Senior Data Scientist

HEJ higheredjobs.com/search/details.cfm

Job Summary

Under the general direction of the Computational and Data Scientist Supervisor, the Senior Data Scientist supports strategically important initiatives within UC Davis Health's Health Analytics Core (HAC). This role focuses on applying advanced computational and analytical methods-including artificial intelligence, machine learning, deep learning, time-series modeling, and large language models-to develop, evaluate, and translate data-driven solutions into clinical, operational, and research environments. The Senior Data Scientist leads and contributes to a diverse portfolio of cutting-edge, collaborative data science projects. Responsibilities include delivering direct analytical and modeling support for HAC initiatives, providing consultative expertise for projects across UC Davis Health, and designing scalable, reusable data science infrastructure, methodologies, software, and tools. These reusable assets form the foundation for the systematic and sustainable application of data science across UC Davis Health. The Senior Data Scientist adapts and advances statistical, machine learning, and computational techniques to address complex, real-world healthcare challenges-often in settings where established analytical approaches do not yet exist. This role drives data-enabled, multidisciplinary initiatives and requires ongoing learning, innovation, and problem solving in close collaboration with clinicians, operational leaders, and researchers across UC Davis Health and the UC Davis campus. The Senior Data Scientist also partners closely with teams in UCDH Information Technology, including the Data Provisioning Core, Health Computing Core, and application development teams, to operationalize and deploy analytics solutions into production environments.

Apply By Date: January 23, 2026 at 11:59pm. Selection activities may start at any time.

Minimum Qualifications - For full consideration, applicants are encouraged to upload license and/or certification if required of the position

- Bachelor's degree in a data-analytic or equivalent discipline (e.g., Data Science, Statistics, Computer Science, Mathematics, Engineering, Information Science or a data-driven disciplinary field) and / or equivalent experience / training
- 3 years' experience in healthcare data science or comparable field
- Hands-on data science problem solving with real-world, complex data sets.
- Experience applying machine learning, predictive analytic, time series analysis, natural language process, and other advance analytic and statistical techniques to model complex systems.
- Verbal and written communication skills for research, technical, and lay audiences.

- Problem-solving and data manipulation skills including the ability to interpret complex healthcare data and aggregate, reorganize, and pivot data to find new and meaningful insights.
- Fluency in the Python programming language and competency using Python's standard machine learning libraries, and a willingness to learn (if necessary) other programming languages such as R and SQL.
- Competency with code management best practices including the use of common code management applications (e.g. - Github)
- Initiative to advance skills and knowledge as needed to fulfill assigned tasks and projects, including learning new methods and technologies.
- Ability to work both as part of a team and independently, including sharing code, documentation and conducting reproducible analyses.
- Familiarity with project management and process improvement principles, concepts, and methodologies.
- Strong skills in communication of analytic methods and results including data visualization (Tableau, Power BI, etc.).
- Ability to design and conduct rigorous experiments to ensure the safety, quality, fairness, and robustness of advanced analytics solutions being implemented in the organization.
- Ability to work within deadlines and manage competing priorities as well as remain flexible to meet the overall goals of the department.

Preferred Qualifications

- Masters or Ph.D. in a data-analytic discipline, or in a disciplinary field with significant data science background.
- Experience with software development, version control, unit testing, portability including best practices in software engineering/programming for reproducibility.
- Experience working in multi-disciplinary teams to solve data-driven, cross-cutting problems.
- Experience developing training and educational materials on data science topics, methods and/or technologies.
- Experience working with clinicians and/or health system operational leaders on data science initiatives.
- Fluency in additional programming languages including R, C, SQL.
- Familiarity with both relational and non-relational database management systems.
- Competency with advanced machine learning methodologies including deep learning, time series modeling methods and large language model.
- Knowledge of data-driven research, scholarly communication, and the technical and social aspects of the research data lifecycle.
- Knowledge of healthcare workflows, processes, and clinical terminology.

Key Responsibilities

- 60% - Project Support
- 15% - Infrastructure Development
- 15% - Communication & Coordination
- 10% - Training & Teaching

Department Overview

The Health Analytics Core (HAC) is one of three core teams within Enterprise Analytics and Data Services (EADS) and supports initiatives spanning all mission areas of UC Davis Health. HAC's work focuses on the development, evaluation, monitoring, and governance of advanced analytics and artificial intelligence models for use in clinical, operational, and research settings. HAC is organized into project-focused, cross-functional analytics teams that include lead investigators or project champions, analysts, project managers, data scientists, and biostatisticians. These teams may also collaborate with industry partners on enterprise-sanctioned initiatives. Through this team-based model, HAC delivers high-impact, end-to-end analytics solutions aligned with institutional priorities. In addition to providing project-specific core services, HAC works closely with the UC Davis Health Analytics Oversight Committee (AOC) to establish best practices, standards, and operating procedures. These efforts guide the safe, responsible, and effective development, deployment, and use of analytic models in both clinical care and clinical research across UC Davis Health.

Department Specific Job Scope

The Health Analytics Core (HAC) supports projects spanning all missions of the UC Davis Health, with a focus on AI model development, evaluations / analysis, monitoring and governance oversight.

POSITION INFORMATION

- **Salary or Pay Range: $9,283.33 - $19,150.00**
- **Salary Frequency: Monthly**
- **Salary Grade: 111**
- **UC Job Title: Cmptl & Data Sci Rsh Spec 4 RP**
- **UC Job Code: 005240**
- **Number of Positions: 1**
- **Appointment Type: Staff: Career**
- **Percentage of Time: 100**
- **Shift (Work Schedule): Monday - Friday**
- **Location: UCDHAS Building (HSP165)**
- **Union Representation: Yes**
- **Benefits Eligible: Yes**

- **Accepting applicants for hybrid or remote work**

Benefits

Outstanding benefits and perks are among the many rewards of working for the University of California. UC Davis offers a full range of benefits, resources and programs to help you bring your best self to work, as well as to help you and your family achieve your health, wellness, financial and career goals. Learn more about the benefits below and eligibility rules by visiting either our handy Benefits Summary for UC Davis Health Employees or Benefits Summary for UC Davis Employees and our Benefits Page. If you are represented by a union, benefits are negotiated between the University of California (UC) and your union and finalized in a contract. Read your bargaining unit's employment contract, stay abreast of current negotiations and learn about collective bargaining at UC: https://ucnet.universityofcalifornia.edu/labor/bargaining-units/index.html

- High quality and low-cost medical plans to choose from to fit your family's needs
- UC pays for Dental and Vision insurance premiums for you and your family
- Extensive leave benefits including Pregnancy and Parental Leave, Family & Medical Leave
- Paid Holidays annually as stipulated in the UC Davis Health Policies or Collective Bargaining Agreement
- Paid Time Off/Vacation/Sick Time as stipulated in the UC Davis Health Policies or Collective Bargaining Agreement
- Continuing Education (CE) allowance and Education Reimbursement Program as stipulated in the UC Davis Health Policies or Collective Bargaining Agreement
- Access to free professional development courses and learning opportunities for personal and professional growth
- WorkLife and Wellness programs and resources
- On-site Employee Assistance Program including access to free mental health services
- Supplemental insurance offered including additional life, short/long term disability, pet insurance and legal coverage
- Public Service Loan Forgiveness (PSFL) Qualified Employer & Student Loan Repayment Assistance Program for qualified roles
- Retirement benefit options for eligible roles including Pension and other Retirement Saving Plans. More information on our retirement benefits can be found here

Physical Demands

- Standing - Frequent 3 to 6 Hours
- Walking - Frequent 3 to 6 Hours
- Sitting - Frequent 3 to 6 Hours
- Lifting/Carrying 0-25 Lbs - Occasional Up to 3 Hours
- Pushing/Pulling 0-25 Lbs - Occasional Up to 3 Hours

- Bending/Stooping - Occasional Up to 3 Hours
- Squatting/Kneeling - Occasional Up to 3 Hours
- Keyboard use/repetitive motion - Occasional Up to 3 Hours

Mental Demands

- Sustained attention and concentration - Frequent 3 to 6 Hours
- Complex problem solving/reasoning - Frequent 3 to 6 Hours
- Ability to organize & prioritize - Frequent 3 to 6 Hours
- Communication skills - Frequent 3 to 6 Hours
- Numerical skills - Occasional Up to 3 Hours
- Constant Interaction - Occasional Up to 3 Hours
- Customer/Patient Contact - Occasional Up to 3 Hours
- Multiple Concurrent Tasks - Frequent 3 to 6 Hours

Work Environment

UC Davis is a smoke and tobacco free campus effective January 1, 2014. Smoking, the use of smokeless tobacco products, and the use of unregulated nicotine products (e-cigarettes) will be strictly prohibited on any UC Davis owned or leased property, indoors and outdoors, including parking lots and residential space. **Special Requirements - Please contact your recruiter with questions regarding which activities apply by position**

- This is a critical position, as defined by UC Policy and local procedures, and as such, employment is contingent upon clearing a criminal background check(s) and may include drug screening, medical evaluation clearance and functional capacity assessment
- This position is designated as a mandated reporter under CANRA and UC policy, and employment is contingent on compliance with applicable policies, procedures and training requirements

Misconduct Disclosure Requirement: As a condition of employment, the final candidate who accepts a conditional offer of employment will be required to disclose if they have been subject to any final administrative or judicial decisions within the last seven years determining that they committed any misconduct; received notice of any allegations or are currently the subject of any administrative or disciplinary proceedings involving misconduct; have left a position after receiving notice of allegations or while under investigation in an administrative or disciplinary proceeding involving misconduct; or have filed an appeal of a finding of misconduct with a previous employer.

A Culture of Opportunity and Belonging

At UC Davis, we're committed to solving life's most urgent challenges and building a healthier, more resilient world. We believe in growing through every challenge, continually striving to improve, and welcoming new perspectives that strengthen our community. We recognize that a vibrant and innovative organization values both individual strengths and shared purpose. The best ideas often emerge when people with different experiences come together. As you consider joining UC Davis, we invite you to explore our Principles of Community, our Clinical Strategic Plan and strategic vision for research and education. We believe you belong here. The University of California, Davis is an Equal Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age or protected veteran status. To view the University of California's Anti-Discrimination Policy, please visit: https://policy.ucop.edu/doc/1001004/Anti-Discrimination Because we want you to feel seen and valued, our recruitment process at UC Davis supports openness and authenticity. Research shows that some individuals hesitate to apply unless they meet every qualification. You may be an excellent fit for this role-or the next one. We encourage you to apply even if your experience doesn't match every listed requirement. #YouBelongHere To learn more about our background check program, please visit: https://hr.ucdavis.edu/departments/recruitment/ucd/selection/background-checks