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Programmer/Analyst Computational Support Team

Job Description

The Pacific Climate Impacts Consortium (PCIC) is a regional climate service centre at the University of Victoria that provides practical information on the physical impacts of climate variability and change to users and stakeholders in BC and across Canada. The *Programmer/Analyst* works to develop and deploy the next generation of climate data analytics applications. Working within PCIC's Computational Support Group, you will team up with PCIC's climate scientists, application developers, and System Administrator to build and maintain a system for public-facing, on-demand climate data computation.

You will collaborate with PCIC's provincial and national partners to provide accessible climate science to advance disaster risk reduction and climate adaptation activities. You will work to add to the information, tools and guidance available for considering climate change in risk assessments and mitigative works in BC.

You will be a part of a dedicated and experienced team that enables access to PCIC data products and innovative web-based analysis tools like [Plan2Adapt](#) and the [PCIC Climate Explorer](#). Your open source software will play a key role in informing government policy and supporting new stakeholders considering climate data: Indigenous Nations, critical infrastructure operators, and services organizations for equity-denied populations.

Accountabilities

- In collaboration with PCIC climate scientists and Computational Support Group, overhaul PCIC's Plan2Adapt web application.
- Incorporate the use of First Nation territories and language family regions into PCIC's online tools and geospatial infrastructure.
- Assist in general application development and maintenance of PCIC's online tools: PCIC Data Portal, Design Value Explorer, and the Weather Anomaly Viewer.
- Assist in maintaining Continuous Integration/Continuous Deliver (CI/CD) pipelines
- Assist in Linux system administration.
- Reports to the Lead, Computational Support

Knowledge, Experience, and Abilities

Knowledge

- Bachelor's degree majoring in Computer Science, Computer Engineering, Mathematics, Statistics, a related field of study, or a commensurate level of experience
- Working knowledge of (able to efficiently read and write) at least four programming languages (e.g. Python, R, JavaScript, C/C++)
- Knowledge of Big O notation and algorithm complexity analysis
- Strong proficiency in SQL for efficient data retrieval, manipulation, and management
- Knowledge of GIS and/or open source geospatial software and techniques

- Knowledge of various models of concurrency is a plus
- Knowledge of various types and layers of virtualization (e.g. oVirt, Docker, K8s) is a plus

Experience

- Significant experience as a Linux user; experience with system administration is a plus
- Significant experience with distributed revision control software, git and GitHub
- Experience with CI/CD tools (e.g. GitHub Actions, TravisCI, Jenkins)
- Experience with containerized applications (e.g. Docker)
- Experience in designing and implementing well-structured, normalized, databases.
- Experience parallelizing large problems is a plus
- Experience with Test Driven Development and executing automated test suites is a plus

Abilities

- Ability to work as a software generalist in an environment of wide breadth. We value your ability to relate to and solve others' problems over knowledge in one specific area.
- Ability to work effectively and collegially with others inside and outside of the organization
- Excellent communication skills, both written and verbal; ability to communicate clearly and constructively with all members of the team; ability to request help from peers and colleagues when necessary
- Ability and willingness to listen and learn from diverse perspectives, adapting software solutions to meet the specific needs and priorities of different stakeholders (particularly from Indigenous Nations and other marginalized communities).

Other Information

- 3-year term commitment
- Full-time (35 working hours per week)

Additional information: Address enquiries to James Hiebert at climate@uvic.ca.

Application: Please send your application including a cover letter, CV, and three professional references to James Hiebert, climate@uvic.ca, with “**ATTN: Programmer/Analyst**” in the subject line. Please indicate whether you are legally able to work in Canada.

Review of applicants will start **immediately** and continue until suitable candidates are found.