Banff Jiang

bxjiang@ucsd.edu. | banffjiang.com | https://www.linkedin.com/in/banff-jiang

Education

University of California, Riverside   Riverside, CA

Bachelors of Science in Data Science   September 2022 – June 2024

- 3.83 GPA in major related courses (STEM)

University of California, San Diego   La Jolla, CA

Bachelors of Science in Data Science   September 2024 – June 2026

Techincal Skills

- **Languages:** Python, C++, C, R, Java, JavaScript
- **Frameworks:** Node.js, Arduino, Flask, React/React Native
- **Developer Tools/Skills:** Git, Github, Docker, PostgreSQL, HTML/CSS, Redis, AWS, FastAPI

Experience

Data Science/Machine Learning Intern   Tempe, AZ

DriveTime   June 2024 – September 2024

- Developed predictive models that calculated potential customer purchase likelihood through credit history by **50%** using ML models such as Random Forest and XGBoost.
- Trained models on **30+** datasets with millions of rows and thousands of features, followed by scoring.
- Increased data model efficiency by **20%** through EDA and cleaning large datasets to preprocess.
- Automated data pipelines using Python and SQL, reducing data processing time by **30%**.

Undergraduate Research Assistant   La Jolla, CA

University of California, San Diego   December 2024 – Present

- Developed and implemented trend filtering techniques on graphs, exploring their application in time series analysis
- Contributed to the development of fast differentially private matrix factorization algorithms

Undergraduate Academic Instructor - Peer Educator   Riverside, CA

University of California, Riverside   March 2023 – June 2024

- Provided organized course materials and tools to efficiently aid **200+** students in Calculus.
- Proctored weekly exams and performed individual/group meetings with students.
- Worked closely alongside Professor to refine standards of the course.

Projects

Stock Market Predictor | *Flask, TensorFlow, PostgreSQL*   June 2024 – July 2024

- Built and deployed a machine learning model to forecast future stock market movements by analyzing historical market data and identifying key trends and patterns.
- Achieved a **96%** accuracy rate by leveraging a combination of Random Forest, Linear Regression, and Support Vector Machines (SVM) to ensure optimal predictive performance.
- Conducted extensive data preprocessing including feature selection, normalization, and handling missing data to improve model accuracy, achieving a **98%** data completeness rate.
- Utilized Python and key libraries such as Pandas, NumPy, Scikit-learn, and TensorFlow for data analysis, model training, and evaluation, improving model predictions by **7%**.

EmotionSense | *NLTK, Seaborn, Scikit-learn*   May – June 2024

- Engineered a sentiment analysis project on **100,000+** Amazon reviews using Elbow Method, KNN, and K-means, vectorized reviews by successfully utilizing BoW and TF-IDF.
- Designed data cleaning and preprocessing pipelines, enhancing dataset readiness for optimal analysis.
- Evaluated model performance using metrics, achieving **90%** F1 score, and **94%** accuracy.