

POSITION DESCRIPTION

Title: Geospatial/Scientific Software Developers (multiple positions)

Responsible to: NCEI Team Lead

Location: Asheville NC; Boulder CO; Silver Spring MD; Stennis MS;

Burlington VT, or 100% remote

ISciences, L.L.C. is seeking early career software developers to support the National Oceanic and Atmospheric Administration's (NOAA's) National Centers for Environmental Information (NCEI) Climate Science and Services Division (CSSD) Climate Information Services Branch.

ISciences is a Burlington, Vermont-based limited liability company founded in 1997. We believe in the power of evidence-based analysis to understand vulnerabilities and achieve sustainability in a rapidly changing world. Our core strength is the ability to integrate expertise in the physical sciences, the social sciences, and information technology to solve our customers' problems.

ISciences provides strategic, scientific, and technical consulting services to a variety of government, commercial, and non-profit clients in the fields of sustainable development, vulnerability assessment, remote sensing, and geospatial analysis. Our contributions influence policy decisions at some of the world's largest companies and at the highest reaches of government. ISciences has four principal areas of practice: Water and Climate, Corporate Sustainability, Remote Sensing, and Human Security.

For more information, visit http://www.isciences.com/. To apply, please send a resume and cover letter to info@isciences.com by Monday, March 18, 2024.

Summary of Position:

These positions will support the development of new climate science products and services with regional, national, or global applications. They will employ a wide range of NCEI, NOAA, and other data. These development activities will employ an approach known as the "co-production of knowledge," wherein developers continuously communicate with practitioners to ensure that products and services are useful and used. Specific responsibilities will include:

- Developing new climatic science data products and services.
- Structuring and organizing instrumental records.
- Rigorously addressing observational artifacts in instrumental records.
- Developing gridded high resolution and temporally consistent products of environmental parameters from multiple observational and reanalysis datasets.
- Developing point-based and gridded products that depict central tendencies, variability, and trends of key environmental parameters.
- Developing products that blend historical data with short-term, seasonal, or multidecadal forecasts/projections to facilitate resilience to emerging events.



• Contributing to the preparation, delivery, and presentation of communications to a wide variety of audiences.

Working in a team requires strong communication and interpersonal skills. Applicants must be comfortable working side-by-side as well as across geographical locations with their colleagues in a highly collaborative environment. Active and self-initiated learning is expected to find innovative solutions to complex technical problems, streamline workflows and collaboration, and project management.

Required Qualifications:

- Ability to work on US Government contracts in the USA.
- Bachelor's degree (or equivalent work experience) in a relevant field such as civil engineering, computer science, earth/environmental science, mathematics, natural resource management, or statistics/data science.
- Proficiency in programming languages such as C++, FORTRAN, Groovy, Java, Javascript, Julia, Python, R, and Rust. Willingness to learn new languages as needed.
- Working knowledge of scientific, geospatial, and statistical data processing and visualization practices and methods such as spatial and temporal interpolation, anomaly detection, and bias correction.
- Working knowledge of relevant spatial software libraries and applications such as GDAL, PostGIS, QGIS, and ArcGIS. Willingness to learn new libraries and frameworks as needed.
- Working knowledge of source control and collaboration tools such as git, GitHub, GitLab, Confluence, and Jira.
- Experience writing/maintaining CI/CD pipelines using tools such as GitHub Actions, GitLab CI, or Jenkins.
- Experience working on Unix and/or Linux platforms.
- Excellent written and verbal communications, including public speaking.

Preferred Qualifications:

- Active public trust clearance.
- Prior experience developing scientific and/or data management software for NOAA or other U.S. government scientific agencies.
- Experience with the full software development lifecycle in an Agile or scaled agile framework (SAFE) environment.
- Experience with cloud computing environments such as AWS, Azure, and Google Cloud; and containerization tools such as Docker.
- Experience with high volume scientific data repositories.

Compensation: Competitive salaries and benefits, with flexible work schedules.

ISciences is an Equal Opportunity Employer