Allison Lynn

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Education

BS in Statistics and Data Science, The University of California Los Angeles

Sept 2022 - June 2026

- Cumulative GPA: 3.8/4.00 | Dean's Honors List: Winter 2023, Fall 2024, Spring 2025
- Coursework: Data Analysis and Regression, Probability Theory, Design and Analysis of Experiments, Mathematical Statistics, Calculus of Several Variables, Linear Algebra, Programming in R, Programming in C++, Programming in Python, Statistical Models and Data Mining, Linear Models, Computational Statistics with R

Experience

Credit Data Science Intern, Tradeweb Markets LLC. - New York City, NY

June 2025 - Aug 2025

- Built a bond similarity model for U.S. institutional bonds, completing the full pipeline from data preparation and feature engineering to standardization and encoding, transforming bond attributes into numerical form.
- Applied distance metrics to identify comparable bonds and developed customized similarity measures for clients, integrating advanced filtering options to refine bond universes.
- Designed and deployed a Streamlit-based Python web application for the bond similarity model, enabling clients to customize their bond universe and instantly identify similar bonds through an interactive interface.
- Contributed to the development of a client- and sales-facing chatbot using agentic architecture and embedding models to address market and product inqueries.

Data Strategy Intern, Ryan LLC. - Los Angeles, CA

June 2024 - Aug 2024

- Worked with machine learning, deep learning, and NLP pipelines using PyTorch, TensorFlow, and BERT.
- Developed Python scripts to automate and optimize large-scale data analysis workflows.
- Wrote efficient SQL queries in Databricks to manage databases and supported data lake integration strategy, while designing Tableau and Power BI dashboards to visualize storage patterns and data inflow.

Calculus Tutor, Unlimited Tutoring - San Diego, CA

April 2023 – June 2024

• Conducted tutoring sessions for high school and university calculus and mathematics courses.

Projects

Modeling Urban Flight in U.S. Commercial Real Estate

Real-Estate-Analysis

- Presented at ASA DataFest 2025 at UCLA; awarded the Judges' Choice Award out of 50+ participating teams.
- Analyzed a proprietary Savills dataset to uncover seven-year trends in commercial lease migration from central business districts to suburban markets, and engineered features to build a logistic regression model that classified lease location type with 90% accuracy.

Predicting ICU Length of Stay

ICU-Stay-Prediction

• Applied Natural Language Processing (NLP) to predict ICU length of stay, utilizing BioBERT embeddings and training Random Forest models to capture complex patterns, and applied LASSO to reduce overfitting.

NBA Analysis: Predicting Game Outcomes

NBA-Analysi

- Developed a classification model in Python to predict NBA game outcomes, achieving **93.87**% accuracy through feature engineering (rolling averages, weighted stats) and feature selection with Linear SVC.
- Trained Random Forest and Gradient Boosting models on engineered and selected features.

Skills

Statistical Modeling & Machine Learning: Logistic Regression, Linear Regression, LDA, QDA, Random Forest, Gradient Boosting, Lasso, Ridge, SVM, KNN, K-means, PCA, Neural Networks

Data Analysis & Visualization: EDA, Experimental Design, Data Mining, Data Visualization (Tableau, Power BI)

Programming & Tools: Python (pandas, matplotlib, PyTorch, scikit-learn), R, SQL, Git, Streamlit

Mathematics: Calculus, Linear Algebra, Probability Theory, Optimization