

Opportunity Reference Code: EPA-SSP-0023-9

Organization

U.S. Environmental Protection Agency (EPA)

**Reference Code** 

EPA-SSP-0023-9

**How to Apply** 

- Submit application and supporting documents by clicking on Apply Now button.
- For more information, contact EPAjobs@orau.org. Do not contact EPA directly.

### Description

The EPA Environmental Research and Business Support Program has an immediate opening for a part-time (up to 20 hours per week) Geospatial Measurement Data Support position with the Office of Research and Development at the EPA facility in Research Triangle Park, NC.

The Office of Research and Development at the EPA supports high-quality research to improve the scientific basis for decisions on national environmental issues and help EPA achieve its environmental goals. Research is conducted in a broad range of environmental areas by scientists in EPA laboratories and at universities across the country.

The National Risk Management Research Laboratory (NRMRL) develops and uses next generation emission measurement (NGEM) approaches to help address emerging needs related to fugitive air pollution sources. The group specializes in measurements in and near industrial facilities and neighboring communities with focus on volatile organic compounds and hazardous air pollutants. In collaboration with external partners and industry groups, the NRMRL team demonstrates real-world application of NGEM systems for source characterization and emissions mitigation. Primary focus:

- Passive and active fenceline monitoring
- Near-facility community impacts
- EPA method OTM 33 and related mobile measurements methods
- Next generation leak detection and repair concepts
- Inverse source location and emission estimation approaches
- Hyper spectral imaging and advanced remote sensing research

The selected candidate shall provide data management, data curation and data analysis support for the NGEM team. He/she shall develop original data processing algorithms and statistical regression models to assist in understanding and publishing complex near-source sensor data sets. The position will involve



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file management, data curation and extraction, quality control, as well as performing qualitative and quantitative data analysis. The selected candidate shall work with other members of NRMRL's NGEM team to maintain multiple datasets for active field efforts, quality control entered data, and perform downstream analysis. He/she shall be a member of a multi-disciplinary research team and shall be trained to support the development, maintenance, and analysis of emerging NGEM systems.

# NGEM data curation and analysis responsibilities shall include:

- · Assisting with quality control of entered data;
- · Running automated data quality tests;
- Developing analysis tools for exploring and visualizing NGEM data;
- Developing scripts to provide reports on the data;
- Developing analysis methods for performing statistical data reduction and filtering; and
- Developing statistical models that explore the geospatial and temporal relationship between NGEM datasets.

#### Communications-related responsibilities shall include:

- Participating as a member of a multi-disciplinary research team:
- Interacting with other members of the development team as well as EPA scientists; and
- Documenting code and database development efforts.

The selected candidate may be asked to present work performed as a poster at a scientific conference and may be asked to co-author scientific papers.

**Location:** This job will be located at EPA's facility in Research Triangle Park, NC.

**Salary:** Selected applicant will become a temporary employee of ORAU and will receive an hourly wage for hours worked at a rate of \$28.14 per hour. The selected candidate will work part time (up to 20 hours per week).

Hours: Part-time up to 20 hours per week.

**Travel:** Occasional overnight travel may be required.

**Working Conditions:** The selected candidate shall be supervised by a mentor who will provide day-to-day direction, as well as coach, advise and counsel the selected candidate, and review his/her work.

This position will involve work in an administrative setting and is not expected to involve exposure to hazardous elements.

**Expected Start Date:** The position is part-time (up to 20 hours



Opportunity Reference Code: EPA-SSP-0023-9

per week) and expected to begin in January 2018. The selected applicant will be a temporary employee of ORAU working as a contractor to EPA. The initial contract period is through May 14, 2018. EPA may elect to renew the contract for an additional two (2) 12-month optional periods.

For more information, contact EPAjobs@orau.org. Do not contact EPA directly.

#### Qualifications

### Eligible applicants must:

- · Be at least 18 years of age and
- Have earned a Master's degree in environmental science, chemistry, statistics, math, physics, information science or a closely related field from an accredited university or college within the last 24 months and
- Be a citizen of the United States of America or a Legal Permanent Resident.

EPA ORD employees, their spouses, and children are not eligible to participate in this program.

# Required Knowledge, Skills, Work Experience, and Education

The applicant shall have:

- Demonstrated experience in analysis of complex geospatial environmental datasets;
- A working knowledge of algorithmic approaches for analysis of environmental sensor data;
- Experience in processing of high time resolution mobile sensor data;
- High proficiency in R-language programming;
- Demonstrated satirical analysis experience and development of novel regression techniques; and
- Strong written, oral and electronic communication skills.

### Eligibility Requirements

- Citizenship: LPR or U.S. Citizen
- Degree: Master's Degree or Doctoral Degree received within the last 24 month(s).
- Discipline(s):
  - Chemistry and Materials Sciences (12 ●)
  - Computer, Information, and Data Sciences (16 ♥)
  - Engineering (2 ◆)
  - Environmental and Marine Sciences (13
  - Mathematics and Statistics (10 ●)
  - Physics (16 ●)

#### Affirmation

I certify that I am at least 18 years of age; a recent graduate with a Master's degree in environmental science, chemistry, statistics, math, physics, information science or a closely related field; a



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citizen or a Legal Permanent Resident of the United States of America; and not a current employee of EPA ORD or the spouse or child of an EPA ORD employee.

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