Joseph Cha

661-417-4224 | jsmcha@ucdavis.edu | linkedin.com/in/{Joseph} | github.com/Joseph

EDUCATION

University of California, Davis — **Expected Spring 2026**
Bachelor of Science in Data Science, Minor in Technology Management — Davis, CA
GPA: 3.7/4.0; Dean's List Winter 2024, Spring 2024
Relevant Coursework: Applied Machine Learning, Advanced Statistical Computing, Regression Analysis, Statistical Data Science

PROJECTS

Full-Stack Resume Analyzer & Job Matcher — **Jun. 2025 – Present**
- Built a full-stack web application (Flask + React) enabling PDF resume uploads, real-time feedback, and interactive keyword recommendations.
- Processed 40K+ LinkedIn job postings; improved average similarity match from **0.3 (TF-IDF baseline) to 0.5 (BERT)**, boosting alignment accuracy by 60%.
- Engineered NLP pipelines for semantic search, cosine similarity scoring, and skill-gap detection to deliver personalized resume optimization.

Airbnb Price Optimization & Feature Analysis — **Nov. 2024 – Mar. 2025**
- Analyzed 48K+ NYC Airbnb listings; identified top pricing drivers (borough, room type, host activity) to guide host revenue strategies.
- Engineered advanced features (interaction terms, spatial mapping, target encoding), improving model robustness.
- Benchmarked models: reduced RMSE from **39 (linear regression) to 16.8 (decision trees)**, improving predictive accuracy by >50%.
- Visualized findings in R (ggplot2, caret), delivering interpretable insights for business decision-making.

Credit Risk Prediction Model — **Jan. 2024 – Mar. 2024**
- Modeled 700K+ credit records for loan risk prediction using logistic regression, random forests, and neural networks.
- Built end-to-end preprocessing pipeline (missing value imputation, encoding, scaling) to ensure reproducibility.
- Improved performance from **56% baseline (logistic regression) to 93% accuracy and 0.92 F1-score** with optimized neural network.

EXPERIENCE

Panda Express, Service Team Associate — **Apr. 2025 – Present**
- Balanced 20+ hrs/week in high-volume role ($75K+ weekly transactions) with full-time coursework, demonstrating adaptability and discipline.
- Cross-trained across counter, cashier, and digital orders to streamline workflow and uphold service standards.

LEADERSHIP & INVOLVEMENT

Klesis Christian Fellowship, Treasurer — **Feb. 2024 – Jun. 2025**
- Managed club budget, ensuring accurate records and funding for 100+ member events.
- Coordinated logistics for guest speakers and outreach programs; operated A/V systems to support livestream production and engagement.

TECHNICAL SKILLS

Languages: Python, R, SQL, JavaScript, HTML/CSS
Libraries: NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn, NLTK, SentenceTransformers
Frameworks: Flask, React, Streamlit
Developer Tools: Git, GitHub, Jupyter Notebook, VS Code