# Jiayi (Viki) Zhao

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#### **EDUCATION**

## UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA)

Sep 2023 - Dec 2024 (Expected)

M.S. in Business Analytics (MSBA)

Business Fundamentals, Optimization, Prescriptive Models, Customer Analytics, Operations Analytics, Competitive Analytics

#### UNIVERSITY OF CALIFORNIA, SAN DIEGO (UCSD)

Sep 2019 - Mar 2023

**B.S.** in Mathematics - Computer Sciences

B.S. in Cognitive Science Spec. in Machine Learning and Neural Computation

GPA: 3.82/4.0

Advanced Data Structure (CSE 100), Design and Analysis of Algorithms (CSE101), Business Analytics (MGT 153), Machine Learning (COGS 118A&B)

#### **TECHNICAL SKILLS**

PROGRAMMING LANGUAGES: Python, R, HTML/CSS/JavaScript, Java, C++, SQL

FRAMEWORKS & TOOLS: Git, AWS, LaTeX, Excel, MATLAB, Visual Code Studio, Tableau, Twitter developer platform

# **PROFESSIONAL EXPERIENCE**

## **MULTUS MANAGEMENT GROUP LLC**

Remote

# Software Design Engineer Intern

Jul 2023 - Sep 2023

- Constructed automation system to scrap and synchronize reservation data from Airbnb with AWS & Airtable, reducing time spent on property management by 90%
  - Implemented a script using Selenium to store most recent reservation data to DynamoDB and backup to S3
  - Optimized performance of scraping scripts on EC2 using Lambda functions
  - Integrated Airtable with AWS through Gateway API to pull latest data from a DynamoDB database

## FLEISCHER RESEARCH LAB @ UC SAN DIEGO

San Diego, CA

#### **Undergrad Research Assistant**

Jun 2022 – Sep 2023

- Conducted research in Analysis of Racial Equity in San Diego Criminal Justice System under Dr. Jason Fleischer
- Executed statistical tests with an outcome-based approach to determine racial disparity in charges, convictions and sentencing, revealing racial bias
- Examined relationship between homelessness-related police stops and specific geographic areas with **geospatial analysis** and **Folium API**, revealing distribution of stops appears to converge on bus stops and large homeless encampment in San Diego

HEY SOCIAL GOOD San Diego, CA

Data & Research Intern

Jun 2021 – Dec 2021

- Conducted research with Python and SpaCy on social impacts of corporations and evaluated for meeting social good requirements
- Analyzed social media of clients with Azure text analytics API and Twitter API to evaluate performance and social impact of clients
- Automated original humanoid actions and improved audit efficiency by 90%

## **DATA ANALYTICS/SCIENCE PROJECTS**

## Housing Dashboard, Feature Engineering Data Scientist

Apr 2022 - Jul 2022

- Developed a rental market dashboard to empower users to make informed decisions based on statistics and personal preferences
- Calculated transit time to campus and groceries using housing address and OpenStreetMap API
- Predict future price on historical data and listing's features using Time Series Forecasting model
- Recommend relevant housing for students based on their preferences by using Collaborative Filtering and Similarity Measurement

## Online Shopping Intention Prediction, Researcher & Group Leader

Mar 2022 – Jun 2022

- Employed Logistic Regression, KNN, SVM, and Random Forest models to predict online shopper purchase intention from 12K+ observations with 17 shopping behavior patterns
- Random forest with 91% accuracy achieves the best performance for shopper purchase decision prediction among all used models

#### Classification of Handwritten Chinese Number Characters, Researcher

Sep 2021 - Dec 2021

- Constructed supervised and deep learning algorithms to classify handwritten Chinese number characters by Chinese MNIST dataset with 15K+ compressed images using **Binary**, **Multilayer Perceptron**, and **CNN**
- CNN with 89% accuracy achieves the best performance for image classification among all used algorithms

#### **AWARDS/EXTRACURRICULAR ACTIVITIES**

- Teaching Assistant for COGS108 "Data Science in Practice" (Fall 2021, Winter 2022) and COGS118A "Supervised Machine Learning Algorithms" (Winter 2023, Spring 2023)
- Excellent Award in Research and Presentation at 2022 Summer Research Conference, UC San Diego Undergraduate Research Hub
- Awarded Chancellor's Research Scholarship for Social Sciences in June 2022
- HR Chair in UCSD Triple C (Chinese Computer Community) Club from April 2021 to April 2022