Job Opening: Student Research Assistantships

Schatz Energy Research Center

Applications due by Tuesday, April 15, 2025 at 5 pm (Pacific)

The Schatz Energy Research Center at Cal Poly Humboldt has openings for two undergraduate students to join our team. One opening is with the Transportation team and the other is with the Off-Grid Energy Access team.

The positions are expected to start on or near May 19, 2025. Both positions may continue through the end of the summer (week of August 18), with potential continuation into the fall. The exact start and end dates for each position are negotiable and will be established in discussion with the selected candidate. Our team members have the flexibility to either work onsite full-time or alternate between remote work and onsite work, with a minimum of 40% of their time spent at the Schatz Center.

These positions are supported with funding made possible through the Robert Waco Clean Energy Internship.

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

We value:

- **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.

Job summary

The selected interns will be assigned to an active research project based on background skillsets, project needs, and student interests. The potential list of projects that could involve participation include the following:

- TRANSPORTATION: *Humboldt Transit Authority (HTA) Zero Emission Bus Project*
  Conduct data analysis to evaluate the driving performance of a pilot hydrogen fuel cell electric bus and the fueling performance of a temporary hydrogen fueling system and summarize these results in monthly reports. The intern will develop a process for analyzing the pilot bus data that can easily be expanded to evaluate the additional ten hydrogen production buses that will be delivered in 2026. The HTA hydrogen fuel cell buses will be the first to operate in Northern California, north of the Bay Area. The results of the performance analysis will play a crucial role in determining the expansion of the HTA fleet and the future adoption of this technology by transit agencies in surrounding counties and regions with similar terrain.

- OFF-GRID ENERGY ACCESS: *Support for the VeraSol Program*
  Conduct desk research on topics related to performance and safety testing of solar water pumps and solar generators (small stand-alone PV+battery systems). In addition to communicating research findings through brief reports, the intern will also contribute to ongoing work with the VeraSol program by assisting with data entry, database management, and similar tasks. The student research assistant may also have the opportunity to participate in other efforts related to off-grid energy access work. This position will substantially contribute to our work on off-grid energy access. For context, more than 1 billion people worldwide are currently unable to access reliable grid electricity. Modern off-grid solar products help support these communities by providing clean and reliable energy for homes, farms and small businesses, and local facilities including schools and health clinics. As the technical lead for the VeraSol program, our off-grid energy access team develops and implements international test protocols for quality assurance to ensure that solar products and appliances are safe, durable, reliable, and perform as advertised. We work closely with national governments, manufacturers, and nonprofit organizations seeking to provide energy access and resilience across Sub-Saharan Africa and South Asia. To date, over 75 million off-grid solar products that were certified through the program have been sold, benefitting well over 100 million people.

Note that this list is not necessarily comprehensive, and the selected students may also be assigned to work on other projects or on other tasks within these projects.

Qualifications

Education and Experience

- Eligible applicants must be undergraduate students in good academic standing at Cal Poly Humboldt who are planning to register for at least 6.0 units the coming semester (Fall 2025).
- *For applicants to the Transportation opportunity:*
    - Coursework and/or prior experience in spreadsheet programming and math.
- *For applicants to the Off-Grid Energy Access opportunity:*
    - Prior experience with technical writing. Relevant experience could come from academic coursework, volunteer work, or other professional or informal roles.

Knowledge, skills, and abilities

- Proficiency with word processing and spreadsheet analysis.
- Ability and willingness to work with and learn from others effectively in a team setting.
- Ability to develop clear, accessible written materials and communicate effectively in both written and verbal settings.
- Careful attention to detail.
- Ability to self-motivate, work independently, and follow through on assignments.
- Interest and enthusiasm for issues related to energy and environmental sustainability.
- *For applicants to the Transportation opportunity:*
    - Knowledge, skill, and ability to use spreadsheet programming to analyze data using mathematical calculations and pivot tables and to generate report quality graphs and charts.
- *For applicants to the Off-Grid Energy Access opportunity:*
    - Ability and interest to conduct research, draft reports to communicate findings, and perform data entry and database management.
    - Have a working knowledge of technical concepts related to solar energy systems.

Compensation

Interns will receive a stipend of $5,000 for contributing to research during Summer 2025 and an additional $2,500 if the intern continues into Fall 2025. It is anticipated that interns will contribute to research efforts for approximately 20 hours per week over the summer and up to 10 hours per week during the semester. The timebase and schedule will be based on the project needs and determined in discussion with the selected candidate.

How to apply

Deadline

All application materials must be received by **5 pm Pacific Time (US) on April 15, 2025**.

Materials

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

- A formal letter of application that
    - Describes your background and what motivates you to apply.
    - Specifies the research opportunity to which you are applying. **If you wish to apply to both research opportunities, a separate letter of application for each is required**.
    - Addresses your experience with the qualifications described above and provides examples of experience, including descriptions of any relevant work and a listing/description of relevant college/university courses successfully completed.
- A resume (1-3 pages preferred).
- A list of three references with contact information (email and/or phone number).

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.

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