

IT/DevOps

Job Description:

I am always seeking to develop a data-science team to solve the many computationally complex problems we encounter in bioinformatics and health data science. We work towards the development of new therapeutics and immunotherapies that leverage the patient's own immune-system to eradicate the disease. Our work and findings help to improve the treatment and care for cancer patients around the world.

The data we deal with is truly huge: individual datasets can be hundreds of terabytes, and can include numerical, textual and imaging data. The team we are building is incredibly diverse, with biologists, statisticians, software engineers, bioinformaticians, mathematicians and data scientists. Together, we are all working as a team toward the common goal of developing new therapies for cancer patients. Use your technical skills to tackle one of the hardest problems of our time as you continue to grow into data-science.

We are seeking to recruit an enthusiastic, highly motivated hybrid IT and DevOps Software Engineer at one of our sites. We are searching for a person passionate about IT and automation to support the life-changing work that we do. We are equipped with state-of-the-art facilities on which to develop your data-engineering and high-performance computing skillset. We offer a nurturing environment and opportunity to pivot your career. The project has access to Cyfronet Pro- metheus (~55, 000 cores) and CI TASK Tryton (~38, 000 cores) clusters, which are consistently represented among the top 500 super computers in the world. As the work is international in nature, we are constantly integrating with sister-groups around the world. There will be ample training opportunities for developers who join the team and we offer an inter- nationally competitive salary competitive with your experience.

How to apply:

You are encouraged to contact Dr. Javier Alfaro (Javier.Alfaro@proteogenomics.ca) to ask further about potential opportunities.

Responsibilities:

The IT/dev-ops specialist is responsible for ensuring that lab-standards established for bioinformatics workflows are supported by robust IT infrastructure. This person creates and maintains automation scripts that set up computers according to our framework. Further responsibilities include managing and maintaining a shared code-base and ensuring that code used by researchers in the lab can be easily used by others in the group. The devops specialist further interacts with sysadmins to install software both locally and on our cluster Prometheus. The dev-ops engineer must have experience with systems and IT operations, the ability to use a wide variety of open source technologies and tools, the ability to code and script, a strong grasp of automation tools, data management skills and be comfortable with communication in English. Trainees and scientists rely on the IT/dev-ops person to avoid losing time in the details of system configurations particular to the IT-infrastructure across our compute resources.

Responsibilities may also include:

- Experience working with tools such as: Google Cloud, GIT, Python and R
- Provide IT consulting on biological data analysis for ICCVS researchers conducting cutting-edge molecular biology research
- Ability to learn, but must have good base knowledge of CS principles
- Ability to review and debug code of colleagues
- An understanding of Continuous Integration (CI) principles
- Knowledge of Automated Deployments

- Be interested in learning Data-Science essentials including Machine-learning and simple statistical analysis

Preferred Qualifications:

- Bachelor's degree in Computer Science
- Experience with version control systems (SVN, Git, Mercurial, etc)
- Experience with some of the following: R, Python, C, C++, Java
- Knowledge of UNIX/Linux environments

Benefits

- You will interact internationally with researchers having state-of-the-art facilities for mass spectrometry, virology, protein biochemistry, vaccine technology and computational biology.
- Employees will have the opportunity to develop skills in machine learning and high performance computing. The center has access to Cyfronet Ares (~37, 824 cores), Athena (47,616 cores) and CI TASK Tryton (~38, 000 cores) clusters, which are consistently represented among the top 500 super computers in the world.
- Our software engineers, statisticians and computer-scientists are encouraged to further develop their skills in data-science through the attendance of workshops, conferences etc.
- I provide an exceptional opportunity for motivated data scientists to work in an international multidisciplinary training environment to tackle major

challenges at the interface between basic cancer discovery science and translational medicine.

- As we are an international center our infrastructure is remote-work compatible. A benefit enjoyed by excellent communicators and team players.