Eagle Rock Analytics
Senior Full Stack Geospatial or Scientific Developer
Remote Work for California Residents

Position Overview.
Eagle Rock Analytics, Inc. seeks a **Senior Full Stack Geospatial or Scientific Developer** to lead the technical development on cloud-based climate and weather data platforms for multiple State of California agencies (e.g., energy and climate-adjacent). The Senior Developer position would be a good fit for an experienced developer with familiarity with geospatial and/or climate data who is looking to create actionable science, help support a team, and mentor early-career developers and scientists. Experience utilizing AWS cloud computing with JupyterHub is strongly desired.

This position will support the development of the [Cal-Adapt: Analytics Engine](), [Cal-Adapt: Data Explorer](), and closely related work. The Senior Developer will be expected to mentor individuals contributing to research, create and manage tasks for junior developers, and develop and establish technical best practices.

We seek an experienced developer who has led teams and will contribute to thought leadership in our work. If your experiences don't line up with what is outlined below, but you believe you would be a great fit for the project, please still apply so we can learn more about you. Based in Sacramento, CA, this position is a fully remote, exempt, full-time, salaried position.

Position Responsibilities:
Serve as technical lead to one (or more) of the following research efforts:
1. Support collaborative development of the [Cal-Adapt: Analytics Engine]()
   - Oversee the hub environment on AWS, and evolve the Platform to become more accessible to a wider array of users
   - Develop a vision for our open climate analytics library [climakitae](), and advise junior staff on best practices, code optimization, and development of open source scientific software
     - Review code and processes to provide guidance, mentoring, and education on improvement areas in efficiency, performance, and maintainability
   - Manage the cloud optimized climate data catalog, including the generation and maintenance of new cloud optimized data
   - Establish best practices and mentor individuals who are developing Python code to execute analytics and methods, including unit tests, metadata, FAIR principle compliance
   - Support individuals who are building [Jupyter Notebooks]() that make high-resolution climate data accessible

2. Critically review and provide thought leadership on partner-produced climate visualization platform [Cal-Adapt: Data Explorer]()

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- Provide a perspective and direction for platform feature development (e.g. APIs, visualizations, website features) and fresh ideas for geospatial visualizations
- Gather requirements for partners to build towards
- Review and evaluate partner-produced features
- Enforce standards and best practices
- Review generated documentation and metadata for usability

Applicants may also provide their skills and insight to one (or more) of the following research or company efforts as aligned with their interests:

3. Providing technical vision and support in the development of the following projects:
   - Evaluating the development of a customizable climate and vulnerability assessment pipeline
   - Creating a "forecast handbook" to support on-the-ground water management operations in anticipation of storm impacts
   - Implementation of cloud-optimized and automated historical weather platform for the Western United States
   - Analyzing hourly profiles of wind, solar, and hydrological resources in future climates

4. Advising on the development of geospatial data in a cloud environment:
   - Develop efficient data pipelines between S3 data catalog and resource-intensive statistical and scientific workflows
   - Vet and provide feedback on the infrastructure setup of an HPC virtual cluster on AWS used for rigorous scientific modeling/computing tasks
   - Review efficacy of machine learning-informed scientific methods
   - Automate documentation development, including best practices within geospatial metadata (e.g. FAIR compliant)

5. Communication and training around developed products:
   - Develop training materials
   - Present developed products to a wide range of users
   - Engage with users (e.g. state agency staff, utilities companies, and consultants) to co-produce methods or improve functions or user experience
   - Communicate technical advances to a scientific audience

6. Business development and project management:
   - Shape your own future by identifying and pursuing opportunities that are responsive to your career goals
   - Develop proposals
   - Learn and/or further develop project management skills

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- Lead small teams of programmers, scientists, and social scientists across institutions such as national labs, universities, public agencies, and small businesses

General Position Requirements:
- This position requires extensive computer work, so applicants must be capable of working at a desk or computer for the majority of the workday
- This position is a senior technical role that is primarily responsible for helping to grow our technical practices as a company and support the individuals doing the work from a professional and technical perspective
- Given the senior level of this role, patience, communication, and empathy are crucial aspects
- Flexibility to perform other duties as required is critical. We are a small team, and sometimes you will have to do tasks that are outside of this position's scope
- We additionally require infrequent, but regular, travel to twice-a-year team planning meetings in Northern California

Required Qualifications:
- Share our [values and vision](#), particularly in creating an inclusive and welcoming workplace
- Experience leading and mentoring junior staff
- Experience leading the development of complex Python-based projects
  - Experience working with scientific (geophysical) toolkits (e.g., nco, cdo, ncl), repositories/libraries (e.g., xarray, MetPy, numpy, scipy), or visualization packages (e.g., matplotlib, hvplot)
- Experience developing web-based interfaces for geospatial data (e.g. Svelte)
- Experience executing at a high level within AWS
- Familiarity and comfort working with cloud optimized geospatial data
- Familiarity with JupyterHub, SageMaker, or similar platforms
- Experience managing and contributing to GitHub based projects

Desired Qualifications. *We anticipate applicants having some of these qualifications*.
- Curiosity about science
- Demonstrated experience contributing to open source software libraries
- Ability to assist with software deployments and tools (e.g., Docker, pipeline deployment)
- Experience with high performance computing (e.g., AWS EC2 and pcluster) within the cloud
- Comfort with physical scientific and statistical concepts
- Ability to work within a multidisciplinary team that includes technologists, scientists, and business leaders

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About Eagle Rock Analytics.
We are a small climate and environmental consulting firm with a focus on applied research that transforms big geospatial data into understandable information that answers questions or advances the science. We don't take profits on public good projects, allowing us to prioritize our clients and stakeholders, maintain professionalism and scientific ethics, and do work without ego. We're hoping to find people to join our team who agree that a slow, steady, methodical, and empathetic approach is better than a fast-paced, work-hard-play-hard, everyone-is-a-unicorn/rockstar approach.

Benefits & Compensation.
The salary range for this position is $118,000 to $150,000 annual salary. We are advertising this position as a remote, full-time, exempt position based in Sacramento, CA. All applicants must be eligible to work in the United States of America. Candidates will be expected to have or will [establish residence in California](). Residents of Pennsylvania need not apply. **Note**: Eagle Rock Analytics is unable to sponsor work visas or provide other immigration support.

Eagle Rock Analytics offers a flexible workplace with a generous benefit package, including at a minimum: health benefits, profit-sharing, retirement (i.e. 6% employer contribution to 401k) and paid time off (equivalent to ~9 weeks per full year worked). As a smaller company we are able to work with employees to meet their needs and prioritize work-life balance.

How to Apply or Learn More.
Questions?: Submit your questions about the application process, position, or working at Eagle Rock Analytics to careers@eaglerockanalytics.com. You can also consult our [careers FAQ]() for additional information.

To Apply:
- E-mail a resume/cv to careers@eaglerockanalytics.com with the subject line of "Senior Developer."
  - The resume title should be "Lastname Firstname - 2024 Senior Developer"
    - e.g. "Smith John - 2024 Senior Developer.pdf"
- In the body of the email, indicate your answers to the following questions
  - "Are you eligible to work in the United States of America?"
  - "Are you a resident of the state of California?"
  - "Is your salary requirement within the range offered?"
- (*Optional*) We encourage you to attach a Statement of Qualifications which addresses in your own words: (1) why you are interested and qualified for the position, and (2) a link to and/or description of a project or product you are proud of (a link could be your GitHub, a publication, a conference proceeding, etc).
  - Please limit replies to 2 pages, with 1" margins and size 12 Times New Roman font.

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Deadline and Process: We'll begin reviewing applications as they come in, and will continue to do so until the listings are removed from our website. We aim for the successful applicant to start in late 2024. We will reach out to successful applicants for interviews. All applicants will be notified when the position is filled.