# Saga Abuodeh

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#### **EDUCATION**

# B.A. Data Science, UC Berkeley

Economics Emphasis

#### **EXPERIENCE**

# Al Trainer, Handshake Move Fellowship | June 2025 - current

- Curating and labeling diverse datasets to improve AI model accuracy and performance across multiple domains.
- Collaborating with data scientists and engineers to iteratively refine AI algorithms, with a focus on bias mitigation and enhancing model fairness and effectiveness.

## Software Engineering Fellow, Headstarter AI | June 2024 – Aug. 2024

- Completed a seven-week AI fellowship focused on data structures & algorithms, technical interviews, and AI project development (Python & Java).
- Designed, built, and iterated on an AI product, prioritizing user experience, scalability, and system design.
- Collaborated cross-functionally to gather feedback, define requirements, and deliver user-centered solutions.

## Data Science Research Intern, Data Discovery: Rocketship Public Schools | Aug. 2023 – Dec. 2023

- Conducted end-to-end analysis on 4TB+ of student engagement and state exam data across 15 schools to evaluate the impact of online learning programs.
- Designed and executed scalable data pipelines for ingestion, cleaning, and analysis of large education datasets
- Modeled student academic performance linked to online learning usage, identifying critical periods of slowed progress for 2,400+ students across 4 core courses.
- Delivered actionable reports to senior data scientists, directly influencing program guideline changes to improve student outcomes without increasing instructional time.

## Undergraduate Teaching Assistant, UC Berkeley Stat 20 | Jan. 2023- May 2023

- Tutored and supported 220+ students in foundational statistics and data analysis using R.
- Led weekly office hours and actively answered student questions on 24/7 online support platform.
- Helped write solution sets and provided in-class academic support to reinforce lecture content.

#### **PROJECTS**

# Data Engineering Pipeline | Team Project | PostgreSQL, MongoDB, Python, Git

- Built and analyzed Yelp database to compare relational vs. NoSQL performance for business insights.
- Identified underrated businesses, declining performance trends, and top reviewers using query optimization techniques.
- Improved PostgreSQL query speed 10x using indexes and materialized views; evaluated tradeoffs with MongoDB for semistructured data.

# Restaurant Success Prediction | Team Project | Python, Random Forest, Logistic Regression

- Merged multi-source datasets including Yelp reviews, zip code demographics, and economic indicators to build a predictive model for restaurant success in Pennsylvania.
- Engineered features and ran exploratory analysis to identify patterns across location, income, and cuisine types.
- Achieved 73.5% accuracy with logistic regression and 70.5% with Random Forest.

### Spam Email Classifier | Python, K-nearest-neighbor classifier, Data Visualization, Logistic Regression

- Achieved an 82% precision using logistic regression and feature engineering. Evaluated performance through precision, false positive rate, and precision-recall curve analysis.
- Applied cross-validation and train/test split to ensure reliable results and minimize overfitting.

#### **EXPERTISE**

# Tools & Technologies:

Python, Java, SQL, R, HTML & CSS, Git, AWS, Power BI, Tableau, Excel, LaTeX.

**Technical Skills:** Data Engineering, ETL, Data Analytics, Data Visualization, Exploratory Data Analysis (EDA), Data Modeling, Data Mining, Machine Learning, Risk Analysis, System Design, Product Development, Project Management, Web Dev, Research.