

Java Specialist

Salary: \$57,000 to \$72,000 per year

Closing Date: October 17, 2008

The UVic Department of Physics and Astronomy is seeking a Java Specialist to work on the CANFAR project. This is a two-year term position.

The Canadian Advanced Network For Astronomical Research (CANFAR) is a new project which will develop an infrastructure to support the processing, storage, data management, and workflow management needs of large Canadian astronomical surveys. The CANFAR infrastructure will also allow astronomers to transparently access the resources of the Canadian Grid infrastructure.

The CANFAR infrastructure will be integrated into an existing environment which includes Canadian astronomers; Canadian astronomy surveys; the telescope facilities in Hawaii which observe and distribute data; the science data archives at the National Research Council's Canadian Astronomy Data Centre (CADC); and the Canadian Grid infrastructure.

The CANFAR team consists of a UVic-hired infrastructure development team, the CADC, and a small group of survey projects. The technical work will be primarily based at the CADC (located 12KM from UVic). The Java Specialist will provide the software development expertise required to design, implement, and deploy various Java components of the CANFAR project.

Organizational Structure

The Java Specialist reports to the CANFAR Technical Lead and CANFAR Project Manager, and will be under the direct supervision of the CANFAR project Principal Investigator.

Key Activities

- Designs and develops various Java components of the CANFAR infrastructure. This process will include:
 - Creating detailed designs of various components of the CANFAR infrastructure and documenting these designs in formal software design documents following the standards of the CANFAR project. The designs will be based on the high level design of the CANFAR infrastructure, and the documented CANFAR requirements.
 - Implementing components of the CANFAR infrastructure following the detailed designs, following the implementation standards of the CANFAR project.
 - Creating test plans to exercise components.
 - Executing test plans and writes test reports.
 - Creating integration plans for integrating components into the operational CADC and CANFAR infrastructures.
 - Implementing integration plans.
 - Updating design documentation to reflect the “as built” system.
 - Writing user and maintenance documentation as required.
- Evaluates and recommends existing software packages to be included in the CANFAR infrastructure. Based on the requirements determined for the CANFAR infrastructure, survey the available software packages, and evaluate their suitability for use in the CANFAR infrastructure.
- Modifies existing CADC software packages to support the CANFAR infrastructure.
- Reviews the designs produced by peers. The reviews help ensure designs produced by peers

- meet the needs and conform to the standards of the CANFAR project.
- Reviews code produced by peers. The reviews help ensure code produced by peers is error free and conforms to the standards of the CANFAR project.
- Prepare inputs to the project planning process, e.g., work breakdown elements, estimates of effort, identification of dependencies.
- Prepares written reports of status of assigned tasks on a weekly basis.
- Participate in weekly team meetings, including providing verbal progress reports on all assigned tasks.

Educational Requirements

A bachelor's degree in Computer Science, Computer Engineering or a related field.

Experience Requirements

At least two years of recent experience in the design and development of software systems using Java and the UNIX or Linux operating system.

At least two years of recent experience working as part of a small to medium-sized development team.

Demonstrated ability to design and implement complex software systems.

Demonstrated ability to design OO software using UML.

Experience designing, developing and maintaining Web applications and Web services is an asset.

Experience with Relational Database programming using JDBC and/or Hibernate is an asset.

Experience with the Eclipse IDE is an asset.

Experience with the argo UML design software is an asset.

Knowledge Requirements

Knowledge of the HTTP protocol and REST principals are an asset.

Contact

Address any enquires to:

Michael Peddle

email: canfar-hiring@astrosci.ca

phone: (250) 363 0005

Applying

A résumé and accompanying cover letter (in MSWord, openoffice, or PDF format) should be sent directly to the contact person. Applications with no cover letters will **not** be considered. Applications must be received no later than the closing date indicated above. In reply please quote the appropriate job title.