

Ahmad (Isa) Alsafwah

901-930-6696 | ahmadacollege@gmail.com | [linkedin.com/in/isaals](https://www.linkedin.com/in/isaals) | github.com/isaadev | isaa.dev

EDUCATION

Boston University

B.A. in Computer Science (Dean's List)

Boston, MA

Sep. 2022 – May 2025

Rhodes College

B.S. in Computer Science (Transferred)

Memphis, TN

Aug. 2021 – May 2022

EXPERIENCE

Full-Stack Engineer Intern

May 2024 – May 2025

Questrom School of Business, Boston University

Boston, MA

- Built a multi-user marketplace simulation (React, Node.js, Tailwind, Empirica) that generated rich behavioral datasets for economic analysis of producer–consumer dynamics and warranty mechanisms.
- Redesigned data models to support multi-product producers; improved data quality/coverage for market-outcome analysis and reduced downstream data cleaning effort.
- Implemented interactive UI to visualize run-time metrics (*e.g.* price, quality, conversion) and export experiment logs for statistical testing and reproducibility.

PROJECTS

Steam Store Sentiment Analysis | *Python, SQL (SQLite), Tableau*

Fall 2025

- Performed end-to-end exploratory data analysis on the 2024 Steam “Hot Picks” dataset to quantify relationships between game pricing, discount depth, and user sentiment.
- Cleaned and standardized pricing and discount fields in Pandas, computed effective prices, and stored structured data in SQLite for aggregation and querying.
- Built SQL queries to segment sentiment scores by price and discount tiers, identifying that **mid-priced games (\$5–30) with 25–50% discounts average the highest review sentiment (4.0/5)**.
- Designed an interactive Tableau dashboard visualizing sentiment distribution and pricing insights, highlighting key drivers of consumer perception.

Latent Semantic Analysis Search Engine — *Python, Flask, Pandas, scikit-learn, NLP*

Spring 2025

- Built a semantic search pipeline over 18,000+ documents using TF-IDF and Truncated SVD (LSA) to uncover latent structure and improve relevance.
- Compressed the term–document matrix by ~90% with SVD, speeding query analytics while preserving interpretability; ranked results via cosine similarity.
- Delivered a Flask API + lightweight UI for real-time querying and insight generation from unstructured text corpora.

Amazon Review Rating Prediction Model | *Python, Pandas, scikit-learn, Gradient Boosting*

- Engineered 15+ review- and user-level features (*e.g.* VADER sentiment, helpfulness ratios, word/summary length, user rating variance) to analyze over 1.7M Amazon movie reviews to predict 1–5 star scores.
- Implemented feature selection using RandomForest importance and trained a **HistGradientBoostingClassifier** for multiclass classification.
- Evaluated model performance via accuracy, classification report, and confusion-matrix visualization; exported predictions for submission and benchmarking.
- Documented full analysis pipeline in Jupyter Notebook, demonstrating strong data-cleaning, feature engineering, and model evaluation practices.

TECHNICAL SKILLS

Programming Languages: Python (Pandas, NumPy, scikit-learn), SQL, Java, C, JavaScript, TypeScript

Data Analysis & Visualization: Data Wrangling, Experimentation, NLP (TF-IDF/LSA), Excel, Tableau

Tools & Platforms: Jupyter, Flask, MongoDB, API Integration, ETL, CSV/JSON

Web Development: React, Node.js/Express, HTML/CSS, Bash, Git/GitHub, Agile Development

Design & UI Tools: Figma, TailwindCSS, Bootstrap, Shadcn, Empirica

Relevant Coursework: Algorithms, Databases, Software Engineering, Embedded Systems, Information Security, Tools in Data Science, Linear Algebra

Languages: English, Arabic, Spanish