

# Zelong/Alan Wang

## Contact

Address  
La Jolla, CA, 92122

Phone  
858-539-5564

E-mail  
zew013@ucsd.edu

GitHub/Personal Web  
zew013.github.io

## Skills

Python  
Excellent

Stata  
Very Good

R  
Very Good

Microsoft Office Suit  
Good

Java  
Average

MATLAB  
Average

Git  
Average

Tableau  
Average

HTML  
Some Experience

Mandarin  
Excellent

Time management  
Excellent

Will learn SQL/NoSQL and tools such as MapReduce/Hadoop and Spark systematically this Fall/Winter

## Education

The University of California, San Diego | 2020-Present | GPA:3.98

B.S | Data Science

Related Coursework: Python, Java, HTML, Data Structures, Data Science Algorithms, Web Scraping, Data Processing, Visualization, Machine Learning, NLP basics, Deep Learning basics.

B.S | Joint Major in Math and Economics

Related Coursework: Calculus, Linear Algebra, Numerical Analysis, Optimization, Probability and Statistics, Microeconomics, Econometrics (t and F statistics, Regressions, experiment design, panel data, etc.), Operations Research.

## Experience

Research Assistant | Professor Dale Squires and Professor Richard Carson | Aug. 2022 - Present

- Explore the underlying pattern in terms of international organizations and their membership fees.
- Extract and prepare data from low quality UN reports (1950-2022) using Python, SOAP OCR API, and AWS.

CSE-PACE Program Designer | UCSD | Apr. 2022 - Present

- Search and review a miscellaneous assortment of papers, articles, programs, and even games.
- Design CSE cohort programs and build courses on various CS/DS related topics.

Research Assistant | Professor Richard Carson | Dec. 2021-Present

- Did literature review and gained background knowledge on discrete choice models and related topics.
- Gathered, arranged, and corrected research data to create representative graphs used for academic paper.
- Performed statistical and qualitative analysis. Wrote code to achieve conditional logit model.

Data Analyst/Tech VP | Lumnus Consulting (Student Enterprise) | Nov. 2021-Present

- Collaborated with business-unit leaders to identify and prioritize problems.
- Built prediction models based on historical Instagram and Twitter data. Created visualizations and analyses for the team. Delivered project presentations on how we should present our organization on social media.
- Organized team events and fostered team communication.

Data Manager & Builder | Robotics Team | 2018 – 2020

Tutor & Math Team Leader | 2019 - 2021

## Self-Driven Projects

Forage Data Analytics Virtual Experience programs | Python, Tableau, Excel, Git

- Accenture: After cleaning data anomalies and merging data in Python, created Tableau dashboard that demonstrates relationships between key features. Practiced storytelling and presentation skills by delivering our findings.
- BCG: Deployed automatic EDA using SweetViz. Defined, assigned price sensitivity to each customer. Tested hypothesis by permutation test, K-S test, and heat map. Predicted customer churn by Random Forest and XGBoost.

Analysis of Power Outage Status in the Continental U.S. | Python, Excel

- Went through the full process of questioning, researching, data cleaning & EDA, missingness assessment, hypothesis test, baseline model, more feature engineering, final model, and fairness analysis.

Indian Crop Production and Indian Climate Analysis | Python, Slides

- Literature review on previous reports about Indian agriculture, pastoralism, and climates.
- Data gathering, processing, interactive visualization using bs4, JSON, Geopandas, Altair, Folium, Plotly.
- Reported findings and provided suggestions.

Simple Language Model | Python

- Web scraping for specific books from a public book website. Tokenize corpora.
- Created an N-Gram Language Model that can generate paragraphs resembling the style of an author or a book.

Wealth Prediction based on 1991 Survey of Income and Program Participation (SIPP) | R

- Gained background knowledge about data. Applied EDA, feature engineering.
- Incorporated and compared polynomials and splines in GAM. Tested full OLS, Lasso, Ridge, Stepwise regression model and Random Forest model.