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Programmer/Analyst Computational Support Team

PCIC is seeking to hire a Programmer/Analyst.

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. Some of your work will involve the multi-institutional collaborative "Data Analytics for Canadian Climate Services (DACCS)" project, funded by a Canada Foundation for Innovation Cyberinfrastructure grant, to develop and utilize state of the art technology for online climate service delivery.

You will be a part of a talented and dedicated team that enables access to PCIC's flagship data products and innovative web-based analysis tools. Your software will play a key role in informing government policy with respect to the impacts of climate change. Your code and deployments will see the light of day and be used immediately to study climate change and disseminate climate change information to users and stakeholders.

Accountabilities

- Assist in application development and maintenance, particularly PCIC's Data Portal and dynamic climate analysis tools (PCIC Climate Explorer, Plan2Adapt).
- Review and analyze application performance requirements in order to develop and provision resource allocations
- Maintain Continuous Integration/Continuous Deliver (CI/CD) pipelines
- Assist in Linux system administration, particularly related to PCIC's web application products and services
- Assist in developing a strategy and implementation for container scaling and orchestration (e.g. with a Kubernetes cluster).
- Collaborate with developers in a multi-organizational coalition across several locations
- Reports to the Lead, Computational Support

Knowledge, Experience, and Abilities

Knowledge

- Bachelor's degree majoring in Computer Science, Computer Engineering, Mathematics, Statistics, 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
- Knowledge of various types and layers of virtualization (e.g. oVirt, Docker)
- Knowledge or experience with application and infrastructure monitoring (e.g. ELK, Datadog, New Relic)

Experience

- Significant experience as a Linux user; experience with system administration is a plus
- 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 parallelizing large problems is desirable
- Experience with Test Driven Development and executing automated test suites

Abilities

- 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 to work with a network of collaborators in multiple locations, time zones and organizations.

Other Details

- Employment period: 2 years with potential for extension.
- Weekly working hours: Full time (37.5 hours per week). No overtime or on-call work.
- Pay rate: Commensurate with education and experience.
- Start Date: As soon as possible.
- A successful candidate must live in or relocate to British Columbia, Canada.

Additional information: Address enquiries to James Hiebert at <u>climate@uvic.ca</u>.

Application: Please send your application including a cover letter, CV, and three professional references to James Hiebert, <u>climate@uvic.ca</u>, with "ATTN: Programmer/Analyst" in the subject line. Please specify whether or not you are currently able to work legally in Canada.

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