

# Christopher Chan

[GitHub](#)

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## Education

### University of California, Santa Barbara

June 2018

Aquatic Biology, B.S.,

Minor: Anthropology

## Personal Projects

### [Food Security](#)

May 2019

Explored the levels of food insecure households in America through statistical test and visualizations.

- Performed T-Tests, Levene's Test, normality test and linear regression.
- Configured a MySQL server on a Linux machine. Wrote SQL queries to retrieve data.

### [Devereux Slough Time Series](#)

Apr. 2019

Built a seasonal ARIMA model in R using data I collected.

- Collected water quality data from loggers for 13 months.
- Developed a data pipeline that aggregated and cleaned over 10,000 data points.
- Validated and explained model results with domain knowledge (ecology).

### [San Francisco Food Trucks](#)

Feb. 2019

Created an interactive Plotly map of food trucks in San Francisco. Found that food trucks clustered around three main areas in the city.

- Conducted statistical and spatial analysis in Python with Jupyter Notebook, SciPy, Pandas and the Seaborn libraries.
- Found geographic patterns and rationalized them with distribution of potential customers.

### [BigMart Sales Prediction](#)

Jan. 2019

Predicted sales of store items based on location and pricing data..

- Built and turned a random forest model in R. Improved accuracy of sales prediction by over 50% over the baseline model.
- Created a Tableau dashboard and wrote a report that the outlined key findings and areas of improvement for stores.

## Experience

### Lab Test Assistant

Mar. 2019 – Present

ViewRay

Assisted engineers with testing of novel radiation therapy treatment system.

- Developed VBA scripts that analyzed over 400 risk assessments reports.
- Wrote requirements and verification procedures.

### Ecology Intern

Mar. 2017 – Jun. 2018

Santa Barbara Audubon Society

Collaboratively built a water quality monitoring program from the ground up which gathered data on the health of an estuary.

- Cleaned, analyzed and visualized water quality data with R and ggplot2.
- Presented the results to a non-scientific audience.

## Profile

Analytical and self-driven performer with a proven track record of balancing multiple tasks and solving complex problems. Competent in data analysis, experimental design, writing for technical and public audiences. Excited by the challenge of capturing and understanding the vast amounts of data that exist.

## Technical Skills

Languages:

- Python (NumPy, Pandas, Matplotlib, scikit-learn)
- R (tidyverse)
- SQL
- Bash

Software

- Linux
- Git/GitHub
- Tableau
- Excel (VLOOKUP, PivotTable)
- Google Spreadsheets
- MS Office

Statistics

- Descriptive
- Inferential
- Time series
- Machine learning

Machine Learning

- Regression
- Decision trees & Random forest
- KNN and K-Means
- Naive Bayes

## Related Coursework

- Statistics
- Biometry
- Writing Science/Technology
- Modeling Environmental & Ecological Change