

HUIYI HE

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Mission Statement:

Analytics professional skilled in applying technical analysis to solve complex business problems and drive data-informed decisions.

EDUCATION

Master of Analytics in College of Engineering

Expected After Summer 2025

University of California - Berkeley

Berkeley, CA

Coursework: Machine Learning (Python) | Optimization Analytics | Databases Design (SQL) | Risk Modeling & Simulation

B.A. in Economics | B.S. in Cognitive Science (Specialization in Machine Learning and Neural Computation)

June 2024

University of California - San Diego (GPA: 3.8)

San Diego, CA

Coursework: Econometrics | Data Science | Financial Markets | Accounting | Business Analytics | Decision under Uncertainty

SKILLS

Python | SQL | R | Stata | Java | Machine Learning | Visualization | Financial Analysis | Problem-Solving | Business Acumen | Leadership

INTERNSHIP EXPERIENCES

Business Insights & Data Analytics Intern

August 2023 - October 2023

YCP Solidiance Consulting

Shanghai, China

- **Developed time-series models in Python to forecast customer demand**, integrating historical sales trends and competitor data to project future sales of *Fine Today* (a Japanese cosmetics company).
- **Leveraged SQL databases and online reports to extract and analyze performance data in the cosmetics sector**, conducting market research and interviewing over 10 industry experts to identify 3-5 key growth drivers.
- **Created interactive dashboards in Power BI and Tableau to visualize KPIs**, such as market share, revenue growth, and customer segmentation, supporting data-driven company strategies that contributed to a 20% increase in overall company performance.

Financial Data Analyst Intern

June 2023 - August 2023

Guangzhou Finance Holding Group Co., Ltd.

Guangzhou, China

- **Built advanced financial models, including multiple linear regression, time-series, and scenario analysis**, using WIND and Bloomberg terminals to predict market trends and support city-wide economic growth.
- **Evaluated over 5,000 industrial data using R for statistical analysis**, enabling regression analysis and hypothesis testing to derive insights on investment portfolios and risk management; generated detailed reports for stakeholders.
- **Improved tracking efficiency by 30% and boosted conversion rates by 15%** by engaging with potential clients via phone to assess their interests and needs, while documenting responses in CRM software.

RESEARCH PROJECT

Agricultural Portfolio Diversification Research

San Diego, CA

Data-Focused Research Assistant Researcher: Vinny Armentano

September 2023 - January 2024

- **Collected and processed over 10,000 agricultural data from LSMS-ISA using Stata and Python**, to examine crop diversification trends across Sub-Saharan Africa.
- **Reduced manual effort by 25% and enhanced analysis speed and accuracy** by constructing and automating data processing pipelines using Stata.
- **Applied covariance estimation and portfolio variance calculations** to assess the risk-return profile of crop combination; created correlation matrices to examine crop interdependencies.
- **Reported weekly progress and incorporated feedback with team**, refining methodologies to ensure alignment with project goals.

PROJECTS

Boutique Hotel "Grandma's Nest" Database System, SQL Project

September 2024 - December 2024

- Designed and normalized a comprehensive database schema with 25+ tables using SQL to support employee management, customer interactions, event planning, and inventory tracking.
- Extracted and analyzed customer data, integrating service orders, events, inventory, and feedback data using complex SQL queries to compute key metrics, perform customer segmentation, demand forecasting, and feedback analysis.

Personalized Book Recommendation System, Machine Learning Project

April 2024 - June 2024

- Preprocessed and analyzed over 200,000 Goodreads entries to develop a book recommendation system in Python, utilizing K-means, GMM, and Hierarchical Clustering for user preference classification.
- Achieved silhouette scores of 0.907, 0.826, and 0.746, visualizing clusters via PCA with Matplotlib to improve interpretability.
- Managed task delegation and timelines with teammates, ensuring consistent project momentum and delivery within deadlines.

Prediction of Mobile Phone Price Ranges, Machine Learning Project

April 2023 - June 2023

- Engineered and cleaned over 10,000 data of mobile phone records; conducted EDA and defined key performance metrics using Python.
- Developed and optimized predictive models using Random Forest and Support Vector Machine (SVM), achieving 88.75% accuracy with Random Forest and 96.75% with SVM by fine-tuning parameters through cross-validation and grid search in scikit-learn.

Analysis for the business development of ER Games, Business Analytics Project

April 2022 - June 2022

- Analyzed an 8,000+ record dataset in the gaming industry, visualizing trends and customer behaviors with R (ggplot2) and performing A/B testing in JMP to identify 5 key international expansion opportunities.
- Developed models to analyze customer behaviors and drive personalized services for the business strategies of game design company.