

Ali Sayyed

📞 469-955-1847 | ✉ alitsayyed@gmail.com | 🔗 [LinkedIn](#) | 🌐 [GitHub](#) | 🇺🇸 US Citizen

SUMMARY

Software Engineer with 2+ years of experience in development, including architecting full-stack systems and scalable backend infrastructure. Self-taught, transitioned from Biochemistry into big tech, and currently pursuing a Master's in Computer Science at Rice University. Proven track record designing systems from scratch and driving cross-team technical decisions, with strong analytical and communication skills.

SKILLS

- Languages: Python, Java, Go, JavaScript, TypeScript, C, SQL, HTML/CSS
- Frameworks & Tools: React, Next.js, Django, FastAPI, gRPC, REST APIs, Docker, Git, GitHub, Azure Devops
- Cloud & Infrastructure: Google Cloud Platform, Azure, PostgreSQL, MongoDB, Virtual Machines, Kubernetes
- AI/Agent Tooling: Claude Code, GitHub Copilot, Pi Agent, N8N
- Core CS: Data Structures & Algorithms, Object-Oriented Programming, Functional Programming, Distributed Systems
- Operating Systems: Microsoft Windows, Mac OS X & Linux (Ubuntu & Kali)
- Soft Skills: Cross-functional collaboration, technical presentations, client communication

EXPERIENCE

Software Engineer Intern - Microsoft

May 2026 – July 2026

- Enabled natural language voice interactions within Microsoft's customer-facing support platform, targeting ~2,000 monthly conversions lost when users cannot talk to a human sales agent.
- Designed and built an end-to-end WebRTC-based Voice Agent for Ask Microsoft from scratch, capable of grounded answers and tool calling. WebRTC enabled low-latency, native bidirectional streaming, validated across 2,400+ tests.
- Built full-stack voice integration (React, FastAPI, Microsoft Agent Framework) with Microsoft's Voice Live API, architecting a REST-based workaround to reuse an existing private endpoint instead of exposing a new public WebSocket.
- Proved client-side VAD outperforms server-side VAD on speech-stop detection, escalating a related production slowdown directly to the Voice Live product team.

Software Engineer - Brain AI

Nov 2024 – May 2026

- Contributed to voice provider migration (Bland to Vapi) in Golang, identifying and refactoring an API request template architecture that was over-fit to Bland's schema, enabling reusable, provider-agnostic integrations going forward.
- Automated an abandoned cart recovery pipeline using Shopify's GraphQL API, introducing outbound calling as a new recovery channel.
- Researched design patterns and created UI mockups for core SaaS frontend, accelerating implementation for the engineering team.
- Designed and built automated AR invoice outreach pipelines (email + calling) through direct requirements-gathering with the client, eliminating manual email outreach and reducing manual processes by ~80%.
- Built a custom Google Apps Script-based data-upload interface for the AR client, enabling secure data ingestion without direct access.

Software Engineer Intern - Legal Pro System

Aug 2024 – Nov 2024

- Independently built a standalone WhatsApp Web-style real-time chat prototype (Django, Angular, WebSockets) for a legal case management SaaS, applying self-taught Python and JavaScript skills with minimal onboarding support.

PROJECTS

Developer Portfolio: <https://www.alitsayyed.com>

Web Development: [AI Website Builder](#)

- Web application that generates frontend code using AI. Microservice architecture built with a Golang backend (Hexagonal DDD), Temporal workflow orchestration, AI agent service (FastAPI), and Next.js.
- Utilized gRPC for efficient frontend-backend communication and REST APIs for seamless AI agent integration.
- Implemented OAuth authentication with Google and JWT-based session management for secure user login.

Low Level Programming

- Built a network packet analyzer in C capable of intercepting and analyzing real-time network traffic.
- Designed and implemented a custom Unix shell in C with command parsing and built-in system call functionality.

Data Structure and Algorithm Implementations

- Implemented advanced algorithmic solutions including an A* search-based puzzle solver, percolation analysis using union-find data structures, and an optimized nearest neighbor search with k-d tree spatial indexing.

EDUCATION

Rice University – Master's in Computer Science (Specializing in AI/ML)

Aug 2025 – Dec 2027

- Relevant coursework: Databases, Algorithms, Cybersecurity, Programming Languages

University of Texas at Dallas – [Data Structures & Algorithms Summer Workshop](#)

May 2025 – July 2025

University of Texas at Dallas – B.S. Biochemistry (4.0 GPA Summa Cum Laude)

Aug 2018 – May 2022

AWARDS

Dean's List, Richardson, TX

Aug 2018 – May 2022

- Maintained top 10% GPA in the School of Natural Sciences and Mathematics.

AES Distinction Scholarship, Richardson, TX

- Awarded a full-ride scholarship to high school students with competitive grades.