

Lian, Gan

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Education

University of California, San Diego (Undergraduate)

Sep 2021 - Jun 2025

- First Major: Data Science GPA: 3.80 / 4.00
- Second Major: Joint Major in Mathematics and Economics GPA: 3.49 / 4.00
- Relevant Coursework: Data Analysis and Inference, Data Structures, Data Management, Data Visualization, Machine Learning, Probabilistic Modeling, Web Mining, Basic Algorithms, Econometrics, Microeconomics, Probability, Linear Algebra, Advanced Calculus, Mathematical Analysis.

Skills

- Programming: Python(numpy, pandas, scikit-learn), R, STATA, HTML/CSS/JavaScript, Node.js
- Machine Learning Skills: ML Models (Linear Regression, Logistic Regression, Ridge regression, Decision Tree, Random Forest, K-Means, KNN, SVM, Naive Bayes), PCA, Cross-Validation, Grid Search
- Additional Skills: SQL query, AWS, Jupyter Notebook, Github, Microsoft Office

Professional Experience

Sequoia China (venture capital)

Jun 2023 - Aug 2023

- Accompanied the Vice President, observed the complete investment cycle in a venture capital firm, from conducting industry research and identifying potential investee companies to analyzing business and competitor performance. Facilitated communication with executives, technicians, and clients, contributing to the final investment decisions.
- Researched the foundational model industry in-depth, examined its historical context, present circumstances, and future expectations. This comprehensive analysis provided valuable insights into market trends and industry standards.
- Conducted investigative surveys within companies specializing in LLMs, Generative Models, Model Security, and frameworks for developing LLMs. Through meetings with emerging AI startups, gained firsthand knowledge of the primary challenges and evolving trends within the AI sector.

Project Experience

- **Hardware Acceleration of ML Algorithms** (senior project, in progress): Machine Learning Acceleration using Hardware such as FPGA refers to design and implementation of hardware blocks that are useful in either acceleration of application codes. Explore use of architectural mechanics that substantially speedup the selected ML codes with tools such as Chakra and Astra-sim
- **Machine Learning Project** (coursework, 2023 Spring): Implemented various machine learning models and methods on a provided labeled dataset as part of course requirements. Techniques included Logistic Regression, Linear Discriminant Analysis (LDA) & Quadratic Discriminant Analysis (QDA), Support Vector Machines (SVM), and Tree-based methods, complemented by hyperparameter tuning to optimize model performance.
- **Data Visualization Project** (coursework, 2023 Spring): Developed an interactive data visualization of the US Commercial Flights dataset from 2016-2018. Utilized various visualization techniques to represent flight delays, cancellations, and frequency, employing bar charts, network plots, and geographic plots to convey complex data in an accessible format.
- **Data Science Project** (coursework, 2022 Fall): Conducted comprehensive data analysis on the World League of Legends (LoL) Esports Matches dataset. Focused on analyzing missing values and utilized the initial 15-minute game data to predict match outcomes.
- **Gaming Community App Development** (interest, 2021 Summer): Independently working on an App offering paid gaming companion services. Executed comprehensive front-end development using HTML/CSS/JavaScript within the APICloud environment and crafted the back-end infrastructure with Node.js, ensuring a seamless user experience.
- **Project Repository:** <https://github.com/francisgan/Projects/tree/main>