

ZACK MOSLEY

zmosleymis@gmail.com | (209) 487-4826

[Portfolio](#) | [LinkedIn](#)

EDUCATION

Master of Data Science

University of California, San Diego

University GPA: 3.78 /4.00

La Jolla, CA

Expected Graduation: June 2026

- Relevant Coursework: Statistics, Linear Algebra, Data Visualization, NLP, Big Data

B.S. in Management Information Systems

California State University, Sacramento

University GPA: 3.80 /4.00

Sacramento, CA

May 2024

- Honors: **Magna Cum Laude**, Dean's Honor List
- Relevant Coursework: Machine Learning, Data Mining, Advanced Analytics, Data Mgmt

A.S. in Accounting

A.S. in Business Administration

May 2021

TECHNICAL PROJECTS

Vehicle Value Estimator (Personal Project, [Full Project](#))

End-to-end vehicle price prediction dashboard using scraped data from Cars.com.

- ▶ Built **ETL pipeline** to ingest/clean **80K+ vehicle listings** across top 10 U.S. manufacturers
- ▶ Engineered features (trim, mileage, year, body style); analyzed price trends via EDA
- ▶ Analyzed depreciation trends by make/year to quantify long-term value patterns
- ▶ Trained & optimized LightGBM (**MAE ~\$1.7K**, **R² ≈ 0.96**) on categorical + numerical features
- ▶ Deployed interactive Dash/Plotly dashboard for real-time pricing & feature insights

NYC Taxi Fare & Tipping Analysis (Academic Project, [My Contributions](#) | [Full Project](#))

Led analysis of **150M+** NYC taxi rides using Spark on SDSC supercomputer, earning **3rd place** in class-wide project competition.

- ▶ Conducted EDA on 20GB+ trip data: time trends, fare efficiency, tipping patterns
- ▶ Applied filters to outliers/invalid trips; engineered time & efficiency features
- ▶ Processed 170M+ trip records on distributed Spark cluster, retaining 88% clean data
- ▶ Developed fare predictor (**MAE ~\$1.91**, **R² ≈ 0.94**) and tip classifier (**~79% accuracy**)
- ▶ Benchmarked against baseline regression, achieving **36% RMSE reduction** with LightGBM
- ▶ Evaluated performance with stratified sampling, residual analysis, and baseline benchmarks

SKILLS

Languages & Tools: Python (Pandas, NumPy, Scikit-learn, Plotly, Matplotlib, Seaborn), SQL, Git, Tableau, Streamlit, Azure DevOps, Excel

ML & Analytics: Statistical analysis, Regression, Classification, EDA, Feature engineering, Cross-validation, Model evaluation

Big Data: Spark, Dask

WORK EXPERIENCE

DBI Beverage

AM Lead Warehouse Associate

2014 - 2020

Stockton, CA

- Improved inventory accuracy **12%** by analyzing records and resolving data discrepancies.
- Reviewed daily operational metrics to pinpoint inefficiencies and recommend workflow changes.
- Managed inbound logistics for **50K+ cases/day**, maintaining smooth warehouse operations.
- Streamlined workflows with regional teams.
- Coordinated cross-team communication ensuring accuracy and timely inventory updates
- Oversaw distribution for **Coors Brewing** and Constellation brands (**Modelo**, **Corona**).