Sahir Mody

732-850-1382 • sahir.mody@gmail.com • sahirmody.com • linkedin.com/in/sahir-mody • github.com/Sahir1234

Experience

Software Development Engineer II • *Amazon* — December 2024 – PRESENT

- Onboarded a new team of engineers by hosting technical deep dives, architecture reviews, and hands-on technical walkthroughs
- Designed a scalable workflow to ensure AI-generated listings formed valid product families to maintain Catalog quality
- Partnered with Principal Engineers to align service design with immediate objectives and long-term architectural vision
- Implemented a scalable Apache Spark workflow on AWS EMR to deliver ad impression and click data to third-party vendors across the US and EU, processing tens of thousands of impressions per hour and enabling onboarding of 40+ new vendors
- Enhanced ad delivery system to handle campaign and advertiser-level overrides, supporting backfills and fine-grained analytics

Software Development Engineer I • *Amazon* — August 2022 – November 2024

- Designed and implemented a Java-based experimental validator to generate curated detail pages for high-value Amazon sellers, protecting 5,000+ item families from catalog instability and reducing frequent product page changes by approximately 45%
- Collaborated with Product Managers to clarify ambiguous requirements for the experimental validator and translated them into a comprehensive integration test suite, with appropriate metrics and SQL-queryable logs to monitor validator impact
- Investigated root cause of testing failures blocking cross-team deployments; led alignment across teams and transitioned tests from monolithic end-to-end to microservice contract testing by no-oping dependency calls, reducing failure rates by 50%
- Contributed to the design review and implementation of an asynchronous cache update workflow using AWS SQS and ECS, setting up CloudWatch alarms, dashboards, and queryable logs to monitor system behavior and alert on traffic spikes
- Automated critical standard operating procedures by writing Python scripts to query multiple diagnostic tools via APIs and aggregate results, reducing on-call engineers' average incident mitigation time from 1 hour to under 10 minutes
- Analyzed support ticket trends to identify/prioritize recurring issues, reducing team's operational load by 30% over 8 months
- Defined multi-year scope and coordinated parallel work streams for an AWS ECS service to reduce duplicated effort in seller listing experiences, collaborating with cross-team stakeholders on architecture, monitoring, and phased rollout
- Authored documentation, operational runbooks, AWS CloudWatch dashboards, and test and launch strategies for a new microservice, enabling 6+ developers to onboard quickly and troubleshoot efficiently with Amazon internal tools

Education

University of Maryland, College Park — August 2018 – May 2022

B.S. in Computer Science with Business Analytics Minor • *GPA: 3.96*

Technical Skills

Programming Languages: Java Typescript Python Scala SQL JavaScript

Technologies: Amazon Web Services Cloud Development Kit React Flask Keras Node.js Firebase

Projects

Moodbird Satisfaction Dashboard

- Built an API with Flask to perform sentiment analysis with Python NLTK on thousands of tweets based on search terms and created an interactive graphical dashboard with Chart.js to retrieve and summarize the analysis results in simple visualizations
- Project placed in the Top 3 out of 10 teams at the Capital One Software Engineering Summit Hackathon

Machine Learning Stock Predictor

- Implemented a web application tool to retrieve and pre-process a company's historical stock data with Pandas, train a neural network created with Keras, and display line graphs of the model's predictions after each epoch of training with C3.js