



Position Announcement Coastal GIS Intern

Are you interested in the intersection of ocean science and policy and want to be part of building an ocean community in coastal California? If so, the Center for Ocean Solutions—a collaboration amongst the Stanford Woods Institute for the Environment, Hopkins Marine Station, Monterey Bay Aquarium, and Monterey Bay Aquarium Research Institute—invites you to apply for our Coastal Geographic Information Systems (GIS) Internship.

The <u>Center for Ocean Solutions</u> works to solve the major problems facing the ocean and prepares leaders to take on these challenges. We bridge the gap between researchers and decision-makers and identify pathways to solutions within science, technology and policy for solving major ocean challenges. We also equip decision-makers and emerging leaders with the knowledge and skills needed to make decisions that lead to long-term health of the ocean.

Our collaborative, interdisciplinary team composed of researchers from the Center for Ocean Solutions and the Natural Capital Project is proposing to work with planners throughout the state to inform strategic prioritization of nature-based climate adaptation strategies. With state-level coastal agency staff, we will co-develop an online visualization tool that will identify priority sites where coastal habitats can best provide protection from coastal hazards at scales relevant to policy and planning decisions and then highlight policy pathways for implementing nature-based strategies. Ultimately, we will inform the implementation of sustainable and cost-effective alternatives to a concrete and metal-reinforced coastline, promoting the strategic use of natural habitats to protect people and property now and for future generations.

Job Description & Duties

The primary responsibility of the Coastal GIS Intern is to support coastal vulnerability modeling work across the State of California using the InVEST tool from the Natural Capital Project and ArcGIS. Other tasks include:

- Assist project staff with GIS data compilation for coastal California
- Manage and organize GIS data sets in ArcCatalog
- Create geodatabases and supporting metadata
- Pre-process GIS files to support coastal vulnerability modeling
- Conduct projections and transformations of GIS data
- Apply Geoprocessing and Model Builder experience as needed for project support
- Document GIS methods and communicate effectively
- Support the education of the use of online tools

Qualifications

We seek a self-starting graduate student or recent graduate with Masters-level experience with the following interests and experience:

- You have strong interest in ocean science and policy and/or ocean education
- You are enthusiastic about GIS and spatial analysis
- You enjoy sharing ideas and communicating with different groups
- You excel at writing metadata, GIS documentation and methodology
- You possess strong communication, media and technology skills
- You are able to work independently, while also knowing when to seek guidance from your peers
- You are detail-oriented
- Extensive ArcGIS experience required; previous InVEST experience and/or Python scripting experience is a plus
- Highly desirable candidates will also have experience with coastal California land use policies and agencies

Hours and Compensation

This position requires an academic six-month commitment of 20 hours per week, beginning in January 2016. Compensation starts at \$22/hour. Evening and weekend work that requires travel to campuses in the Monterey Bay and San Francisco Bay Area may be involved.

Start Date: January 2016

To apply: Please email (1) a letter of interest providing background on your GIS experience, (2) a sample of your mapping work (e.g. project, class maps, documentation, metadata), and (3) a CV including a list of three references to:

Eric Hartge, Research Development Manager, Center for Ocean Solutions: ehartge@stanford.edu.

Deadline: November 16, 2015