Research Analytics Software Engineer

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Type: Full-Time
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Application Due: 02/02/2026
Category: Software Engineer/Programmer; +1 Laboratory and Research
Military
Research Analytics Software Engineer

Research Analytics Software Engineer - 38720 University Staff **Description**

University of Colorado Anschutz Medical Campus

Department: Biomedical Informatics

Job Title: Research Analytics Software Engineer

Position #:00820235 - Requisition #:38720Job Summary:

The Department of Biomedical Informatics at the University of Colorado School of Medicine on the Anschutz Medical Campus is looking to hire a research analytics software engineer to develop, maintain, and deploy scientific software. The engineer joins a growing software development team that supports the operational needs of the department and the research programs of its faculty. This position will provide an opportunity to develop sustainable open-source software products that serve multiple communities of users. Some will be publicly available to meet the needs of the research community, while others will be tools used internally by the department. The engineer will need to be able to select the most appropriate approach for the challenge at hand.

The engineer will need to work closely with faculty, other engineers, and other stakeholders to develop and maintain scientific software. Our software involves a wide variety of disciplines, such as machine learning, statistics, medicine, and biology, and takes many different forms, such as packages, web apps, web servers, workflows, and more.

Some of the projects the engineering team has worked on can be explored at cu-dbmi.github.io/set-website. Some of the topics the department and its community of collaborators research can be explored at news.cuanschutz.edu/dbmi.

Key Responsibilities:

- Partner with DBMI faculty and their research laboratories to advance their scientific and technical missions, particularly in domains such as Health AI, Machine Learning, Clinical Informatics, and data-driven biomedical research.
- Core activities include:
- Data analysis and pipeline development.
- Analytical and quantitative modeling.
- Visualization, dashboarding, and research reporting.
- Software engineering to support research workflows.
- Containerization and reproducible computing environments.
- Assist DBMI faculty in mentoring junior Research Assistants and students, providing technical guidance, code reviews, and support for best practices in research software development.
- Contribute to broader DBMI research initiatives and operational needs, including shared infrastructure, documentation, and cross-lab collaborations.
- Other duties as assigned to support the evolving needs of DBMI research programs.

Work Location: Hybrid - this role is eligible for a hybrid schedule of 3 days per week on campus and as needed for in-person meetings.**Why Join Us:** The Department of Biomedical Informatics fosters a thriving community of researchers in the University of Colorado School of Medicine who are inventing and deploying advanced analytics and data or knowledge integration approaches. The goal of building this community is to make the Anschutz Medical Campus a leader in translating data into advances in research practice, health care delivery, and population health, and to scale these innovations to offer worldwide benefit. **Why work for the University?** We have AMAZING benefits and offer exceptional amounts of holiday, vacation, and sick leave! The University of Colorado offers an excellent benefits package including:

- Medical: Multiple plan options
- Dental: Multiple plan options
- Additional Insurance: Disability, Life, Vision
- Retirement 401(a) Plan: Employer contributes 10% of your gross pay
- Paid Time Off: Accruals over the year
- Vacation Days: 22/year (maximum accrual 352 hours)
- Sick Days: 15/year (unlimited maximum accrual)
- Holiday Days: 10/year
- Tuition Benefit: Employees have access to this benefit on all CU campuses
- ECO Pass: Reduced rate RTD Bus and light rail service

There are many additional perks & programs with the CU Advantage.**Qualifications: Minimum Qualifications:**

- Bachelor's degree in software development or a directly related field from an accredited institution.

- Three (3) years of software development, software or system engineering, bioinformatics, or directly related IT professional experience.
- Two (2) years of experience in data analysis using R with common analysis utilities (Tidyverse, dplyr, etc.).
- Two (2) years of experience with manipulating large datasets to transform, profile, sanitize, explore, analyze, and present information in a reproducible way.
- Two (2) years of experience with version control, preferably with Git
- Experience developing and deploying reusable and robust R packages, including familiarity with testing frameworks (testthat) and documentation generation (roxygen2).
- A combination of education and related technical/military/paraprofessional experience may be substituted for a bachelor's degree on a year for year basis. An advanced degree (Masters or Doctorate) may be substituted for experience on a year for year basis if the degree is in a field of study directly related to the work assignment.

Applicants must meet minimum qualifications at the time of hire. **Preferred Qualifications:**

- Master's degree in software development or a directly related field from an accredited institution.
- Documented open-source contributions.
- Two (2) years of experience with GitHub, including GitHub Actions experience.
- Two (2) years of experience visualizing complex data utilizing common libraries (ggplot, Plot.ly, etc.) or data analysis products (Tableau, Looker Studio) for figures and tables in manuscripts, reports, etc.
- Experience creating reusable and presentable Jupyter/Quarto Notebooks or R Markdown for data analysis and processing.
- Experience developing and maintaining R-Shiny (or equivalent) application.
- Experience submitting packages to CRAN or Bioconductor, including meeting their quality and compliance standards.

Conditions of Employment:

Applicants must be currently authorized to work in the U.S. We are unable to sponsor employment visas at this time.

Knowledge, Skills, and Abilities:

- Ability to communicate effectively, both in writing and orally.
- Ability to establish and maintain effective working relationships with employees at all levels throughout the institution as well as with geographically distributed collaborators.
- Ability to interact with people of varying technical levels to gather requirements and convey complex technical concepts.
- Ability to interact effectively and respectfully with a team of developers with complementary competencies.
- Any familiarity with machine learning, statistics, medicine, or biology is a plus.

- Strong analytical and quantitative skills, including the ability to understand, interpret, utilize, and present complex data.

How to Apply: For full consideration, please submit the following document(s):

1. A letter of interest describing relevant job experiences as they relate to listed job qualifications and interest in the position.
2. Curriculum vitae / Resume
3. Three to five professional references, including name, address, phone number (mobile number if appropriate), and email address.

Links to 1-3 source code repositories with open-source contributions, if applicable. Questions should be directed to: DBMI.HR, dbmi.hr@cuanschutz.edu**Screening of Applications Begins:** Screening begins on **February 1st, 2026**.**Anticipated Pay Range:** The starting salary range (or hiring range) for this position has been established as **$100,000 - $127,000**. The above salary range (or hiring range) represents the University's good faith and reasonable estimate of the range of possible compensation at the time of posting. This position may be eligible for overtime compensation, depending on the level. Your total compensation goes beyond the number on your paycheck. The University of Colorado provides generous leave, health plans and retirement contributions that add to your bottom line. Total Compensation Calculator**Equal Employment Opportunity Statement:** CU is an Equal Opportunity Employer and complies with all applicable federal, state, and local laws governing non-discrimination in employment. We are committed to creating a workplace where all individuals are treated with respect and dignity, and we encourage individuals from all backgrounds to apply, including protected veterans and individuals with disabilities.**ADA Statement:** The University will provide reasonable accommodations to applicants with disabilities throughout the employment application process. To request an accommodation pursuant to the Americans with Disabilities Act, please contact the Human Resources ADA Coordinator at hr.adacoordinator@cuanschutz.edu.**Background Check Statement:** The University of Colorado Anschutz Medical Campus is dedicated to ensuring a safe and secure environment for our faculty, staff, students, and visitors. To assist in achieving that goal, we conduct background investigations for all prospective employees.**Vaccination Statement:** CU Anschutz strongly encourages vaccination against the COVID-19 virus and other vaccine preventable diseases. If you work, visit, or volunteer in healthcare facilities or clinics operated by our affiliated hospital or clinical partners or by CU Anschutz, you will be required to comply with the vaccination and medical surveillance policies of the facilities or clinics where you work, visit, or volunteer, respectively. In addition, if you work in certain research areas or perform certain safety sensitive job duties, you must enroll in the occupational health medical surveillance program. Application Materials Required: Cover Letter, Resume/CV, List of References **Job Category**
: Information Technology **Primary Location**
: Hybrid Department: U0001 -- Anschutz Med Campus or Denver - 21925 - SOM-BIOMED

Informatics Gen Ops **Schedule**
: Full-time **Posting Date**
: Jan 16, 2026 **Unposting Date**
: Feb 2, 2026, 6:59:00 AM Posting Contact Name: DBMI.HR Posting Contact Email: dbmi.hr@cuanschutz.edu Position Number: 00820235 **To apply, visit https://cu.taleo.net/careersection/2/jobdetail.ftl?job=38720&lang=en** jeid-29d12d21bf30944c 9a6d0515378915c0