



## Assistant Professor

### INTRODUCTION

The Department of Statistics at the University of Connecticut (UConn) invites applications for two tenure-track positions at the level of Assistant Professor. To strengthen the areas of focus identified in the 2022-2025 Strategic Plan (<https://clas.uconn.edu/strategic-plan/>) of the College of Liberal Arts and Sciences at UConn, we seek candidates in emerging areas of statistics and data science with strengths in either or both of the following directions.

1. Causal inference and causal statistical learning. With the rise of big data, this field is undergoing exciting development, and many advanced probabilistic/statistical methods are being developed to bridge the gap between correlation/association studies and causal reasoning. The study of causality from large-scale observational data has enormous potential to advance knowledge in many scientific fields.
2. Environmental data science. The future of the planet depends on interdisciplinary efforts. Effective and feasible policies and actions rely critically on controlled experiments and rigorous, data-driven analysis. The vast amounts of potentially relevant environmental data, as well as the complexity of models used, demand the specialized expertise of environmental data scientists.

The Department of Statistics at UConn (<https://stat.uconn.edu>) is a highly active center of research, education, and service with regional, national, and international prestige. It is a founding member of the New England Statistical Society, for which it houses the administration. In recent years, the Department has continued to grow and blossom in all aspects. As of Fall 2022, we have 22 full-time faculty members.

Founded in 1881, UConn is a Land Grant and Sea Grant institution and member of the Space Grant Consortium. It is the state's flagship institution of higher education and includes a main campus in Storrs, CT, four regional campuses throughout the state, and 13 Schools and Colleges, including a Law School in Hartford, and Medical and Dental Schools at the UConn Health campus in Farmington. The University has approximately 10,000 faculty and staff and 32,000 students, including nearly 24,000 undergraduates and over 8,000 graduate and professional students. UConn is a Carnegie Foundation R1 (highest research activity) institution, among the top 25 public universities in the nation. Through research, teaching, service, and outreach, UConn embraces diversity and cultivates leadership, integrity, and engaged citizenship in its students, faculty, staff, and alumni. UConn promotes the health and well-being of citizens by enhancing the social, economic, cultural, and natural environments of the state and beyond. The University serves as a beacon of academic and research excellence as well as a center for innovation and social service to communities. UConn is a leader in many scholarly, research, and innovation areas. Today, the path forward includes exciting opportunities and notable challenges.

Record numbers of undergraduate applications and support for student success have enabled the University to become extraordinarily selective.

### **MINIMUM QUALIFICATIONS**

- A Ph.D. in statistics or a closely related quantitative discipline.
- Demonstrated research potential in statistics, with a focus on causal inference or environmental data science.
- Ability to teach core statistics courses at both undergraduate and graduate levels.
- Ability to excel in research, teaching, and public engagement, with a commitment to promoting diversity and inclusion through research, teaching, and/or service.
- Strong interpersonal and communication skills.

### **PREFERRED QUALIFICATIONS**

- Postdoctoral academic, government, or industrial experience in statistics or a closely related quantitative discipline.
- Experience and leadership potential in tackling challenging statistical problems related to complex observational data.
- Experience with state-of-the-art computational and visualization methods.
- Strong potential for securing external funding.
- Research/teaching interests in interdisciplinary data analytics and/or emerging areas of probability/statistics.
- For the causal inference and causal statistical learning emphasis, theoretical background in probability and advanced statistical inference, as well as experience in applying causal inference methods to complex real-world data or developing novel causal inference methods.
- For the environmental data science emphasis, collaborative experience with environmental scientists and engineers, as well as strong theoretical background in stochastic processes and in modeling of dependent data.

### **APPOINTMENT TERMS**

These are full-time, 9-month, tenure-track positions. These positions will involve conducting high-quality research, teaching undergraduate and graduate level courses, advising students, contributing to the development of data science, and securing external funding. Salary will be competitive and commensurate with qualifications and experience. The successful candidate's academic appointment will be at the Storrs campus. Faculty may also be asked to teach at one of UConn's regional campuses as part of their ordinary workload.

### **TERMS AND CONDITIONS OF EMPLOYMENT**

Employment of the successful candidate is contingent upon the successful completion of a pre-employment criminal background check.

## TO APPLY

Please apply online to Academic Jobs Online <https://academicjobsonline.org/ajo/jobs/22876> and submit the following application materials:

- **A cover letter,**
- **Curriculum vitae,**
- **Research and scholarship statement** (innovative concepts that will form the basis of academic career, experience in proposal development, mentorship of graduate students, etc.);
- **Teaching statement** (including teaching philosophy, teaching experience, commitment to effective learning, concepts for new course development, etc.);
- **Commitment to diversity statement** (including broadening participation, integrating multicultural experiences in instruction and research and pedagogical techniques to meet the needs of diverse learning styles, etc.);
- **Transcript,**
- **Three (3) letters of reference.**

In the cover letter, the candidate should clearly state their emphasis as “causal inference and causal statistical learning”, “environmental data science” or both.

Inquiries can be addressed to the Search Committee at [kun.chen@uconn.edu](mailto:kun.chen@uconn.edu). Review of applications will begin immediately. Full consideration will be given to applications completed and received before December 1, 2022.

At the University of Connecticut, our commitment to excellence is complemented by our commitment to building a culturally diverse community.

These positions will be filled subject to budgetary approval.

All employees are subject to adherence to the State Code of Ethics which may be found at <http://www.ct.gov/ethics/site/default.asp>.

*The University of Connecticut is committed to building and supporting a multicultural and diverse community of students, faculty and staff. The diversity of students, faculty and staff continues to increase, as does the number of honors students, valedictorians and salutatorians who consistently make UConn their top choice. More than 100 research centers and institutes serve the University's teaching, research, diversity, and outreach missions, leading to UConn's ranking as one of the nation's top research universities. UConn's faculty and staff are the critical link to fostering and expanding our vibrant, multicultural and diverse University community. As an Affirmative Action/Equal Employment Opportunity employer, UConn encourages applications from women, veterans, people with disabilities and members of traditionally underrepresented populations.*