Two postdoc positions in Canada (open to start immediately)

We are looking for highly motivated individuals to fill two postdoc positions (Université de Montréal [UdeM]). Working as part of a larger team including university, government scientists and Indigenous partners, the three individuals will work on different aspects of a recently funded project aiming to shed light on how tall shrub encroachment affects tundra vegetation composition, structure and diversity, and associated surface-atmosphere interactions across scales. Funded through the Institute for Data Valorisation (IVADO) and ArcticNet, the two-year positions are primarily based in Montréal, Québec with regular research visits to Wilfrid Laurier University (WLU) in Waterloo, ON and Trail Valley Creek (TVC) near Inuvik, NT:

https://www.wlu.ca/academics/research/partnerships/gnwt/research-sites/trail-valley-creek.html

Montréal is home to several research-intensive universities and research clusters, including a vibrant artificial intelligence community centered on Mila - Quebec AI Institute. Collectively, these world-renowned institutions provide ample career development and collaboration opportunities. A competitive salary for the postdoc positions is based on the candidate’s experience.

**Postdoc_1: Land surface-atmosphere interactions.** Based at UdeM, postdoc_1 will process, analyze and upscale flux measurements collected at the TVC Research Station. The “nested” Arctic flux set-up includes three eddy covariance towers and an automated chamber system: a 20-m landscape tower > two 5-m ecosystem towers > 18 automated chambers (see some footage here: https://www.dropbox.com/sh/q7pmdw8s83gh0lq/AADUm4MYyP2IlhVFYFL5M7CEa?dl=0)

**Postdoc_2: High-resolution image classification.** Based at UdeM and WLU, postdoc_2 will collect ultra-high resolution unmanned-aerial vehicle imagery over the terrestrial-aquatic Arctic landscape to identify and measure individual plants and map plant communities and land cover using deep learning methods.

**Ideal applicants for the two postdoc positions have**

1) a strong quantitative background obtained through a PhD in ecology, environmental science, computer science, Earth system science, etc.,
2) in at least some aspects of the project (e.g., micrometeorology, deep learning, image classification),
3) the ability to work independently and effectively as part of a team setting consisting of university, government, and Indigenous researchers, and
4) excellent written and oral communication skills in English, and
5) a track record of timely completion of projects and publications.

Please email questions regarding the positions and application packages consisting of cover letter, curriculum vitae, an English writing sample (ideally a publication), copies of academic credentials, and names and contact information of at least two referees to:

oliver.sonnentag *at*umontreal.ca (postdoc_1)

jbalzer *at* wlu.ca (postdoc_2)

etienne.laliberte *at* umontreal.ca (postdoc_2)

The review of applications will commence immediately until the positions are filled.