Wahhaj Malik

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EDUCATION

University of California, Davis — Davis, CA
B.S. Electrical and Computer Engineering — *Mar 2024*

TECHNICAL SKILLS

Languages: Java (3 yrs), Python (5 yrs), C/C++ (5 yrs), JavaScript (2 yrs), SQL, Bash, GraphQL, HTML/CSS
Back-End: Spring Boot, Node.js, Express.js, Django, GraphQL (Apollo Federation), Maven
Front-End: HTML, CSS, React.js
Data: Kafka, Elasticsearch, Cosmos DB, MongoDB, Prometheus
Data Science: NumPy, Pandas, Scikit-learn
DevOps: Git, GitHub Actions, Kubernetes, Docker, Jenkins, Terraform, Concord, Cron
Tools: AWS, CLI, Splunk, Kibana, Grafana, Figma, Postman, Linux

EXPERIENCE

Software Engineer — May 2024 – Present
Walmart Global Tech — *Sunnyvale, CA*

- **Designed and implemented** a Spring Boot certificate-management service backed by Cosmos DB, caching CNs and expiry dates for **thousands of certs** and automating renewals—eliminating **100% of manual work**.
- **Modernized the Remote Fuel Manager UI** in **React.js**, introducing **Redux** state management and live price widgets, giving store associates real time visibility into fuel dispenser statuses.
- **Instrumented a GCP BigQuery pipeline** streaming dispenser heartbeat/error logs to a REST-backed dashboard, giving store associates instant visibility into screen freezes and other anomalies.
- **Created a TypeScript GraphQL subgraph** solution, exposing real-time fuel prices and station hours data to customers; engineered for **over 1,000 transactions per second**.
- **Eliminated legacy SFTP workflows** by building as **Spring Boot REST client** that interfaces directly with the remote fuel-price API, decommissioning an on-prem transfer server and cutting infrastructure costs by **20%**.

Software Engineer — Jul 2021 – Jun 2022
MHMA — *Tracy, CA*

- **Developed a React.js/Node.js** web app for user registration and payment processing, integrating middleware alongside MongoDB for secure transactional endpoints.
- **Integrated PayPal and Stripe** for secure transactions and adhered to industry payment standards.
- **Applied Agile methodologies** with JIRA to streamline feature delivery and QA cycles, writing unit and integration tests to maintain code quality.

PROJECTS

SEC Filings Analytics Platform | *Spring Boot, Java, Jackson, REST, SEC-API, OpenAI, Docker*

- **Built a backend service** that aggregates and normalizes insider-trading (Form 4) and institution-level (13F) filings into a unified JSON API, enabling compliance teams to query who traded what and when.
- **Processed and enriched** daily batches of SEC filings—flattening nested JSON, filtering invalid entries, and computing time-series metrics (e.g., monthly sell volumes, top insider traders) to power real-time dashboards.
- **Introduced an LLM-powered insights endpoint** using OpenAI's API to perform natural-language trend analysis of insider trading patterns (e.g., highlighting top buyers by sector).
- **Containerized and deployed** the service alongside PostgreSQL via Docker Compose, standardizing local development.

EmergenSee | *Cooperative Perception for Emergency Vehicles*

- Trained and integrated a **YOLOv5 model** on an initial dataset of **1,000 images**, finetuning to achieve **85%** detection accuracy.
- Built cooperative perception algorithms in **Python** for V2V communication, prioritizing emergency vehicles in simulation environment, mocking various traffic scenarios.