Software Engineering Internship

Benioff Ocean Science Laboratory

University of California, Santa Barbara

2024

The Benioff Ocean Science Laboratory is seeking UCSB students with interest in software engineering, marine science, and artificial intelligence

About the Organization
Based at the Marine Science Institute at UCSB, the [Benioff Ocean Science Laboratory](#) applies marine science and technology to create scalable solutions to pressing ocean health challenges. The research group both manages and financially supports projects that address a variety of marine issues, including species protection, ocean pollution, and sustainable management of marine resources.

About the Team
The Engineering team at Benioff Ocean Science Laboratory works cross-functionally with scientist-led ocean projects. We support each project in the areas of data management, computer vision, infrastructure, and web tools. We do full-stack development and have flexible development cycles prioritizing needs based on the research mission and project. Some examples of the work include a computer vision pipeline to capture data of plastic and debris, API design and development to provide data that will help industry avoid ship strikes on whales, and database management for ship traffic, whale detections, drone videos of sharks, and imagery from the Baltimore Trash Wheel.

Internship Description
The intern will work with Benioff Oceans engineers and scientists to build software tools that will support the various projects and our technology infrastructure. This internship will have full-stack engineering work consisting of API development, data infrastructure buildout, and front-end user interface implementation. This internship will provide valuable experience to students actively pursuing graduate school or a career in computer science, marine science, and/or technology.

Responsibilities
➢ Develop and deploy back-end code, and build infrastructure on Google Cloud Platform.
➢ Create or modify front-end code for various applications.
➢ Participate in code reviews, write and maintain clean code, maintain documentation, and help develop our team's engineering protocols.
➢ Communicate with and collaborate with other team members, including project scientists.

Basic qualifications
➢ Currently pursuing an undergraduate or graduate degree at UCSB
➢ Programming ability in at least one programming language
➢ Curiosity, eagerness to learn, and problem solving skills

Additional preferred qualifications
➢ Proactive, attention to detail, ability to work independently and self-motivated
➢ Familiarity with Google Cloud and development in cloud infrastructure
➢ Python, SQL, JavaScript, React, Machine Learning, and Computer Vision

This is a part-time internship (approximately 10-15 hr/wk) for the Fall 2024 quarter (flexible start/end dates), with the potential to extend into the Winter & Spring 2025 quarters based on performance and project needs. Undergraduate student compensation is $22/hr and graduate student compensation is $24/hr.

The Benioff Ocean Science Laboratory is committed to promoting diversity, equity, inclusion, and justice (DEIJ) in our field of marine science. We proactively strive to bring the voices, intellect, and talents of people of all colors, backgrounds, and identities into our work to further science and conservation, and we commit to taking concrete actions to achieve our vision of a more diverse and inclusive organization. We strongly encourage candidates from marginalized or underrepresented groups to apply.

We encourage all applicants to submit an optional Statement of Contributions to Diversity with their application materials. Please describe and give specific examples of how you have worked to enhance or develop your awareness on issues of diversity and inclusion in the workplace or other professional or academic environments.

To apply, please send a cover letter, resume, and the optional Statement of Contributions to Diversity to bosl-contact@ucsb.edu with the subject line "Engineering Internship" by 11:59 PM PDT on September 1, 2024.

The University is especially interested in candidates who can contribute to the diversity and excellence of the academic community through research, teaching and service.

The University of California is an Equal Opportunity/Affirmative Action Employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law.