# **ZACK MOSLEY**

(209) 487-4826 | <u>zmosleymis@gmail.com</u> <u>GitHub</u> | <u>LinkedIn</u>

#### **EDUCATION**

• Relevant Coursework: Statistics, Linear Algebra, Big Data Analytics, NLP, Data Visualization

### University of California, San Diego

La Jolla, CA

Master of Data Science

Expected Graduation: June 2026

University GPA: 3.78 /4.00

•

# California State University, Sacramento

Sacramento, CA

Bachelor of Science in Business Administration -

May 2024

Management Information Systems

University GPA: 3.80 /4.00

• Honors: Magna Cum Laude, Dean's Honor List

• Relevant Coursework: Data Mining, Advanced Analytics, ML, Data Management

Associate of Science in Accounting

May 2021

Associate of Science in Business Administration

#### 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,  $R^2 \approx 0.96$ ) 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,  $R^2 \approx 0.94$ ) 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: Apache Spark, Dask

#### WORK EXPERIENCE

#### **DBI** Beverage

2014 - 2020

AM Lead Warehouse Associate

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 Molson Coors and Constellation brands (Modelo, Corona).