Assistant/Associate/Full Professors - Scientific Software and AI for the Chemical Sciences - UC Berkeley

Position overview

**Position titles:**

- Assistant Professor
- Associate Professor or Full Professor

**Salary range:** The posted UC academic salary scales set the minimum pay determined by rank and step at appointment. See the following table(s) for the current salary scale(s) for this position: [https://www.ucop.edu/academic-personnel-programs/_files/2023-24/oct-2023-acad-salary-scales/t1.pdf](https://www.ucop.edu/academic-personnel-programs/_files/2023-24/oct-2023-acad-salary-scales/t1.pdf); [https://www.ucop.edu/academic-personnel-programs/_files/2023-24/oct-2023-acad-salary-scales/t3.pdf](https://www.ucop.edu/academic-personnel-programs/_files/2023-24/oct-2023-acad-salary-scales/t3.pdf). The current base salary ranges, from the salary tables for this position, are $74,600 - $197,100 and $99,100 - $215,800. "Off-scale salaries" and other components of pay, which would yield compensation that is higher than the published system-wide salary at the designated rank and step, are offered when necessary to meet competitive conditions.

**Anticipated start:** July 1, 2024

**Review timeline:** October 31, 2023

**Application Window**

**Open date:** September 11, 2023

**Next review date:** Tuesday, Oct 31, 2023 at 11:59pm (Pacific Time)

Apply by this date to ensure full consideration by the committee.

**Final date:** Tuesday, Oct 31, 2023 at 11:59pm (Pacific Time)

Applications will continue to be accepted until this date, but those received after the review date will only be considered if the position has not yet been filled.

**Position description**

The University of California, Berkeley seeks applicants for two faculty positions at the Assistant Professor, Associate Professor, or Full Professor rank, whose research is at the interface of the computational, statistical, chemical, and physical sciences, including the development and deployment of new materials using artificial intelligence (AI) and machine learning (ML) methodology. The two positions to be filled are:

- Machine learning applied to chemical sciences, joint between the Department of Chemistry and either the Department of Electrical Engineering and Computer Sciences (EECS) or the Department of Statistics;
- Scientific software infrastructure, in the Department of Statistics.
Successful candidates for the first position on “machine learning applied to chemical sciences” will seek to advance the development and application of techniques in artificial intelligence/machine learning in chemistry, materials science, and chemical biology. We will consider creative and energetic candidates who show promise and/or accomplishment in research, teaching, and mentoring. The Departments of Chemistry, EECS, and Statistics each offer a PhD program, academic and professional master's programs, and undergraduate majors. In particular, the Data Science major provides opportunities to develop domain emphasis courses related to machine learning in chemistry. The person offered this position would have the opportunity to engage in teaching, course development, and mentoring for each of these programs. They would have the opportunity to interact and collaborate with a diverse group of colleagues in the Departments of Chemistry, EECS, and Statistics, as well as in the Departments of Physics and Materials Science and Engineering, a possible future interdisciplinary department in the College of Computing, Data Science, and Society (CDSS), and the Bakar Institute of Digital Materials for the Planet (BIDMaP). Berkeley also offers opportunities to interact and collaborate with researchers in other departments and with scientists at the nearby Lawrence Berkeley National Laboratory.

Successful candidates for the second position on “scientific software infrastructure” will seek to advance the reliable and efficient development and application of artificial intelligence/machine learning methods through the development of scalable, extensible, and interoperable software, including platforms that support computational reproducibility and open science. Scientific domain questions of interest include the data-driven discovery of new materials to address climate change based on AI/ML and high-dimensional sparse statistics. We will consider creative and energetic candidates who show promise and/or accomplishment in research, teaching, and mentoring. The Department of Statistics offers a PhD program, a professional master's program, and undergraduate majors in Statistics and in Data Science (the latter jointly with EECS). In particular, the Statistics and Data Science majors provide opportunities to develop domain emphasis courses related to scientific computing and machine learning in chemistry, physics, and materials science. The person offered this position would have the opportunity to engage in teaching, course development, and mentoring for each of these programs. They would join a diverse group of colleagues in the Departments of Statistics and EECS, with world-renowned expertise in both AI/ML and open-source scientific computing, and a sustained tradition of collaboration in data science with disciplines spanning the natural and social sciences. They would have the opportunity to interact and collaborate with colleagues in the Departments of Chemistry, Materials Science and Engineering, and Physics, among others, as well as a possible future interdisciplinary department in CDSS, BIDMaP, and the nearby Lawrence Berkeley National Laboratory.

These two positions are associated with the Bakar Institute of Digital Materials for the Planet, a new institute located in CDSS. The broad goal of BIDMaP is to leverage artificial intelligence/machine learning to develop cost-efficient, easily deployable new materials that help limit and address the impact of climate change. Its faculty are drawn
from a broad range of departments, including Chemistry, Materials Science, and Physics, as well as Statistics and EECS, and form an active community with an ambitious research agenda, an intellectual exchange through seminar and distinguished visiting scholar programs, and a postdoc fellowship program. It is possible that, as CDSS evolves, a new interdisciplinary department that might house computational physical science may be established; were that to transpire, then BIDMaP would likely be a core component of such a department. The EECS or Statistics half of the first position and half of the second position may transfer to this new unit, if and when established.

The Departments of Chemistry, EECS, and Statistics and UC Berkeley use inclusive hiring practices. We encourage potential candidates to see their career accomplishments holistically, as we do, and to make the decision to apply even if they do not see their experience as conforming strictly to each of the preferred qualifications in this job description. We value inclusion and welcome collaboration. Any candidate who is excited about research related to AI/ML and scientific software infrastructure in the natural sciences and teaching/mentoring at UC Berkeley belongs on our list for consideration of our open position.

All departments on the Berkeley campus value diversity, equity, and inclusion as exemplified by the following principles of community:

• We recognize the intrinsic relationship between diversity and excellence in all our endeavors.
• We embrace open and equitable access to opportunities for learning and development as our obligation and goal. Our excellence can only be fully realized by faculty, students, and staff who share a commitment to these principles.

Successful candidates for our faculty positions will demonstrate evidence of a commitment to equity and inclusion in higher education through their teaching, research, and service activities.

The Departments of Chemistry, EECS, and Statistics are committed to addressing the family needs of faculty, including dual-career couples and single parents. We are also interested in candidates who have had non-traditional career paths or who have taken time off for family reasons, or who have achieved excellence in careers outside academia. For information about potential relocation to Berkeley, or career needs of accompanying partners and spouses, please visit http://ofew.berkeley.edu/newfaculty.

College of Computing, Data Science, and Society: https://data.berkeley.edu

College of Chemistry: https://chemistry.berkeley.edu/home

Bakar Institute of Digital Materials for the Planet: https://bidmap.berkeley.edu/

Electrical Engineering and Computer Sciences: https://eecs.berkeley.edu/
Qualifications

Basic qualifications (required at time of application)
Completion of a doctoral degree (e.g., PhD), or equivalent international degree, or enrolled in a doctoral degree or equivalent international degree-granting program at the time of application.

Application Requirements by Level

Assistant Professor

Position title: Assistant Professor

Individuals should submit their application at this level if they meet one of the following conditions: Current or recent PhD candidate or graduate; current or recent postdoc; current assistant professor (including those who are “senior” assistant professors near tenure); position equivalent to assistant professor (ie., at an international university). Please note that his level determination is only for application review purposes, not the ultimate appointment level of the finalist.

Document requirements

• Curriculum Vitae - Your most recently updated C.V. with publication list
• Cover Letter
• Statement of Research
• Statement of Teaching
• Statement on Contributions to Advancing Diversity, Equity, and Inclusion - Statement on your contributions to diversity, equity, and inclusion, including information about your understanding of these topics, your record of activities to date, and your specific plans and goals for advancing equity and inclusion if hired at Berkeley. /shortcuts/ofew_contributions_diversity.
• Publication 1
• Publication 2
• Publication 3
**Reference requirements**

• 3-5 letters of reference required

Applicants at the Assistant Professor level must provide three to five letters of recommendation that speak to their record and/or potential for excellence in research, teaching, mentoring, service, and contributions to diversity and inclusion. It is preferred that all letters of recommendation be uploaded by referees by the final application date (October 31, 2023).

**Apply link:** [https://apptrkr.com/4590654](https://apptrkr.com/4590654)

**Associate or Full Professor**

**Position title:** Associate Professor or Full Professor

Individuals should submit their applications at this level if they meet one of the following conditions: Current tenured professor, a position equivalent to tenured professor (i.e., at an international university). Please note that his level determination is only for application review purposes, not the ultimate appointment level of the finalist.

**Document requirements**

• Curriculum Vitae - Your most recently updated C.V. with publication list

• Cover Letter

• Statement of Research (Optional)

• Statement of Teaching (Optional)

• Statement on Contributions to Advancing Diversity, Equity, and Inclusion - Statement on your contributions to diversity, equity, and inclusion, including information about your understanding of these topics, your record of activities to date, and your specific plans and goals for advancing equity and inclusion if hired at Berkeley. [shortcuts/ofew_contributions_diversity](https://shortcuts/ofew_contributions_diversity)

• Publication 1 (Optional)

• Publication 2 (Optional)

• Publication 3 (Optional)

**Reference requirements**

• 3-5 required (contact information only)
Applicants at the Associate and Full Professor level must include names of three to five persons who may be contacted confidentially on behalf of the applicant. We will seek your permission before reaching out to letter writers. We will only request letters of reference for finalists. Three letters of reference will be required.

Apply link: https://aptrkr.com/4590654

Help contact: iquintanilla@berkeley.edu

Campus Information

UC Berkeley is committed to diversity, equity, inclusion, and belonging. The excellence of the institution requires an environment in which the diverse community of faculty, students, and staff are welcome and included. Successful candidates will demonstrate knowledge and skill related to ensuring equity and inclusion in the activities of their academic position (e.g., teaching, research, and service, as applicable).

The University of California, Berkeley is an Equal Opportunity/Affirmative Action 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. For the complete University of California nondiscrimination and affirmative action policy see: http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct

In searches when letters of reference are required all letters will be treated as confidential per University of California policy and California state law. Please refer potential referees, including when letters are provided via a third party (i.e., dossier service or career center), to the http://apo.berkeley.edu/ucb-confidentiality-policy prior to submitting their letter.

As a University employee, you will be required to comply with all applicable University policies and/or collective bargaining agreements, as may be amended from time to time. Federal, state, or local government directives may impose additional requirements.

Job location
Berkeley, CA

To apply, visit https://aptrkr.com/4590654