World Data System International Technology Office Web Developer Co-op

Position Summary

Ocean Networks Canada (ONC) is a world-leading organization supporting ocean discovery and technological innovation. ONC is a not-for-profit society that operates and manages innovative cabled observatories on behalf of the University of Victoria that supply continuous power and Internet connectivity to various scientific instruments located in coastal, deep-ocean, and Arctic environments. ONC is also a member of the World Data System, a global consortium of data distribution centers under the auspices of the International Science Council. ONC is the physical host, along with the Canadian Astronomy Data Center and the University of Waterloo’s Polar Data Catalogue, of the WDS International Technology Office (ITO). The ITO supports the contribution of WDS members to the global research data infrastructure.

Position Description

The ITO engages with WDS members and other partners on a range of issues associated with the development of digital research infrastructure. One such issue that the ITO is currently working on is helping the international polar research community make data more FAIR (Findable, Accessible, Interoperable and Reusable). The current project in service of that goal involves creating a federated search website for polar data as well as analyzing which polar data repositories are being aggregated and consumed by which tools and indexers. We are seeking a co-op student who is interested in engaging with a global research community, who has some experience with and interest in learning more about writing software that runs on the web.

Duties and responsibilities

The ITO Co-op will report to the Director of the ITO, and will work closely with an ITO developer and research associate to:

1. Contribute features, tests and documentation to a polar federated search web app (more information here) and other, related open-source projects
2. Contribute to an effort to map data repository relationships
3. Participate in various working group meetings and weekly team standing meetings
4. Other duties as assigned

Job knowledge requirements:

The ideal candidate will be a 3rd or 4th year undergraduate or graduate student in Library Science, Digital Humanities, Computer Science or Software Engineering with both web design and development skills, or have the equivalent combination of education and experience.

- Experience with or interest in learning about making web apps and some of the relevant programming languages: HTML, CSS, Python, Javascript, XML.
- Experience with or interest in learning about software virtualization systems like Docker, Kubernetes and Helm
- Experience with or interest in learning about knowledge graphs, schema.org metadata, and semantic networks
Experience with or interest in learning about Github, web design principles, and how http works are also helpful.

Candidates with an equivalent combination of education and experience will also be considered.

**Competencies:**

- Excellent organizational skills
- Excellent written and verbal communication skills
- Excellent problem solving skills
- Ability to learn about new technologies and technical jargon
- Good interpersonal skills; the ability to listen and ask relevant questions about what staff need and expect
- Ability to work independently and proactively within a team-oriented environment
- Interest in engaging with a global community of scientific researchers

**Conditions:**

- This is a 12 month term position.
- Position subject to funding
- The successful candidate will be eligible to work remotely. The candidate must either be a Canadian or be in possession of a Canadian work permit.
- International working group meetings are often outside of normal business hours.

**Start Date:** May 1st, 2022  
**End Date:** April 30, 2023  
**Application Deadline:** April 15th, 2022  
**Salary:** $3000/month (or $19.74 per hour)+4% vacation pay  
**Hours per week:** 35 hours per week; official ONC office hours are 8:30-4:30 Monday-Friday.  
**Location:** Queenswood Campus, 2474 Arbutus Road, Victoria BC V8N 1V8  
**To Apply:** email your resume, academic transcript, and cover letter to ncadmin@uvic.ca