

Data scientist wanted for developing a platform for molecular ecology research

The Department of Ecology and Evolutionary Biology at the University of California, Santa Cruz (UCSC), in collaboration with Cyverse, invites applications for the UC Santa Cruz: API Cyberinfrastructure data scientists for ecoDASH under the mentorship of Dr. Rachel Meyer and the CyVerse team. The data scientist will work with teams at both UCSC and Cyverse to build web tools connecting analytical software and data hosting platforms, to perform ecological and biodiversity research. In addition to back end software development, they will participate in scientific research projects with the ecoDASH team. This scientific team includes Dr. Tyson Swetnam (CyVerse), Dr. Beth Shapiro and the UCSC Paleogenomics Laboratory, Drs. Rasmus Nielsen and Lenore Pipes (UC Berkeley), and Dr. Ariel Levi Simons (UCSC), along with others.



ecoDASH will help people in conservation and ecology manage environmental DNA and other ecological data, analyze their data, learn what others are doing, and build a collaborative network. The cyberinfrastructure data scientists will work with software developers, User eXperience team, a web development team, and molecular ecology scientists to build ecoDASH. ecoDASH will integrate different datasets together and present them in appealing interactive ways to help people learn, design studies, and evaluate results. We will focus the tool functionality first to explore the Los Angeles River watershed, but eventually will broaden functionality to be free of geographic restrictions. We seek to hire a data scientist who is interested in building these interactive systems and integrating many kinds of biotic and abiotic data to ask conservation, evolution and ecology questions. They will work with the team as the back-end software developer and data scientist.

ACADEMIC TITLE

Data scientist

SALARY

Commensurate with qualifications and experience \$55,000-65,000 annually. This is a one-year position, although there may be a possibility of renewal.

LOCATION

Our project teams are primarily located in Santa Cruz, CA or Tuscon, AZ. Remote work is an option, although in-person travel a few times a year will be encouraged.

BASIC QUALIFICATIONS

- Bachelor's degree in a computational science, or related area, and four years experience.
- Master's degree in a computational science, or related area, and two years experience.

- Ph.D. in a computational science, or related area.

DUTIES AND RESPONSIBILITIES

- Research, identify, and test scientific applications and software for the ecoDASH project; develop software and systems that extend and integrate within CyVerse's cyberinfrastructure.
- Regularly meet with collaborators at UCSC and CyVerse to help update collaborators on project developments.
- Use and follow best practices with containers, computational notebooks, reproducible coding, big datasets, edge computing, and distributed computing.
- Perform related duties as assigned by the project management.
- Additional duties may be assigned.

KNOWLEDGE, SKILLS, AND ABILITIES

- Programming familiarity with at least one of the following languages: Python, R, Perl, C, C++, Linux shell, Java, JavaScript or DBMS.
- Familiarity using git, and an active Git(Hub|Lab) account.
- Demonstrable oral presentation and communication skills.
- Ability to communicate easily with scientists and educators from various disciplines.
- Excellent interpersonal skills and ability to build consensus.
- Very strong organizational skills.
- Ability to work independently under established deadlines and in a collaborative team.
- Ability to travel as required to collaborator institutions, relevant conferences, etc.

POSITION AVAILABLE

As soon as possible after initial review of the applications. Final degree must be in hand at the time of the initial appointment.

APPLICATION REQUIREMENTS

All documents and materials must be submitted as PDFs and should be forwarded to Rachel Meyer, [rameyer \[at\]ucsc.edu](mailto:rameyer@ucsc.edu).

DOCUMENTS/MATERIALS

- Letter of application that briefly summarizes your qualifications and interest in the position (required)
- Curriculum vitae (required)
- Contact information for two references (required)

RECRUITMENT PERIOD

Full consideration will be given to applications completed by April 21, 2022. Applications received after this date will be considered only if the position has not been filled.