Mable Zhang

EDUCATION

University of California, Berkeley

B.A. Data Science & B.A. Economics

Expected Graduation: May 2025

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GPA: 3.86/4.0

Relevant coursework: Computational Structures in Data Science (Python and SQL), Introduction to Machine Learning, Probability Mathematics and Statistics, Econometrics, Data Structures (Java), Principle & Techniques of Data Science

EXPERIENCE

Data Science Intern - Fannie Mae

June 2024 - August 2024

- Built an anomaly detection model using Isolation Forest, achieving a 95% accuracy rate in identifying abnormal month-to-month bank principal and interest payments and performing data quality assurance
- Executed exploratory data analysis on datasets of 2M remittance records to identify key risk factors of the 2023 U.S. banking crisis, presented 3 data visualization reports to the VP of Operations
- Utilized Python and SQL to extract insights from the database, analyzing servicer-bank relationships across 2,000+ financial institutions, uncovering patterns that highlighted critical risk factors for bank failure

Research Data Analyst - UC Berkeley

August 2023-August 2024

- Conducted research on the impact of mechanization in agriculture on the female labor market in India
- Analyzed and interpret a 8-module full-scale labor survey results using regression analysis and (T-test) from 100+ Indian villages, utilizing R programming and LaTeX to translate survey findings into visual figures
- Contributed to research initiative publication on J-Pal (Abdul Latif Jameel Poverty Action Lab)

Data Analyst (Contract) - Hilton Hotels & Resorts

September 2023-December 2023

- Conducted business performance analysis and tracked KPIs to evaluate sustainable material alternatives for amenities
- Designed and developed an interactive Tableau dashboard to visualize sustainability statistics, integrating calculated metrics, LOD expressions, and parameters for real-time analysis
- Delivered six data-driven reports to Hilton ESG leadership, utilizing data storytelling to influence marketing and sustainability decision-making

Product Management Intern - Haddee Education

May 2023-August 2023

- Led a cross-functional team of 15 interns to launch an end-to-end beta-testing AI-based SAT digital application
- Designed a complete user interface (UI) on Figma based on market research results, conducted cost analysis and market sizing research, and incorporated backend data into HTML code for 20+ pages of the demo
- Drafted business reports and a Product Requirements Document that outlined potential business models for the app and presented a pitch deck to founder and product managers

PROJECTS

Trash Cleanup Route Optimization

January 2025

• Developed a routing algorithm for trash collection in New York City using Vehicle Routing Problem (VRP) and a Geodesic Distance matrix in Python, used heat maps and clustering to identify high-density areas and prioritize cleanup efforts

Cook County Housing Gov Data Set

November 2024

- Conducted exploratory data analysis (EDA) on 270K+ housing data points, visualizing features like bedroom count, wall material, and neighborhood to identify correlations with property value.
- Developed a data pipeline for outlier removal and data transformation, performing feature engineering to train a linear regression model assessing the predictive power of 60+ features on housing prices.

World Generation May 2024

• Developed an interactive 2D world generator game with features such as line of sight rendering, dynamic world creation, and save and load functionality using Java

SKILLS

Programming: Python (Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, TensorFlow), R, Java, JavaScript **Data Analytics & Visualization:** Microsoft Excel, PowerPoint; Amazon RedShift, DBeaver, MySQL, Tableau, Power BI **Soft Skills:** communication skills, attention to detail, strong work ethic, problem-solving, organization, team player