

**Environmental Informatics/Junior Java Developer  
Environmental Sciences Division  
Oak Ridge National Laboratory  
Oak Ridge, Tennessee**

ORNL08-47-ESD

**Project Description:**

The Environmental Sciences Division (ESD) of Oak Ridge National Laboratory (ORNL) has an opening for a recent Bachelors or Masters student in its [Environmental Data Science & Systems science area](#). We are seeking a recent (within the last 5 years) Bachelors or Masters graduate interested in applying programming skills to the development of environmental informatics tools and the distribution of environmental data. The candidate will join an enthusiastic team of programmers and scientists working on the ORNL Distributed Active Archive Center (DAAC) for biogeochemical dynamics and the Atmospheric Radiation Measurement (ARM) Archive. The [ORNL DAAC](#) is one of eight DAACs for NASA's Earth Observing System and is responsible for gathering, distributing and adding value to biogeochemical data used in validation of NASA satellite data products and earth science program. [ARM Archive](#) supports the scientific field experiments of the Atmospheric Radiation Measurement (ARM) Program by storing and distributing the large quantities of data collected from these experiments.

The primary duties of the selected candidate will be to develop user interface applications that will facilitate the users to search and order various research data from ARM Archive and ORNL DAAC, in addition to developing new user interfaces, the candidate will be requested to maintain various current applications that are written mostly in Java and Perl

**Required skills:**

Software development using OOD techniques, good understanding in multi-tier application development and MVC architectural pattern, Internet applications development on systems that include tolls and technologies like using Java, J2EE, Java servlets, JSP, Java framework (JSF, Spring or Struts), Java multi-threading, Tomcat, Apache web server, Web 2.0 development, Ajax toolkits, Style Sheets, JavaScript, open source widgets, XML, XSLT, XML Schema, Linux and Windows OS, and various open source tools.

Experience with SQL and one or more relational databases, such as MySQL, Sybase, or Oracle.

Excellent problem solving, design, development, and debugging skills. Ability to work with multiple projects and teams. Willing to learn and adopt new and emerging technologies.

**Additional preferred skills:**

- Experience in using C,C++, statistical tools such as SAS, SPSS or any other statistical analysis tool
- Background in Environmental Science, Atmospheric Science, Geo Science, Physics or Chemistry

Knowledge in one or more of the following: Service Oriented Architecture, Web Services, Axis, Perl, Hibernate ORM, Portlet development, automatic job scheduling, data analysis data visualization and data extraction, Eclipse, JUnit, SVN, Flash, IDL, or MatLab

This position is affiliated with ESD and ORNL but the successful candidate will be an employee of Oak Ridge Associated Universities under their [Postgraduate Program](#). The position is for 1 year with the opportunity to extend for an additional two years depending on performance.

The program is open to all qualified U.S. and non-U.S. citizens without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a veteran or disabled veteran. Security clearance is not required for this position.

**Qualifications: Master's degree required**

Required disciplines in Computer Sciences, Earth and Geosciences, Environmental and Marine Sciences

Other requirements:

Java, J2EE, JSP, Servlets, Spring, Ajax, XML, Eclipse, Tomcat, portlet, Perl, open source tools, data analysis, data visualization.

Applicants cannot have received the most recent degree more than five years prior to the date of application and must complete all degree requirements before starting their appointment.

**How to Apply:**

Qualified applicants may apply online at [https://www2.ornl.gov/ORNL\\_POST/](https://www2.ornl.gov/ORNL_POST/). All applicants will need to register before they can begin the online application. For complete instructions, on how to apply, please see the instructions at <http://www.ornl.gov/orise/edu/ornl/ornl-pdpm/application.htm>. When applying for this position, please reference the position title and number (ORNL08-47-ESD).

Additional Information: Environmental Data Science & Systems

[http://www.esd.ornl.gov/research/environ\\_data\\_systems/](http://www.esd.ornl.gov/research/environ_data_systems/)

This appointment is offered through the ORNL Postdoctoral Research Associates Program and is administered by Oak Ridge Associated Universities (ORAU). This appointment is open to all qualified U.S. and non-U.S. citizens without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnam-era veteran or disabled veteran.