

# ZE YU (DARREN) ZHAO

(+1) 585-404-5068 | [zz2873@columbia.edu](mailto:zz2873@columbia.edu) | [linkedin.com/in/ze-yu-zhao](https://www.linkedin.com/in/ze-yu-zhao) | New York, USA

## EDUCATION

### Columbia University

*Master of Science in Business Analytics*

New York, NY

Dec 2022

### University of Rochester

*Bachelor of Arts in Financial Economics and Statistics*

Rochester, NY

May 2021

## PROFESSIONAL EXPERIENCE

### Success Academy Charter Schools

New York, NY

*Data Analyst Associate*

Feb 2023 – Present

- Conducted in-depth data analysis on scholars' assessment scores including score distribution and test item analysis using Excel (pivot tables, VBA, vlookups, countifs etc.)
- Built a data warehouse by collecting student assessment information from various files and utilized SQL to set up a relational database and construct an ETL pipeline for data loading
- Maintained rostering and assessment data across systems, ensuring data integrity for reliable analysis and reporting
- Created data visualizations on BI dashboards (Looker and Sisense) to showcase scholars daily assessment performances

### HireBeat Inc.

New York, NY

*Data Scientist Intern*

Sep 2022 – Dec 2022

- Cleaned, transformed and normalized 10,000 IT-related job descriptions from AWS using NLP techniques such as stop-word removal and lemmatization to streamline the company's entity resolution and action keywords scraping process
- Developed and deployed a word2vec model, enhancing the job matching feature by providing top 5 recommended positions to users, leading to a 20% increase in successful job matches
- Designed an ETL pipeline for the recommendation model's output, and established KPIs to monitor the model's success
- Conducted an A/B testing to determine the most effective resume text parser, calculated p-values and test statistics for feature selection, leading to strategic enhancements in the parsing process

### Everbright Securities

Guangdong, China

*Data Scientist Intern*

Jun 2020 – Aug 2020

- Engineered an efficient ETL pipeline using SQL for seamless data loading into Tableau, developed a sophisticated KPI dashboard visualizing the time-variant and sector-wise returns and volatilities of public offer funds
- Led comprehensive market trend research on public offer funds utilizing Python, deployed a multivariate regression model coupled with factor analysis on historical investment performances, predicting next 12 months' investment trend
- Managed the construction of Sharpe Ratio-Maximizing portfolios for four clients, applied attribution analysis and risk control strategies, resulting in average 12.3% ARR, enhancing client satisfaction and investment performance

### Metco Ceramic Technology Ltd.

Shanghai, China

*Data Analyst Intern*

Jun 2019 – Aug 2019

- Extracted 100+ survey responses with SQL and analyzed purchase behavior to advise on product targeting strategy
- Applied ARIMA models in R for a tile company, and tuned parameters using grid search to forecast tile products' sales performance in the next 3 months, achieving 87% accuracy
- Developed a recommendation model using the KNN algorithm to predict and rank customers' preferences on different products, increasing model performance by 14%

## PROJECT EXPERIENCE

### Capstone Project - Supply Chain Analysis for Apple Inc.

Jan 2022 – May 2022

- Performed Exploratory Data Analysis to analyze supply volume of Apple products, and built a data warehouse for transforming common data wrangling and data preprocessing to Python functions, reducing running time by 200%
- Boosted process efficiency by automating supply and demand data operations, including waterfall charts and auto-highlight/filtering, utilizing Python-based widgets and frameworks

## SKILLS

**Programing Skills:** Python, AWS, Spark, SQL, R, Advanced Excel, Tableau, Git

**Statistics & Machine Learning:** A/B Testing, Regression, Time Series, Decision Tree, Random Forest, NLTK, PyTorch