

# Zelong Wang

## Contact

### Address

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### 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 contribution data from UN reports since 1950 using Python and OCR API.

### CS PACE Program Researcher | UCSD | Apr. 2022 - Present

- Research and review on CS cohort program of the forerunners.
- Design CSE cohort programs and build courses.

### 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.