The Cooperative Institute for Research in the Atmosphere (CIRA) at Colorado State University seeks to fill a professional scientific position designed to conduct collaborative research with the National Oceanic and Atmospheric Administration (NOAA) located at the Earth System Research Lab (ESRL), Global Systems Division (GSD) in Boulder, CO. Office will be in Boulder, CO. This position is located in a federal facility and requires the ability to pass a National Agency Check with Inquiries (NACI, federal background check) for building access.

The Cooperative Institute for Research in the Atmosphere (CIRA) at Colorado State University (CSU) is a multi-million dollar research organization located on CSU’s Foothills Campus in Fort Collins, Colorado. CIRA is a cooperative institute that is also a research department within CSU’s College of Engineering, in partnership with the Department of Atmospheric Science. Its vision is to conduct interdisciplinary research in the atmospheric sciences by entraining skills beyond the meteorological disciplines, exploiting advances in engineering and computer science, facilitating transitional activity between pure and applied research, leveraging both national and international resources and partnerships, and assisting NOAA, Colorado State University, the State of Colorado, and the Nation through the application of our research to areas of societal benefit.

NOAA's Global Systems Division (GSD) of the Earth System Research Laboratory (ESRL) is a federal science and research laboratory under NOAA’s Office of Oceanic and Atmospheric Research. GSD provides the National Weather Service (NWS) and the nation with environmental observing, prediction, computer, visualization, and information systems. These systems deliver data, forecasts, and predictions of weather, including severe weather events, within the next few minutes to weeks away. ESRL/GSD is a leader in the applied research, directed development, and technology transfer of environmental data, models, products, and services that enhance environmental understanding with the outcome of supporting commerce, protecting life and property, and promoting a scientifically literate public.

The IT Services/Data Services Group (DSG) within GSD develops Linux-based systems that acquire, process, store, and distribute meteorological datasets to support the development, testing, and evaluation of advanced weather models and weather information systems within GSD and the wider NOAA community.

The individual in this position will work with DSG teammates to extend and manage these data systems. He/She will establish user requirements for new datasets, and then develop, update, configure, and document software, as needed, to provide new capabilities. The individual will maintain a working knowledge of DSG’s established systems and methods, and research
methods to improve DSG services and ensure high availability of the large array of datasets for which DSG is responsible. This position will report to the DSG Technical Lead.

**Essential Job Duties:**

**Data Systems Management 95%**

- Work with meteorological research scientists to define requirements for data services that meet research needs.
- Design, develop, configure, monitor, document and troubleshoot data flows and applications within the DSG-developed framework to satisfy requirements.
- Work with IT Services’ systems administrators, networking and support staff to resolve service outages, and configure, monitor and manage system resources.
- Work with DSG teammates and others to envision and develop techniques and system architectures that will meet future data processing needs, while keeping abreast of trends in information technology hardware, software and services.
- Participate in external efforts to develop community-wide approaches to data handling issues.
- Communicate verbally and in writing with DSG team members, GSD managers, GSD users, and external data providers and users, in support of DSG’s services and GSD’s mission.

**Documentation and Reporting 5%**

- Prepare software documentation in collaboration with team members.
- Prepare status reports as required by the project sponsor and CIRA.
- Prepare and deliver technical talks and presentations as requested.

**Required Qualifications:**

- This position is located in a federal facility and requires the ability to pass a National Agency Check with Inquiries (NACI, federal background check) for building access.
- Bachelor’s degree in atmospheric or computer sciences or a related field plus 5 years relevant experience or Master’s degree in atmospheric or computer sciences or a related field plus 2 years relevant experience.
- Experience with meteorological datasets and applications.
- Expertise with Linux commands and utilities.
- Ability to develop clean, efficient, well-documented software in scripted and compiled languages, such as bash, perl, ruby, python, java, C or C++, plus a willingness to work with legacy code in these languages.
- Excellent verbal and written communications skills, including the ability to connect with a community of data users and providers in order to elicit requirements and discuss issues.
• Ability to work as part of a software development team as well as independently.
• Ability to see the big picture of a complex system as well as to focus in on the details.

Desired Qualifications:
• Experience developing and managing meteorological data acquisition systems.
• Experience with data transport methods like Unidata’s Local Data Manager (LDM), ftp, http, rsync and scp.
• Experience with data formats like GRIB, BUFR and NetCDF.
• Experience with Open Geospatial Consortium (OGC) standards and methods.
• Experience with databases and web development
• Interest in taking on leadership responsibilities within the group as expertise with the system develops.

Background Check:
Colorado State University is committed to providing a safe and productive learning and living community. To achieve that goal, we conduct background investigations for all final candidates being considered for employment. Background checks may include, but are not limited to, criminal history, national sex offender search, and motor vehicle history. **In addition, this position is located in a federal facility and requires the ability to pass a National Agency Check with Inquiries (NACI, federal background check) for building access.**

Commitment to Diversity and Inclusion:
Reflecting departmental and institutional values, candidates are expected to have the ability to advance the Department's commitment to diversity and inclusion.

Application Deadline: Applications will be accepted until all positions are filled; however, to ensure full consideration applications should be submitted by 11:59 PM MDT on July 15, 2018. Apply electronically by clicking “Apply to this Job” at the following website: [http://jobs.colostate.edu/postings/57544](http://jobs.colostate.edu/postings/57544). References will not be contacted without prior notification of candidates. Please be sure to address the required qualifications in the application materials.