Paid Internship: Student Research Intern

Schatz Energy Research Center

Applications due by Monday, September 8, 2025, at 8 am (Pacific)

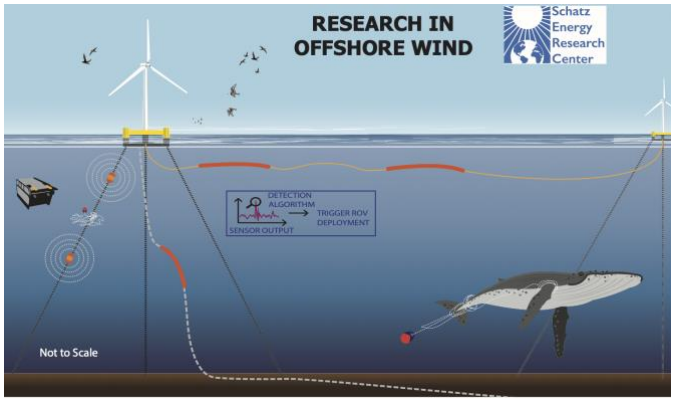
The Schatz Energy Research Center has an opening for an undergraduate student research intern to join our offshore wind team on a project to develop entanglement mitigation strategies for offshore wind turbines. This paid internship position is expected to start in October 2025 and continue into the Spring Semester 2026. The position is supported with stipends made possible by funding support from the Philip & Yuriko Anton Climate Endowment.

Humpback whale by marneejill, CC BY-SA 2.0

We work in a hybrid environment that supports flexibility and connection. Our team members currently have the option to work onsite or alternate between working remotely and at least 40% onsite at the Schatz Center. Students are encouraged to meet our onsite expectation, schedule permitting. Applications are welcome from undergraduate students enrolled at Cal Poly Humboldt.

About the Research Area

Offshore Wind (OSW) Secondary Entanglement: Floating offshore wind lease areas in California overlap with known marine animal habitats. Floating turbines are anchored to the seafloor using mooring lines, which can become entangled with lost fishing gear or other debris, while posing an entanglement risk to wildlife (i.e. secondary entanglement). Our entanglement mitigation project will develop a system of technologies to monitor and identify mooring line entanglements. We will use computational simulations to predict floating platform motions and mooring cable loading for a variety of entanglement scenarios.



Position summary

In this position, the student research intern will support our ongoing mooring line entanglement research. They will design and perform simulations using computational fluid dynamics software (such as OrcaFlex), post-process the results, and apply statistical analysis to draw conclusions based on the results.

Responsibilities

Depending on skills, experience, and project needs, the Intern may:

- Design and run simulations of floating offshore wind platforms and mooring systems using computational software (e.g., OrcaFlex), with training and support from the project team.
- Post-process simulation results and extract relevant performance and loading data.
- Apply statistical methods to analyze simulation outcomes and identify patterns.
- Document modeling assumptions, methods, and results for team review.
- Assist in developing recommendations for entanglement monitoring and mitigation strategies.
- Maintain organized records of models, data, and analysis files.
- Participate in team meetings, share progress updates, and adapt to new tools or tasks as needed.

Qualifications

Minimum qualifications

Education and Experience

- Eligible applicants must be undergraduate students in good academic standing at Cal Poly Humboldt who are registered for at least 6.0 units the coming semester (Fall 2025).
- Experience with mathematical modeling and computational analysis, gained through academic coursework, projects, research, work experience, or other activities.

Knowledge, skills, and abilities

- Proficiency with word processing, spreadsheet analysis, and basic data management.
- Ability to learn and apply computational modeling and statistical analysis techniques for floating offshore wind platform dynamics.
- Skill in organizing, interpreting, and presenting quantitative results clearly.

- Strong written and verbal communication skills, including the ability to convey technical concepts in plain language.
- Ability and willingness to work respectfully and effectively in a collaborative team setting.
- Willingness to learn and use new tools or methods to support research and collaboration.

Compensation

Interns will receive a total stipend of $5,000 for contributing to research during **Fall 2025 and Spring 2026**. It is anticipated that interns will contribute an average of 8-10 hours per week during each semester to the Center's offshore wind research efforts.

How to apply

Deadline

All application materials must be received by **8 am Pacific Time (US) on Monday, September 8, 2025**.

Materials

Applicants must submit the following via email to schatzenergy@humboldt.edu:

1. In your email subject line, include your full name and the research area. Example: *"Jordan Kim – OSW Secondary Entanglement Internship Application"*
2. A formal letter of application (cover letter) addressed to the Schatz Hiring Committee that includes the following,
    a. Describes your background and what motivates you to apply.
    b. Addresses your experience with the qualifications described above and provides examples of experience, including descriptions of relevant work and/or a listing/description of relevant college/university courses successfully completed.
3. A resume (2 page maximum).

Note: Your cover letter will be used as a writing sample to assess the quality of your writing.

Additional materials may be required from candidates invited to interview.

Additional Information

Who we are

Since 1989, the Schatz Center has been a leader in applied research and project development for clean and renewable energy. Our current portfolio includes microgrid development, sustainable transportation design, carbon life cycle analysis, solar product testing, offshore wind feasibility studies, and planning and policy for clean energy access around the globe.

As residents of a rural coastal community, we are keenly aware of our social and environmental responsibilities. We are committed to increasing energy access and resilience for communities worldwide — and do so through clean and renewable design that reduces climate change and restores environmental and human health.

Our organizational commitments

Our Vision

The Schatz Center envisions a healthy planet with thriving, equitable, resilient communities powered by clean energy.

Our Purpose

Our team is committed to addressing climate change and improving human and ecosystem health through work that supports clean energy, climate-resilience, equity, and justice. Our work includes:

- **Research and development** – we do applied research focused on energy and environmental issues.
- **Technology deployment** – we design, integrate, build, test, and operate innovative, renewable, and resilient energy systems that are responsive to social and environmental needs.
- **Collaboration** – we work with public and private partners including Tribal Nations, communities, agencies, academic institutions, foundations, and industry to exchange knowledge and implement innovative solutions locally and internationally.
- **Education and Training** – we support learning that provides practical, hands-on experience for current and future practitioners and leaders.

Our Values

- **Kindness**: Treating people and the planet with care and respect through acts of inclusion, helpfulness, generosity, and encouragement.
- **Integrity**: Approaching one another and our interdisciplinary research with curiosity, open-mindedness, transparency, and humility.
- **Equity, Diversity, and Inclusion**: Providing a nourishing and rewarding environment for Center staff, students, and partners. Respecting the differences of our colleagues and actively seeking to identify and remove barriers to ensure opportunities to thrive.
- **Justice**: Working to advance racial justice, gender equality and women's empowerment, LGBTQIA+ rights, economic equality, and environmental justice.
- **Teamwork and Collaboration**: Supporting internal and external community building and engagement to create inclusive and innovative solutions. Sharing knowledge with and learning from our colleagues, collaborators, community partners, and the public to advance understanding.
- **Effectiveness**: Using our technical, scientific, and policy expertise to do good work that makes a difference.

Questions and inquiries

- For assistance with the application process, please submit an Accommodation Request Form, which can be at https://forms.humboldt.edu/spf-accomodation-request-form, or contact the campus ADA Coordinator at (707) 826-3626 or confidential fax at (707) 826-3625. For more information regarding accommodation, you may also visit the Cal Poly Humboldt Campus Disability Resource Center at https://disability.humboldt.edu/employee-accommodation. Individuals in need of a telecommunications relay service may contact the California Relay Service at (877) 735-2929 TTY.
- Learn more about our employment opportunities at schatzcenter.org/jobs.

About the Philip & Yuriko Anton Climate Endowment

Philip and Yuriko Anton are pleased to support research assistantships at the Schatz Energy Research Center through their Anton Climate Fund. Support will go to undergraduate students pursuing extracurricular work at the Center related to clean energy and climate change, with a preference for supporting student involvement in projects involving renewable energy technologies such as offshore wind energy.

For additional information, please email schatzenergy@humboldt.edu or call (707) 826-4345.