Opportunity Title: ORNL Environmental Informatics Post-Bachelor's Research Associate

Opportunity Reference Code: ORNL20-01-ESD

Organization	Oak Ridge National Laboratory (ORNL)
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Description

Oak Ridge National Laboratory (ORNL) is the largest U.S. Department of Energy (DOE) science and energy laboratory, conducting basic and applied research to deliver transformative solutions to compelling problems in energy, environment, and security.

The Environmental Sciences Division (ESD) of ORNL is seeking a Post-Bachelor's Research Associate in Geographic Information Systems (GIS) to join the Remote Sensing and Environmental Informatics group (https://www.ornl.gov/group/rsei). The candidate will contribute to data curation, documentation and management of data supporting nuclear non-proliferation activities. The candidate will join an enthusiastic team of developers, data scientists, and environmental scientists working in Remote Sensing and Environmental Informatics to provide integrated data products, data management and delivery systems and services, and data analytics to facilitate research, education, and decision-making in the environmental sciences.

Major Duties and Responsibilities

• Collaborate with the project lead to automate the extraction of metadata from data files and the quality assurance of those data files.

• Contribute to the identification of methods for organizing and archiving this data, in collaboration with staff at ORNL and other DOE laboratories.

• Develop scripts and approaches for efficient and high-quality QA/QC of datasets ingested into the archive.

• Write dataset documentation for publication into the nuclear non-proliferation data system.

• Provide scientific and technical support for data distribution tools and services.

Qualifications

The candidate must have a bachelor's degree in geography, earth and environmental science, ecology, forestry, or a bachelor's degree in any science or engineering field with a minor or significant experience in the earth and environmental sciences. The most recent degree must be within three years of the start date for the position.

Preferred Skills:

Required Qualifications

• Experience in with geospatial software (GIS systems).

• Working knowledge of geospatial data formats and projections.

• Excellent technical writing skills.

• Good interpersonal skills and experience working in a collaborative team

environment.

Preferred Experience

• Domain knowledge of environmental science, climate, geography, and/or remote sensing is preferred.

• Some experience in scientific software development, preferably in Python or R.

• Experience working with the Linux operating system and tools.

• Familiarity and experience in metadata standards, particularly ISO 19115 or FGDC.

Living in East Tennessee: While the opportunity to work at ORNL is an amazing experience in itself, it's easy to overlook everything else East Tennessee has to offer if you haven't had the opportunity to spend time here. From spending your weekends downtown at Knoxville's farmers market, the Rhythm n' Blooms Music Festival, or the Dogwood Arts Festival, to some of the best hiking, kayaking, and camping in the U.S., East Tennessee has something to offer everyone.

The ORNL Post-Bachelor's Research Associate Program is administered by Oak Ridge Associated Universities through its contract with DOE to manage the Oak Ridge Institute for Science and Education (ORISE).

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Bachelor's Degree received within the last 36 month(s).
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12 👁)
  - **Communications and Graphics Design** (1 👁)
  - **Computer, Information, and Data Sciences** (16 👁)
  - **Earth and Geosciences** (21 👁)
  - **Engineering** (27 👁)
  - **Environmental and Marine Sciences** (14 👁)
  - **Life Health and Medical Sciences** (45 👁)
  - **Mathematics and Statistics** (10 👁)
  - **Other Non-Science & Engineering** (1 👁)
  - **Physics** (16 👁)
  - **Social and Behavioral Sciences** (3 👁)
- **Age:** Must be 18 years of age