



CALL FOR POSTDOCTORAL SCHOLAR IN DATA SCIENCE

Description

The Data Science Initiative (DSI) at the University of California, Davis is excited to invite applications for a postdoctoral scholar starting in Spring/Summer 2018. This postdoc will work at the interface of Data Science and disciplinary problems, developing novel solutions, software and methods to address emerging challenges. The scholar will work both independently and with the research team at the DSI to make progress on a portfolio of interdisciplinary projects.

We seek applicants with a keen interest and experience in multi-disciplinary collaborations with various fields. The position requires scholarly independence, the ability to manage scientific projects and integrate into a larger team and community. This is an excellent opportunity for individuals who want to gain experience in a broad array of authentic data science projects, and who are keen to learn new technologies/methods and apply them in novel ways to solve real problems. We consider Data Science as a broad field spanning the entire research data pipeline and encompassing a range of skills and knowledge. As such, we encourage applicants with a proven track record as good problem-solvers from any data-engaged field to apply, regardless of their disciplinary research training.

The DSI was founded to promote and support research and training in data-driven discovery across all colleges, schools and disciplines at UC Davis. The DSI coordinates data-science training activities, provides consulting and collaborative services for research projects, and conducts novel research in data science. Research and training activities at the DSI span the entire data pipeline, from data acquisition, management, cleaning, transformation, visualization, and modeling to dissemination/publication and high-performance computing, and involve aspects of data governance, security, privacy and ethics. The DSI is committed to fostering an inclusive environment to promote all members of the university community, including faculty, students and staff from a variety of domains, backgrounds, cultures and personal experiences. For more information, see <https://www.ucdavis.edu/> and <http://dsi.ucdavis.edu>.

Qualification Requirements

Applicants for the position should have earned a PhD prior to the position start date and have both interest and experience in Data Science with a background in either:

- a field related to Data Science (i.e., Computer Science, Statistics, Machine Learning, Information Science, etc.) with a proven ability to apply methods and technologies to solve cutting-edge problems in different domains, or
- an applied domain with a thesis that contains a significant Data Science component and demonstrable proficiencies in statistics, data technologies, and/or computational data science.

All applicants are expected to have experience applying modern statistical methods, proficiency in a high-level programming language (e.g., R or Python), and evidence of hands on data analysis skills. The ideal candidate will have demonstrated strong project leadership and management, interpersonal communication and decision-making skills, and abilities to work well independently and as part of a team, and also have experience with different forms of data (e.g., text, image, video). Motivation and demonstrated capacity to pursue complex problems and work successfully within a collaborative setting are also essential. Preferred candidates will also have some/any of the following skills: use of SQL and NoSQL databases; high-performance computing; web/JavaScript-based data visualization tools; natural language processing; machine learning methods and applications.



Major Responsibilities

The postdoctoral scholar is expected to:

1. Collaborate with DSI partners to work on cross-disciplinary research projects.
2. Conduct research in Data Science methods and technologies.
3. Train students, faculty and staff, possibly including designing and leading workshops and/or courses, supervising interns, etc.
4. Help foster the Data Science community via participating in our DSI Affiliates program and events.

Training and opportunities for the postdoctoral scholar include:

- Dedicated research mentoring.
- Research funding to support approved travel and dissemination of research conducted at the DSI.
- Access to the computing resources at UC Davis and the DSI, including compute servers and clusters as well as Amazon Web Services resources.
- Access to opportunities for specialized training sponsored by the DSI and other scientific computing groups at the University.
- Teaching opportunities in workshops for relevant areas of speciality and possible teaching of undergraduate or graduate data science courses.
- Opportunity to mentor graduate and undergraduate students on projects that will expose the scholar to practical data science problems across domains.

The postdoctoral fellow will report to the Faculty Director of the Data Science Initiative, and will assist the Academic Coordinator and Associate Directors of the Initiative.

This is not a tenure-track position and is for one year, with the possibility of extension. Salary will be commensurate with experience and university policy. Given the sensitive nature of the data involved in the research, this position is subject to background check. Employment is contingent upon successful completion of a background investigation including criminal history and identity check. The successful applicant must be eligible to work in the USA. UC Davis is an affirmative action/equal employment opportunity employer and is dedicated to recruiting a diverse community. We welcome all qualified applicants to apply, including women, minorities, veterans and individuals with disabilities.

How to Apply

Documents: To apply please submit the following items as one pdf document:

- **Curriculum Vitae**, including listing of pertinent coursework and relevant Github repository.
- **Cover Letter**, including your desired start date.
- **Statement of Research Background and Demonstrated Competency in Data Science**.
- Optional:
 - **Brief Example Research Plan**, including research interests that align with ongoing projects at the DSI (see <http://dsi.ucdavis.edu>) and learning strategy for skills that need development.
 - **Transcripts** from graduate and undergraduate institutions (strongly encouraged).

References:

- **3 letters of academic recommendation** emailed directly from the letter writer.

Send all questions and materials to datascience@ucdavis.edu with the subject line **"DSI Postdoc Application."** Applications will be reviewed as they are received. Start dates are expected between April and September 2018. The position is open until filled. Questions? Contact datascience@ucdavis.edu or plreynolds@ucdavis.edu.