

Position Overview.

Eagle Rock Analytics, Inc. seeks a **Senior Atmospheric or Climate Scientist** to lead novel research and development of a cloud-based climate and weather data platform for the State of California. The Senior Scientist will work primarily on the <u>Cal-Adapt: Analytics Engine</u>, which brings compute power, climate data, and cutting edge analytics together to empower scientifically-informed decision-making in California. The Senior Scientist may also contribute forward-thinking scientific guidance for the development of climate data tools and visualizations made publicly available via the <u>Cal-Adapt: Data Explorer</u>. As the State's data portal for the Fifth California Climate Change Assessment, this work directly supports the State of California's ambitious climate goals around renewable energy through cutting-edge scientific programming with hands-on stakeholder engagement and public policy, leading to actionable scientific outcomes.

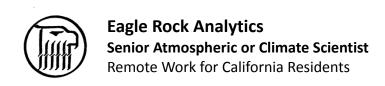
In this role the Senior Scientist will be guiding the overall work by providing scientific leadership to the development of new tools and analytic methods using downscaled GCM data; providing organizational structure and people management to our development team; developing and nurturing relationships with key stakeholders and users; and contributing to business development at Eagle Rock Analytics. Experience with CMIP6 model output, cloud computing, scientific programming, project management and/or working with stakeholders is ideal.

The role is likely best suited for a mid- or late-career professional interested in both management and research, but we will consider any applicant capable of performing key responsibilities. This position requires strong interpersonal skills and the demonstrated ability to manage staff; the Senior Scientist will be expected to mentor individuals contributing to research and development and establish/enforce technical best practices. Based in Sacramento, CA, this position is a fully remote, exempt, full-time, salaried position.

Position Responsibilities.

Bring climate and atmospheric science expertise to support applied research tasks:

- Demonstrate both scientific insight, direction and creativity regarding CMIP6 models, and ideally functional knowledge of working through the "hot model problem"
- Provide thought leadership on applying scientific knowledge to energy-sector challenges in utilizing projections data
- Create and implement novel statistical/analytical approaches to guide users to appropriate and specific GCM data for their application



- Meet stakeholders "where they are" and find paths to improve their use of climate data in an incremental fashion
- Effectively communicate complex scientific concepts to interested parties outside the scientific community to support decision-making and collaboration

Lead development of new tools and analytics for the <u>Cal-Adapt: Data Explorer</u> and the <u>Cal-Adapt: Analytics Engine</u>:

- Bring new energy and a clear vision for the next generation of climate data analytics and tools hosted on the Cal-Adapt: Data Explorer
- Support individuals who are building <u>Jupyter Notebooks</u> that make high-resolution climate data accessible
- Coordinate work among the team to establish goals and then meet them while communicating with clients, colleagues, and leadership teams
- Work with individual contributors to mentor and support them by reviewing code and scientific analysis to provide guidance and education on improvement areas in efficiency, performance, and approach
- Communicate with and educate decision-makers, policymakers, and energy sector professionals

Mentoring and management:

- Be an empathetic and effective leader of a team with diverse backgrounds
- Organize development efforts in line with project goals and stakeholder needs
- Lead meetings with a broad range of stakeholders
- Manage and track generation of deliverables and key project tasks
- Communicate project updates with colleagues, project leadership, stakeholders and technical staff at state agencies
- Help non-scientific, technical collaborators to understand climate science applications and key concepts
- Empathetically and compassionately support the professional development of more junior colleagues

Business development:

- Identify future opportunities for new projects
- Lead the development of proposals
- Execute technical or scientific writing in an industrial environment



Develop progress reports, track project budgets, and contribute to invoicing

Based on your education and scientific interest you *could* contribute to other research and development efforts such as:

- Providing climate data and expertise to improve the scientific rigor of climate and vulnerability assessments
- Creating a "forecast handbook" to support on-the-ground water management operations in anticipation of storm impacts
- Developing a high quality, automated historical weather platform for the Western United States
- Analyzing hourly profiles of wind, solar, and hydrological resources in future climates

General position requirements:

- Periodic travel to workshops, seminars, conferences, and meetings with our partners
- This position requires a lot of computer work, applicants will need to be capable of working at a desk or computer for the majority of the workday.
- This position involves executing complex research and computational tasks independently, in a timely fashion. This requires applicants to be able to learn new skills, maintain focus, execute documentation processes, complete tasks independently, make timely decisions without consultation, and communicate clearly with team members.
- Perform other duties as required. We are a small team, and sometimes you'll have to do tasks that are outside of position scope.

Required Qualification.

- Share our values and vision, particularly in creating an inclusive and welcoming workplace.
- Subject mastery in atmospheric/climate science or similar geophysical, environmental, computational, or adjacent engineering/mathematical fields; likely a M.S. or Ph.D. or equivalence in experience.
 - Familiarity with GCM skill/uncertainty/confidence assessment, downscaling techniques and/or modeling experience.
 - Expertise analyzing very large geospatial datasets (GCM output, ideally weather observations, and/or historical weather data products).
- Demonstrated experience in managing small to mid sized (3-10 people) projects.



 Excellent communication (writing and oral) and comfort in speaking to technical and non-technical partners, as well as colleagues at state and federal agencies. At a minimum this includes the capacity to write technically (proposals and manuscripts); write directly and simply in executive summaries and informal communication; orally communicate with slide decks at professional meetings; and communicate informally with partners. Communication (to us) involves actively engaging partners with empathy, embracing feedback and constructive criticism, and interacting with partners and colleagues with tact and sensitivity.

Desired Qualifications. We anticipate applicants having some of these qualifications.

- Supervisory and mentoring experience of junior staff.
- Experience successfully developing proposals (i.e. RFQ's, RFP's, grants) or business proposals.
- Capacity to make decisions and execute project tasks amidst an incomplete and evolving understanding of partner and stakeholder needs.
- Experience performing scientific/computational work in the cloud, or better -- experience developing applications on AWS.
- Expertise with Python, or R (or other modern computing languages such as Fortran77), along with the willingness to learn other languages. Experience working with scientific (geophysical) toolkits (e.g. nco, cdo, ncl), repositories/libraries (e.g. XClim, MetPy, NumPy, SciPy, tidyr), or visualization packages (e.g. ggplot, matplotlib, cartopy, Panel, HoloViews) a plus. Basically, we hope to find a candidate who has knowledge of any setup for working with big geospatial data, and trust your capacity to learn our particular approach (i.e. Python).
- Demonstrate a commitment, or willingness to contribute to, open-source computing through open-source collaborative code (e.g., GitHub), and FAIR/CARE principles
- Personal accountability and the capacity to work independently, while managing multiple concurrent tasks with overlapping deadlines.
- Experience developing, managing, or contributing to open-source repositories.
- Demonstrated interest in stakeholder engagement, public policy and/or doing science that benefits people. We're looking to hire someone who's excited to do science that increases reliability, safety and lowers the cost of the energy system. Familiarity with California energy system rules, regulations and legislation is a plus.
- General and broad knowledge of modern software and applications, such as videoconferencing, MS office, collaboration tools (like GitHub) and team communication

software (we use Slack). You will be working with colleagues working remotely, partners at other institutions and/or be working remotely yourself – so we expect you to communicate effectively asynchronously and without supervision.

About Eagle Rock Analytics, Inc.

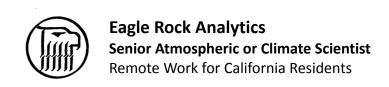
We are a small climate and environmental consulting firm, with a focus on applied research that transforms big geospatial data into understandable information that answers questions or advances the science. We don't take profits on research and public good projects such as Cal-Adapt work, allowing us 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 slow, steady, methodical, and empathetic is better than a fast-paced, work-hard-play-hard, everyone is a unicorn/rockstar approach.

About the Cal-Adapt Enterprise.

The Cal-Adapt Enterprise consists of the Cal-Adapt: Data Explorer (cal-adapt.org) a web accessible visualization platform for exploring the impacts of climate change in California, and the Cal-Adapt: Analytics Engine. Cal-Adapt is maintained by a consortium of researchers and developers from a public-private partnership involving executive leadership from the California Energy Commission and operation/development from campuses across the University of California, national labs and California based small businesses. While supporting Cal-Adapt, you would work at Eagle Rock Analytics which administers and is the lead of Cal-Adapt for the State of California.

As Cal-Adapt is at the center of climate science research and policy in California, the Senior Scientist should plan to play an important role in advancing the science and capacity of climate data utilization in California. The Cal-Adapt: Analytics Engine project receives research contributions from three internal projects to which the successful candidate could also contribute: (1) development of historical weather observations platform; (2) development of hourly renewable energy profiles; (3) improving the quality and rigor of climate vulnerability assessments. As the Cal-Adapt team works closely with other research efforts across the State of California to better visualize, analyze and make available climate and other environmental data of interest to policy and decision makers you will build (*or expand*) on professional relationships.

Benefits & Compensation.



The salary for this position is \$105,000 to \$140,000. We are advertising this position as a remote, full-time, exempt position, based in Sacramento, CA but will consider applicants seeking part-time employment. Candidates will be expected to have or will <u>establish residence</u> in <u>California</u>. Residents of Pennsylvania need not apply.

Eagle Rock Analytics offers a flexible workplace with a generous benefit package, including at a minimum, profit sharing, health benefits, retirement (i.e. 6% employer contribution to 401k) and paid time off. As a smaller company we are able to work with employees to meet their needs, and we 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 <u>careers@eaglerockanalytics.com</u>. You can also consult our <u>careers FAQ</u> for additional information.

Note: Eagle Rock Analytics cannot sponsor work visas or other immigration activities. All applicants must be qualified to work in the United States of America regardless of employment status.

To Apply:

- E-mail a resume/cv to <u>careers@eaglerockanalytics.com</u> with the subject line of "2024 Sr. Scientist."
 - o Resume title should be "Lastname Firstname 2024 Sr. Scientist"
 - e.g. "Smith John 2024 Sr. Scientist.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?"
 - o "Are you a resident of the state of California?"
 - "Is your salary requirement within the range offered?"
- 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.



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 will reach out to successful applicants for interviews. All applicants will be notified when the position is filled.