

POSITION DESCRIPTION

Title: Geospatial Services Software Engineers (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 to mid-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 enhanced access tools and visualization/interpretation services for a wide variety of climate datasets, products, and services. These capabilities are intended to support the use of climate data by a wide range of external users for decision making and strengthening resilience. The work will unify several best practices and successful technological approaches already in use within NOAA. The NOAA ArcGIS-based Geoplatform will be employed for website and mapping applications, and the Google Climate Engine will provide the ability to compute and download user specified derivative products such as spatial subsets, time-series statistics, and spatially weighting. Specific responsibilities will include:

- Developing new geospatial climate science workflows and tools to harvest, organize, and provide interactive and API-based services to a wide variety of climate science products available from NCEI and throughout the Federal government.
- Developing tools to compute and provide interactive and API-based access to derived climate data products.

- Documenting, publishing, and supporting peer and public review of code used to calculate climate-related products for both NCEI internal and external use.
- Developing software that is compatible with NCEI modernization efforts for generating climate-related products and services.
- Recommending new software architectures, coding practices, and workflows to support science data dissemination and delivery applications.
- 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 and geospatial data workflow management and methods.
- 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.
- Experience with cloud computing environments such as AWS, Azure, and Google Cloud; and containerization tools such as Docker.
- Proficiency with 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 scientific workflow management tools such as Kepler, Airflow, Nextflow, or snakemake.
- Experience with high volume scientific data repositories.

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

ISciences is an Equal Opportunity Employer