

## **Research Data Analytics Specialist at the University of Colorado-Boulder**

CU-Boulder's Research Computing group provides computing support for a number of research initiatives around the campus.

One such initiative – the Earth Lab initiative, which is part of CU-Boulder's "Grand Challenge: Our Space, Our Future," is working to push the frontiers of coupled earth and social system science. Earth Lab's mission is to harness the wave of Earth observations from aerospace platforms and other sources to better understand the pace and pattern of environmental change. Earth Lab will:

- Capitalize on the Data Deluge from Space to accelerate science;
- Reduce Environmental Risk and Surprise by using this wealth of data to understand and predict slow and abrupt Earth System change to help society manage and adapt;
- Train a New Generation of Data Scientists in Earth Analytics.

In order to support Earth Lab's developing Analytics Hub, a state-of-the-art computing facility that leverages existing cyber-infrastructure investments and houses scientific support staff and specialists who assist researchers and students with all data management and visualization needs, the Research Computing group is seeking a Research Data Analytics Specialist to join its dynamic team. This position will report to Research Computing's Senior Research Data Specialist.

### **Job Responsibilities:**

- Consult with and advise scientific researchers at the University of Colorado Boulder on efficient, appropriate, and powerful computational and informatics approaches for advancing scientific investigations in languages they use and understand
- Assist with the design and development of Earth Lab's Analytics hub, and instruct users on how to utilize the system
- Participate in solutions around the integration of diverse remote sensing and in-situ datasets
- Work with Earth Lab developers and cyber-infrastructure collaborators to optimize interoperability and long-term sustainability of these codebases and datasets as generalized resources for science researchers
- Participate in and lead teaching efforts, including training workshops or formal CU courses

### **Required Qualifications:**

- Bachelor's degree or higher in the computer sciences or related fields with experience working with science groups OR a Bachelor's degree or higher in the physical sciences or related fields with strong quantitative background in analysis, statistics, and programming;
- Three year's experience in a quantitative or scientific field in the area of data analytics;
- Strong familiarity with collecting, organizing and analyzing science data, especially relative to physical science data;
- Proficiency working with one or more of the following software programs or languages: R, Python, Matlab, ArcGIS, C/C++, Fortran;

### **Required Competencies:**

- Must have exceptionally strong communication skills, and work well with other scientists/researchers in intensive face-to-face and remote collaborations.
- In depth knowledge of statistical methods to explore and analyze large scientific data sets with these programming languages;
- Expert knowledge in data processing and manipulation, including formatting, ingest, and data cleaning;
- Strong desire to educate academic researchers on how to use these tools, which includes a strong service background.

**Desired Qualifications:**

- Advanced quantitative skills in statistical and informatics areas, especially relative to modeling of earth/atmospheric/geoscience data, facilitating data integration, and data and text-mining approaches;
- Data mining experience;
- Knowledge of Earth observations and experience working with satellite remote sensing data and imagery;
- Previous teaching experience.

**Application Instructions:** Applications are accepted starting December 6, 2015 at the new university job site: [www.cu.edu/careers](http://www.cu.edu/careers). This position will be listed with Research Computing. Please submit electronically and include:

- 1) A letter of application which specifically addresses how the applicant meets the minimum and desired qualifications of the position.
- 2) A current resume.
- 3) The names, addresses, daytime telephone numbers and e-mail addresses for three professional references.

Note: The final candidate will be required to provide proof of completed academic degree in the form of a transcript or diploma copy if the candidate will be using a completed academic degree to fulfill a minimum requirement for the position.

Please note that the University of Colorado-Boulder is launching a new career platform ([www.cu.edu/careers](http://www.cu.edu/careers)) on December 6, 2015. Please check the Earth Lab hiring website for updates on how to apply for this position:

[http://www.colorado.edu/geography/jkbalch/jkbprofile/Earth\\_Lab\\_Jobs%21.html](http://www.colorado.edu/geography/jkbalch/jkbprofile/Earth_Lab_Jobs%21.html)

**Application Deadline: Applications submitted by the end of the day on January 8th will receive full consideration.**

**Questions may be directed to Shelley Knuth, the Chair of the Search Committee for this position. Shelley can be reached at [shelley.knuth@colorado.edu](mailto:shelley.knuth@colorado.edu).**

**Salary and Benefits:** Salary will be commensurate with skills and experience. The University of Colorado offers a full benefits package. Information on benefits programs, including eligibility, is available at [www.cu.edu/pbs/](http://www.cu.edu/pbs/). For additional information about the University of Colorado at Boulder, go to: [www.colorado.edu/about/ataglance.html](http://www.colorado.edu/about/ataglance.html).

The University of Colorado at Boulder is committed to providing a safe and productive learning, living and working community. To achieve this goal, we conduct background investigations for all final applicants being considered for employment. Background investigations for this position include criminal history and reference checks.

The Immigration Reform and Control Act requires that verification of employment eligibility be documented for all new employees by the end of the third day of work.

The University of Colorado is an Equal Opportunity Employer committed to building a diverse workforce. We encourage applications from women, racial and ethnic minorities, persons with disabilities and veterans. Alternative formats of this ad can be provided upon request for individuals with disabilities by contacting Employment Services at (303) 492-6475.