

Salim Mohamed

U.S Citizen | 503-519-8153 | salimmohamed.swe@gmail.com | [linkedin.com/in/salimamohamed](https://www.linkedin.com/in/salimamohamed) | salimmohamed.dev

EDUCATION

Oregon State University

June 2026

Bachelor of Science in Computer Science, Major GPA: 3.7/4.0

Corvallis, OR

Activities: *ColorStack, National Society of Black Engineers (NSBE), ACM @ OSU, AI Club @ OSU*

EXPERIENCE

Software Engineer

July 2026 – Present

IBM

San Jose, CA

- Diagnosed and fixed a silent data-truncation defect in a **Python MCP server** backing an internal AI agent, surfacing exact row counts the tool had been discarding and eliminating fabricated totals in agent responses.
- Built **macOS .pkg** installer bundling a self-contained **Python 3.12** runtime with dependencies resolved at build time, enabling zero-command offline installation with **SHA256** verification, code signing, and automated smoke tests.
- Developed chat application using **Node.js**, **Express**, and **WebSockets** wrapping a headless CLI AI agent, streaming JSON-line output to a browser UI with live markdown rendering.

Software Engineering Intern

June 2025 – August 2025

Voiya

Portland, OR

- Deployed **AWS Bedrock AgentCore** and **Claude Agent SDK** for production AI agents powering interpreter scheduling and call routing, processing 120+ daily bookings across 200+ languages.
- Developed backend microservices for interpreter availability lookup, language-based caller matching, and booking validation, deployed in a **distributed system** serving a telecommunications platform.
- Built multi-step client intake form using **React** and **TypeScript** with client-side validation, integrating with **AgentCore Gateway** APIs for real-time interpreter availability.

Software Engineering Intern

June 2024 – August 2024

Avaza Language Services

Nashville, TN

- Built scalable ETL pipeline using **Python** and **Pandas** to migrate 50,000+ call records from legacy Excel system to **PostgreSQL**, reducing data retrieval time by 85% and eliminating manual entry errors.
- Developed automated data validation scripts to clean and standardize translator records, client IDs, and call logs across 20+ languages, ensuring data integrity for 100+ daily translation requests.
- Designed database schema and REST API endpoints using **Flask** to enable real-time translator availability lookup, replacing manual Excel searches with sub-second queries.

PROJECTS

Argus | *Next.js, React, TypeScript, Convex, AWS Bedrock, Claude* | **1st Place, ColorStack Hackathon** [Website](#)

- Built autonomous AI agent using **Claude** via **AWS Bedrock** to monitor Polymarket trading data, flagging suspicious patterns like statistically improbable win rates and timing around major announcements.
- Developed full-stack application with **Next.js**, **React**, and **Convex** real-time database, integrating Polymarket Gamma API for live market data with a polished dashboard UI.
- Implemented responsible AI design with transparent evidence generation, full agent logging for accountability, and human-in-the-loop review for all alerts.

Real-Time Memory Analysis Engine | *C++, DirectX 11/12, FPGA, DMA, Win32 API*

[GitHub](#)

- Architected FPGA-based memory acquisition system using DMA, achieving sub-5ms latency and **208.7 MB/s** throughput by bypassing OS abstractions for direct physical memory access.
- Developed **C++** application with DirectX 11/12 overlay rendering and Win32 API hooks, processing **10,000+** memory events/second with real-time visualization.
- Implemented scatter/gather read patterns and caching strategies, achieving **5,804 ops/sec** read rate—outperforming community baselines by **39%** throughput and **12%** read rate.

TECHNICAL SKILLS

Languages: Python, C++, C#, JavaScript, TypeScript, Java, SQL, R, Swift, Kotlin, HTML, CSS

Frameworks & Libraries: React, Next.js, Node.js, Express, Flask, Pandas, NumPy, scikit-learn, TensorFlow, pytest, Jest, Selenium

Databases & Tools: PostgreSQL, MySQL, MongoDB, Supabase, Docker, Git, CI/CD (GitHub Actions), Linux

Cloud & Infrastructure: AWS, AWS Bedrock, Claude Agent SDK, DirectX 11/12, Win32 API, FPGA, DMA