Project Background
Whale populations around the world face many human threats, top amongst them lethal entanglement in fishing gear and ship strikes. Existing conservation interventions that target measures like fishing area closures or vessel speed reduction to times and areas where whales are present depend on frequent and comprehensive whale monitoring. But the current methods for surveying the sea for whales rely on flying airplanes and sending out vessels, which are expensive, vulnerable to weather disruptions, and unable to cover the vast scales of coastline at high enough frequency. Pairing very high resolution (VHR) satellite imagery with machine-learning detection algorithms may give us the ability to monitor whales remotely and in conditions and locations that other monitoring tools cannot reliably reach. The Nature Conservancy (TNC) has partnered with leading global researchers and partners at the National Oceanic and Atmospheric Administration (NOAA) to develop the first species-specific whale detection algorithms to monitor and inform conservation interventions in high-risk areas off California.

An undergraduate student intern will co-create a technical user guide for the use of a machine learning (ML) whale detection tool to create actionable data on the presence and distribution of whales in VHR satellite imagery. This project will center on transforming coarse technical guidance produced by ML researchers and software developers into an accessible technical manual tailored to the needs of marine mammal researchers and data scientists who use monitoring data on whales to inform conservation interventions. The role will involve interfacing with TNC staff, international researchers, and partners at NOAA.

Qualifications
- Excellent written and verbal communication skills
- Interest in data science, remote sensing, and/or wildlife monitoring; past experience a plus
- Ability to work independently and as part of a team
- Excellent organizational skills and attention to detail
- Experience using graphic design tools (e.g., Canva)

Details
The position is 10 weeks, 35 hours/week, with dates flexible from mid-June to mid-September. Most work will be performed remotely, with opportunities for in-person meetings pending student locations and partner availability. The student will receive a $6500 stipend. This position is part of the Bren Environmental Leadership (BEL) Program – the student will participate in professional development training during the summer and a poster session at the Mantell Symposium on Environmental Justice and Conservation Innovation in Fall 2024. Applicants must be full-time continuing undergraduate students at UCSB (not graduating within the 2024 calendar year).

How to Apply
Please submit applications to this form by March 3 at 11:59 pm. Applications should include:
- A brief statement (2-3 paragraphs) or cover letter describing why you are interested in this project and how your previous experience and qualifications make you a good fit for the position. We are committed to fostering an inclusive environment and supporting diverse students in Environmental Science, including those from underrepresented, low-income,
and first-generation college backgrounds, and those active in DEI, environmental justice, or social justice. We welcome insights into how your experiences or perspective might shape your contribution to the BEL community.

- A resume or CV, including any relevant coursework and previous experience

**Interview and Selection Process:** Approximately two weeks after the submission deadline, applicants selected for interviews will be notified by email. Though only some students will be selected for interviews, all applicants will be notified of the status of their application when the interview/selection process is complete (approximately 3-5 weeks after the application deadline).