Jeel Faldu

Data Scientist | Email | Riverside, CA | LinkedIn | GitHub

SUMMARY

Data Scientist with 2 years of applied experience in ML, predictive analytics, and statistical modeling through externships, and code jams. Proficient in Python, SQL, and PyTorch, including designing metrics, building predictive models, running experiments, and deploying interactive dashboards. Skilled at transforming complex datasets into actionable insights and collaborating cross-functionally to support data-informed product and business decisions.

SKILLS

Python | SQL | Machine Learning | PyTorch | Scikit-learn | Experimentation (A/B Testing, Causal Inference) | Time Series Forecasting | Data Pipelines (ETL) | Data Visualization (Plotly Dash, Streamlit, Matplotlib, Seaborn) | Statistical Modeling

TECH PROJECTS

Customer Churn Prediction | TripleTen | 05/25 | GitHub

Developed models to predict customer churn using account, demographic, and usage data.

- ➔ **Purpose:** Predict churn to reduce customer loss and improve retention.
- ➔ **Methods:** Tested 5 models (LogReg, RF, CatBoost, XGBoost, LightGBM) with preprocessing, class imbalance handling, and hyperparameter tuning.
- ➔ **Results:** LightGBM achieved 89% accuracy and 0.915 AUC-ROC, +15% over baseline; key drivers included tenure, contract type, and usage.
- ➔ **Recommendations:** Deploy as a web service and expand feature engineering for stronger predictions.

Spotify Song Popularity Prediction (Highest Score) | August Code Pudding | 08/25 | GitHub | Slides

Collaborated in a team competition to build a model predicting Spotify song popularity from audio features.

- ➔ **Purpose:** Predict a song's popularity (0–100) using features like danceability, energy, tempo, and valence to provide actionable insights on music trends.
- ➔ **Methods/Techniques:** Built an end-to-end PyTorch pipeline with preprocessing, feature engineering, and model evaluation. Visualized predicted vs. actual popularity.
- ➔ **Results:** Achieved strong predictive accuracy, identifying key audio features influencing song popularity. Enabled insights into genre trends and audience preferences.
- ➔ **Recommendations:** Expand the model with real-time Spotify API integration and explore deeper neural network architectures for improved predictions.

Sweet Lift Taxi Demand Forecasting | TripleTen | 03/25 | GitHub

Developed a predictive system to forecast hourly taxi demand from airport ride data.

- ➔ **Purpose:** Forecast hourly taxi demand to optimize driver allocation and reduce wait times.
- ➔ **Methods:** Performed resampling, trend/seasonality analysis, and evaluated AR, ARMA, RF, CatBoost, LightGBM with tuning.
- ➔ **Results:** Random Forest delivered RMSE = 43.87, outperforming AR (48.3) and Moving Average (84.6); enabled 15–20% more accurate driver allocation in simulations.
- ➔ **Recommendations:** Deploy RF in production with real-time dashboards for proactive management.

EXPERIENCE

TripleTen | Data Science Extern | 08/25 –09/25 | Remote

Working on a data science externship exploring AI-evaluated tutoring calls and their predictive power for student success on the TripleTen learning platform.

- ➔ **Data Analysis & Predictive Modeling:** Analyzed AI-scored tutoring calls to identify trends in student activity and learning progress.
- ➔ **Machine Learning:** Built models to identify which features, beyond AI-generated scores, are the strongest predictors of overall student performance (Overall AI Score Percentage).
- ➔ **Research & Evaluation:** Investigated patterns across programs to understand drivers of student progression and engagement.
- ➔ **Collaboration & Reporting:** Presented insights via weekly updates and visualizations to guide cross-functional decision-making.

Think Together – Colton District | Program Leader | 04/24 – Present | Colton, CA

Think Together – CA nonprofit supporting underserved students through after-school programs.

- ➔ **Data-Driven Instruction:** Raised homework completion by 30% for 25+ students by analyzing engagement data and tailoring sessions.
- ➔ **Process & Compliance:** Managed daily attendance and safety data for 25+ students, ensuring full compliance and strong parent partnerships.
- ➔ **Collaboration:** Worked with 5+ staff weekly to track behavior trends, share insights, and drive early interventions.

CSUSB | Supplemental Instruction Leader | 08/22 – 12/23 | San Bernardino, CA

A leading public university in Southern California, CSUSB supports academic excellence and student success through peer-assisted learning and mentorship programs like Supplemental Instruction (SI).

- ➔ **Instruction & Facilitation:** Led twice-weekly SI sessions for Organic & General Chemistry, boosting grades and concept mastery for 30+ students.
- ➔ **Engagement Growth:** Built a volunteer base that grew session attendance by 40%, fostering a collaborative, judgment-free learning space.
- ➔ **Academic Leadership:** Developed tailored study plans and communication strategies, earning recognition from faculty for consistent, high-quality support.

CSUSB | Research Assistant | 10/23 – 12/23 | San Bernardino, CA

A public research university advancing academics and science, CSUSB provides undergraduates with hands-on research in neurobiology and disease modeling.

- ➔ **Experimental Management:** Maintained 50+ Drosophila colonies under strict protocols, ensuring consistent data for cognitive behavior studies.
- ➔ **Data Analysis:** Conducted 100+ behavioral assays and statistical tests, uncovering patterns in cognitive decline and supporting research hypotheses.
- ➔ **Collaborative Reporting:** Delivered findings in 12+ weekly team meetings, driving iterative improvements to experimental design and analysis.

EDUCATION

TripleTen |Data Scientist Program | 04/24 - 06/25

Completed an intensive, project-focused data science bootcamp emphasizing practical skills, including:

- ➔ **Technical Skills:** Python, SQL, Data Wrangling, EDA, Machine Learning, NLP/Embeddings, Data Visualization (Plotly, Streamlit, Dash, Matplotlib, Seaborn)
- ➔ **Tools:** Pandas, NumPy, Scikit-learn, Jupyter, Git
- ➔ **Collaboration:** Participated in 7 Code Jams, gaining experience in team-based problem-solving, communication, and project management.
- ➔ **Achievements:** c

CSUSB | Bachelor of Science in Biology | 2021 – 2023 | Cum laude | GPA: 3.6 | Dean's List

- ➔ Completed coursework in biostatistics, genetics, microbiology, ecology, and research methods. Contributed to faculty research through data collection, analysis, and reporting.