

University of California, Berkeley
Department of Mechanical Engineering
Seeks Applications for a Tenure-Track Faculty Position
in *Data-Driven Engineering Design*

POSITION OVERVIEW

Anticipated start: July 1, 2023 or on a mutually agreed date thereafter.

APPLICATION WINDOW

Open September 29, 2022 through Monday, Dec 12, 2022 at 11:59pm (Pacific Time)

POSITION DESCRIPTION

The DEPARTMENT OF MECHANICAL ENGINEERING, University of California, Berkeley, seeks candidates for a tenure-track faculty position at the Assistant Professor level in the area of **Data Driven Mechanical Engineering Design**. The Department seeks candidates with expertise in advancing design tools and methods for products and engineering systems utilizing novel computational, simulation-based, data science, and/or machine learning techniques.

The themes of interest should be interpreted broadly. Representative topics include but are not limited to: data science, deep learning, and/or modern computational techniques applied to optimal design and manufacturing; mixed data-driven and formal methods for design of complex and mission-critical systems from medical devices to aerospace; data-driven design ideation and human-centered design; and human-AI/machine interaction during the design process. Applicants are encouraged to articulate which stages of the engineering design process their research addresses (e.g. from ideation to realization), the relevant mechanical engineering application areas (e.g. from nanoscale devices to aerospace systems), and the computational methods utilized.

The Department is committed to fostering interdisciplinary research to address societal grand challenges such as: aerospace engineering; autonomous and intelligent mechanical systems; engineering for human health; and sustainable energy, water, and mobility. Candidates are encouraged to highlight the connections between their research and these grand challenges. Aerospace Engineering is a new growth area in the College of Engineering and candidates whose research and design expertise relates to aerospace systems are encouraged to apply.

Berkeley is a fertile environment for engineering design research, practice, and teaching. Design faculty collaborate with faculty in departments across campus and leverage campus resources, including the Jacobs Institute for Design Innovation, the Division of Computing, Data Science, and Society, the CITRIS Research Center for IT solutions, and the Blum Center for Developing Economies.

In addition to developing a vibrant, cutting-edge research program, the successful candidate will be expected to teach and develop undergraduate- and graduate-level courses in design and/or data science or related areas. Relevant courses include the Department's introductory, product, and capstone design classes, as well as courses emphasizing contemporary data science and/or machine learning techniques.

The Department of Mechanical Engineering and 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 position will demonstrate evidence of a commitment to advancing diversity, equity, and inclusion at UC Berkeley.

The Department is 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 more information about potential relocation to Berkeley, or career needs of accompanying partners and spouses, please visit <http://ofew.berkeley.edu/newfaculty>.

For more information about the Department: <https://www.me.berkeley.edu/>

QUALIFICATIONS

Basic qualifications (required at time of application)

Applicants must have a Ph.D. (or equivalent international degree), or be enrolled in a Ph.D. or equivalent international degree granting program at the time of application.

APPLICATION REQUIREMENTS

Document requirements

- Cover Letter
- Curriculum Vitae - Your most recently updated CV
- Statement of Research
- Statement of Teaching
- 3 Publications
- Statement on Contributions to Advancing Diversity, Equity, and Inclusion - A statement on your contributions to diversity, equity, inclusion, and belonging 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 as a Berkeley faculty member will be required as part of the application package. Please note that this statement may be evaluated as a standalone document. Financial and in-kind resources are available to pursue activities that help accelerate our efforts to achieve our equity and inclusion goals, with the full backing of the College. Guidelines to applicants on writing effective statements that demonstrate commitment to diversity, equity, inclusion, and belonging can be found at <https://ofew.berkeley.edu/recruitment/contributions-diversity/support-faculty-candidates> and examples of related ongoing programming in the College are available at <https://engineering.berkeley.edu/diversity>.

Reference requirements

- **3 required (contact information only)** Professional References: Please provide names and contact information for three professional references. We will only contact your references to request letters if you are advanced to the second round of review for the position, and we will seek your permission prior to doing so.

Application link: <https://aprecruit.berkeley.edu/JPF03635>

Help contact: veneros_d@berkeley.edu

CAMPUS INFORMATION

Diversity, equity, inclusion, and belonging are core values at UC Berkeley. Our excellence can only be fully realized by faculty, students, and academic and nonacademic staff who share our commitment to these values. Successful candidates for our academic positions will demonstrate evidence of a commitment to advancing equity, inclusion, and belonging.

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 UC Berkeley statement of confidentiality (<http://apo.berkeley.edu/ucb-confidentiality-policy>) prior to submitting their letter.

As a condition of employment, you will be required to comply with the University of California SARS-CoV-2 (COVID-19) Vaccination Program Policy. All Covered Individuals under the policy must provide proof of Full Vaccination or, if applicable, submit a request for Exception (based on Medical Exemption, Disability, and/or Religious Objection) or Deferral (based on pregnancy) no later than the applicable deadline. Please refer to Appendix F, Section II.C. of the policy for the deadlines applicable to new University of California employees. (Capitalized terms in this paragraph are defined in the policy.) Federal, state, or local public health directives may impose additional requirements.

Positions that are represented by a collective bargaining unit or agent have particular contracts. For more information, please refer to the relevant contract: Lecturer contract, Postdoctoral contract, Research Series contract, and Librarian contract. Questions about represented positions can be directed to the hiring unit.

Job Location: Berkeley, CA