic is also in place.

To apply, please email a summary of your qualifications and interest in this project, along with a CV, and unofficial transcripts to tlantz@uvic.ca. Application review will begin on July 15, 2022, but submissions will be accepted until a suitable candidate is found. The start date for this position is January or September, 2023.

This project is part of PermafrostNet, a multi-sectorial research network of twelve Canadian universities and more than 40 partner organisations. As a member of the network, the successful applicant will have opportunities to engage with government (provincial, federal, indigenous), industry, and international partners, as well as graduate students and researchers from across Canada. The Arctic Landscape Ecology Lab and PermafrostNet are strongly committed to fostering diversity as a source of excellence, cultural enrichment, and social strength. We welcome those who would contribute to further diversification including, but not limited to women, visible minorities, First Nations, Inuit and Métis peoples, persons with disabilities and persons of any sexual orientation or gender identity and expression.