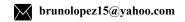
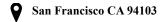
# **Bruno Lopez**







## **EXPERIENCE**

## REMOTE SENSING DATA ANALYST/SCIENTIST

San Francisco, CA

Orbital Sidekick

Feb 2022 - Dec 2022

- Using machine learning techniques I created workflows for analyzing crop species, health, and biomass using hyperspectral (HSI) data.
- Completed multiple projects including crop/forest speciation, fire change detection, time-series analysis of vegetation, mineral mapping, and creating internal python modules for company use.
- Mentored a Masters's degree student and supervised him in projects such as change detection, mineral mapping, and general technology (Python classes, PEP-8, Gitlab, Documentation, etc..)
- Fused open-sourced data and our data to create sophisticated machine-learning algorithms for classification.
- Reproduced and adjusted methodologies from multiple papers to suit our business demands/goals.

## RESEARCH DATA ANALYST

Stanford, CA

Stanford University

January 2021 - January 2022

- Led a project using Machine Learning techniques to build models that predict crop classification and crop yields in Malawi, Africa.
- Scripted programs to automate data extraction, data analysis, dashboard creation, report making, data visualization, web scraping, and machine learning for our lab group and handled version control using Git.
- Conducted statistical research/data analysis for multiple projects under minimal supervision.
- Designed and implemented data pipelines for undergraduate students improving their speed 2-10 times.

#### ENVIRONMENTAL DATA ANALYSIS INTERN

Moss Landing, CA

Monterey Bay Aquarium Research Institute (MBARI)

July 2020 - September 2020

- Extracted, cleaned, analyzed, and plotted messy biogeochemical datasets, using R and Python.
- Mapped out the routes of Biogeochemical Argo-Floats in the Subarctic Pacific Ocean programmatically.
- Analyzed time-series data to quantify changes in the Phytoplankton biomass in the Subarctic Pacific.

## **EDUCATION**

## University of California, Santa Cruz

Graduated June 2020

Bachelor of Science in Earth Science w/ Honors

**GPA 3.48** 

Honors Thesis: "Assessing Long-Term Changes in Sea Surface Temperature Extremes".

**Relevant Coursework:** Programming Abstractions: Python, Data Analysis in the Environmental Sciences, Advanced GIS, Statistics, and Data Analysis in the Geosciences, Scientific Computing, Data Visualization.

# **SKILLS**

Python (File I/O, Object-Oriented Programming, Data Visualization, Text Mining, Time Series Analysis, Geospatial Data Analytics, Rasterio, Geopands, GDAL), Machine Learning (Random Forest, Regression, K-Means, PCA, SVM, CNN), Git (Branches, Merging, Pushing, Pulling), SQL (Querying, Database Creation), R (Data Cleaning, Statistical Analysis, Data Visualization, Text Mining, Time Series Analysis, dplyr, ggplot2)