

# Stanford | Center for Ocean Solutions

## **Research Assistant (Vessel Tracking Analysis)** Addressing Illegal Fishing and Labor Abuse Initiative

Are you interested in the intersection of ocean science and policy and want to be part of building solutions for current and future ocean issues? If so, the Stanford Center for Ocean Solutions, an initiative of the Stanford Woods Institute for the Environment, invites you to apply as a Research Assistant.

The [Stanford Center for Ocean Solutions](#) (COS) catalyzes research innovation and action to improve the health of the oceans for the people who depend on them the most. COS capitalizes on Stanford's broad expertise in ocean science and many other disciplines crucial to developing ocean solutions, including engineering, computer science, political science, design and business. Our core team of researchers and fellows partner with other research institutions, national and international non-governmental organizations, businesses and governments, as well as established and emerging leaders in the data revolution.

### **Project Description**

Illegal, unreported and unregulated (IUU) fishing is a widespread and pervasive issue, jeopardizing the livelihoods of three billion people who rely on fisheries and disrupting needed revenues to fisheries dependent countries. At the same time, environmental degradation from IUU and overfishing can exacerbate labor abuses in fisheries. To develop management and policy solutions to mitigate these activities, we use a data-driven approach to understand the risks of IUU fishing and labor abuse associated with fishing activities. This work will be centered around analyses of vessel tracking data from the Automatic Identification System (AIS) and Vessel Monitoring System (VMS) available through Global Fishing Watch to examine risks within specific countries waters.

### **Job Duties**

The primary responsibility of the Research Assistant is to support the Data Research Scientist through data cleaning, data processing, analytical work, data visualization and written synthesis. Specific tasks include:

- Querying data from the Global Fishing Watch database (Google BigQuery)
- Cleaning up data for analysis
- Conducting summary statistics and statistical analyses
- Visualizing data for communication
- Additional tasks as necessary

## Qualifications

We seek a detail-oriented, investigative, self-starting undergraduate or master's student at Stanford University with the following interests, skills and experience:

- Fluency in Python or R for data manipulation, analysis and visualization
- Familiarity with SQL and Google Cloud Platform
- Familiarity with advanced statistics
- Attention to detail in organizing research and work products
- Ability to work independently and within a team environment
- Superior organizational, planning and time management skills
- Demonstrated ability to organize and prioritize workload
- Strong communication skills

## Start Date and Working Hours

This position requires a ~10 h/week commitment **from November 2021 to March 2022**. The start date and working hours are negotiable. The contract may be extended based on performance as well as project needs and funding. Compensation is competitive compared to similar roles and will follow Stanford's guidelines for student wage rates.

## Location

This position will be based at the Center for Ocean Solutions office at Stanford University (Palo Alto). Given current restrictions related to COVID-19, all work could be done remotely.

## Application Process

Please email 1) a letter of interest providing background on your experience and applicable skills; and 2) a resume outlining your education and professional experience; to: Shin Nakayama, Stanford Center for Ocean Solutions: [shinn1@stanford.edu](mailto:shinn1@stanford.edu). Please include "**COS Research Assistant Application (VTA)**" in the email subject line. Please feel free to contact this person if you have any questions.

## Deadline

The position will remain open until filled.

*Stanford is an equal opportunity employer and all qualified applicants will receive consideration without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, veteran status, or any other characteristic protected by law.*