Mohammed Ansari

San Jose, California

📞 (669) 288-3655 ✉ mohammed.ansari@sjsu.edu 🔗 linkedin.com/in/imohammedansari ⌨ github.com/ByteMaverick
🌐 mohammedansari.dev

Education

San Jose State University   **Aug. 2023 – May 2027**
Bachelor of Science in Data Science — GPA: 3.94(Spring 25) | Cumulative: 3.56   *San Jose, California*

- **Coursework:** Data Structures and Algorithms, Advanced Machine Learning, Advanced Python, Processing Big Data, Object Oriented Design, Linear Algebra, Statistics, Calculus

Technical Skills

Programming Languages: Python, Java, SQL, Bash Scripting
Machine Learning & GenAI: Scikit-Learn, TensorFlow, XGBoost, Hugging Face, OpenAI/Vertex AI APIs
Data Analysis & XAI: Pandas, NumPy, Matplotlib, Seaborn, SHAP, LIME, Evidently AI
Databases & Cloud: MySQL, MongoDB, Vector Databases, AWS, Google Cloud
MLOps & DevOps: Docker, Apache Airflow, MLflow, Git, GitHub Actions (CI/CD), Grafana, Prometheus
Frameworks & Concepts: FastAPI, LangChain, LangGraph, RAG, Vector Search, Prompt Engineering, A/B Testing

Technical Experience

ClauseBit – AI-Powered Privacy Analyzer 🔗 🔗   **May 2025 – July 2025**
Creator   *San Jose, California*

- Build an **AI-powered browser extension and web app** that automatically analyzes privacy policies and terms of service to help users understand risky clauses based on their **personal privacy preferences**.
- Developed an **Adaptive RAG pipeline** using **LLM APIs + Vector Search** to identify and explain **risky legal clauses** (e.g., data sharing, dark patterns), enabling **real-time clause-level QA** and summaries.
- Built a self-updating **knowledge base** with on-demand web scraping agents, cutting manual maintenance by **60%**.
- Reduced **hallucinations by 40%** using clause relevance filtering, vector confidence scoring, and fallback rejection.
- Deployed full-stack system on **GCP** (Cloud Run, Functions, Firestore) with Clerk authentication, optimizing end-to-end latency to **sub-25s** using chunking, LRU caching, and **async-based concurrency**.

DockFlow – Real-Time Bike Dock Availability Predictor 🔗   **Aug 2025 – Present**
Creator   *San Jose, California*

- Built a real-time **ML platform** that predicts Bay Wheels bike dock availability 15 minutes in advance to help cyclists find available docking stations, using **dock live feeds**, **weather data**, and **event schedules** in a **time series** model.
- Orchestrated a robust **Apache Airflow ETL pipeline** on **GCS** and **BigQuery** to automate multi-source ingestion, cleaning, and feature engineering, ensuring reliable and reproducible workflows.
- Implemented continuous **model drift monitoring** with **Evidently AI**, applying **statistical drift detection methods** to detect performance decay and trigger adaptive retraining.
- Deployed a containerized **FastAPI** inference service to **GCP Cloud Run** with CI/CD via **GitHub Actions** and comprehensive monitoring in **Prometheus & Grafana** for **XGBoost** model health.

TripSafe – Traffic Accident Risk Prediction Tool 🔗   **April 2025 – May 2025**
Team Lead — Course Project - A Grade   *San Jose, California*

- Built a **multi-class accident risk classifier** to help drivers and route planning systems assess traffic safety by analyzing 7M+ U.S. accident records, leading end-to-end development from data cleaning via **Bash scripting** to inference.
- Defined interpretable risk labels (Low, Medium, High) via **K-Means** clustering; applied **PCA** to reduce dimensionality.
- Balanced class distribution with **SMOTE**; tuned **Logistic Regression, SVM, XGBoost** via **GridSearchCV**.
- Achieved **95% test accuracy** via **cross-validation** with low log loss; validated generalization using **classification reports** and **confusion matrices** for real-world safety and route optimization systems.

Leadership/Extracurricular

Machine Learning Club @ SJSU   **Feb 2025 – Present**
Lead Outreach and Recruitment Officer   *San Jose, California*

- Led onboarding and outreach campaigns that increased member retention by **25%** and drove consistent event turnout.
- Monitored and analyzed weekly **engagement metrics** to optimize recruitment strategies and boost participation.

Certifications and Awards

- **AWS Certified AI Practitioner**   **Jun 2025**
- **Machine Learning A-Z (Udemy)**   **Jul 2025**
- **Dean's List, San Jose State University**   **Fall 2023 – Spring 2024**