

Jiarui (Ada) Song

📞 424-440-0802 ✉️ jjarui2002@g.ucla.edu

Education

University of California, Los Angeles (UCLA)

Sept 2021 - Mar 2025

B.S. in Statistics & Data Science and B.S. in Mathematics/Economics (GPA: 3.93 / 4.00)

Coursework: Real Analysis, Multivariate Calculus, Differential Equations, Probability Theory, Linear Algebra, Time Series Analysis (SARIMA, ETS, Prophet), Clustering Models, Regression Analysis, Classification Models

Cornell University

May 2024 - August 2024

Machine Learning Foundations e-certificate, Break Through Tech

Coursework: Machine Learning Algorithms, Natural Language Modeling, Exploratory Data Analysis, Data Visualization

Professional Experience

Jazz Hands For Autism — Nonprofit for Autism Education

Jun 2024 – Dec 2024

Data Analyst and Research & Evaluation Internship

Los Angeles, CA

- Developed a data visualization app with Shiny in R to analyze student data from 2020-2024, including emotions, attendance, behaviors, and feedback, providing comprehensive performance insights to support decision-making.
- Utilized AppSheet to create personalized apps for over 30 students, showcasing individualized data emotions, behaviors, and performances, facilitating personalized educational planning.
- Built visualization apps using API-integrated Moodle data to provide teaching teams with real-time insights into student grades, attendance, and progress, enabling tailored strategies and improved individualized support.

Pacific Wealth Solution, LLC — Data-Driven Insurance Solutions

Jul 2024 – Sept 2024

Data Analyst Internship

Irvine, CA

- Developed an app-like interactive dashboard for the sales team with functionalities including navigating pages, inputting client details, and generating outputs such as cash value and death benefits.
- Incorporated post-pandemic variables and predictors to update mathematical models, enhancing the accuracy of key financial metrics such as surrender value and IRR rates by over 60%, improving usability and decision-making.
- Leveraged illustration data from insurance carriers (Guardian, New York Life, and Pacific Life) to build a comprehensive dataset, enhancing the accuracy of client analysis by 80% and enabling detailed comparative analysis of different carriers' offerings.

SACIVA — Student Networking Platform

Aug 2024 – Dec 2024

AI Studio Fellow

Los Angeles, CA

- Led a team of 5 to develop clustering models, including K-means, DBSCAN, and Mean-Shift, to group universities based on geographic location, aiming to simplify the housing search process for international students.
- Created detailed cluster profiles by integrating weather, safety, and cost of living data, providing users with accessible and comprehensive university insights.
- Achieved 86% clustering accuracy and consistent performance across test datasets of 6,800+ locations, with metrics such as silhouette score and F1 score exceeding benchmarks.

Projects & Research Experience

Han Du's Quant Lab | Research Assistant

Sept 2024 - Present

- Conduct a systematic meta-analysis of social science research employing quantitative methods, extracting detailed metadata including sample sizes, software packages, feature counts, features per tree, and key model parameters.
- Evaluate the application of random forest models in empirical studies, uncovering trends in data characteristics and methodological practices to advance best practices in quantitative social science research.

Alcoholic Status Prediction | Kaggle Competition (2nd Place)

Oct 2023 - Dec 2023

- Applied MICE to handle missing values, created new features based on health criteria, and developed predictive models using classification algorithms including logistic regression, LDA, random forest, and XgBoost.
- Performed feature selection using Random Forest importance analysis, PCA, and BIC to enhance the generalizability of the classification model by removing noisy features, resulting in a 5% accuracy improvement on the testing data.

Skills

Programming Languages & Tools: R, SQL, Python, C++, Tableau, Excel

Other Knowledge: Mathematical Analysis, Microeconomics & Macroeconomics Theory, Finance and Insurance Knowledge