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Website: http://pacificclimate.org/

DevOps Specialist Computational Support Team

PCIC is seeking to hire a DevOps Specialist.

Pacific Climate Impacts Consortium (PCIC)

The Pacific Climate Impacts Consortium (PCIC) was created to assess climate impacts in the Pacific and Yukon Region of Canada. The goals of the Consortium are to foster collaborative research, to strengthen the capacity to address regional climate change and variability, and to provide the scientific basis for policy development. 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. Through collaboration with climate researchers and regional stakeholders, PCIC produces knowledge and tools in support of long-term planning. http://www.PacificClimate.org

Nature of Work

The DevOps Specialist works to build infrastructure to develop and deploy the next generation of climate data analytics applications. The position is part of the multi-institutional collaborative "Data Analytics for Canadian Climate Services (DACCS)" project funded by a Canada Foundation for Innovation Cyberinfrastructure grant. Working within PCIC's Computational Support Group, he/she will team up with PCIC's application developers, authors of scientific software and System Administrator to build continuous delivery pipelines, and a system for public-facing, on-demand climate data computation. He/she will collaborate with PCIC's national partners to develop and utilize state of the art technology for online climate service delivery.

The DevOps Specialist 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. His/her software will play a key role in informing government policy with respect to the impacts of climate change. His/her 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

- Design and implement Continuous Integration/Continuous Deliver (CI/CD) pipelines
- Develop and refine Docker container builds
- Assist in Linux system administration, particularly related to PCIC's web application products and services
- Review and analyze application performance requirements in order to develop and provision resource allocations
- Assist in developing a strategy and implementation for container scaling and orchestration (e.g. with a Kubernetes cluster).
- Assist in application development, as needed
- Collaborate with developers in a multi-organizational coalition across several locations
- Reports to the Lead, Computational Support

Knowledge, Skills & 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. 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

Ability

- 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.

Employment period

2-year term commitment.

Weekly working hours

Full time (37.5 hours per week)

Pay rate

Commensurate with education and experience.

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, <u>climate@uvic.ca</u>, with "ATTN: DevOps Specialist" 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.

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