

SUMMARY

Software Engineer with 4+ years building secure, data-intensive distributed systems at scale. At Amazon, optimized petabyte-scale data pipelines for \$1.3M in quarterly savings and led security/compliance across 55PB of privacy-sensitive data with zero violations. Deep expertise in Python, AWS, distributed systems, and full-stack development, plus a track record coaching 200+ engineers into roles at top tech companies.

TECHNICAL SKILLS & INTERESTS

Programming Languages: Python, JavaScript, TypeScript, Java, SQL, Swift, C++, C, R | **Frameworks:** React, Node.js, Rails, jQuery, Flask
Cloud & Tools: AWS, Git, Docker, CI/CD, LLVM, MySQL, SQLite | **Concepts:** Data Pipelines, Distributed Systems, Security Hardening, Full-Stack Development, LLM Integration (Anthropic/Claude API), AI-Assisted Development, REST APIs | **Spoken Languages:** English (native), Spanish (native)

SOFTWARE ENGINEERING EXPERIENCE

Coachable

Software Engineer

New York, NY

May 2023-Present

Coachable.dev is an education startup that helps engineers land roles at top tech companies through software-driven career prep and coaching.

- Engineered and scaled the company's coaching platform and data systems, supporting 80+ active learners and sustaining a 95% placement rate into roles at Google, Amazon, Meta, Microsoft, mid-sized and startup companies.
- Designed analytics pipelines to track student performance, hiring outcomes, and curriculum insights; enabled 3x faster reporting and improved data accuracy by 40%.
- Built and maintained internal tooling in Python, React, and AWS, improving coach-to-student efficiency by 50%.
- Coached 200+ students in computer science, data structures, algorithms, and problem solving fundamentals; guided students through 1000+ mock interviews resulting in hundreds of offers.
- Collaborated with the founding team to scale operations and content delivery, contributing to >300% user growth year over year.

Amazon Inc.

Software Development Engineer, Alexa Data Depot Team

Cambridge, MA

July 2021-January 2023

The Alexa Data Depot team manages high-volume, privacy-sensitive data pipelines powering customer experiences and analytics across Alexa devices.

- Led data deletion and retention workflows handling 700M+ objects (>55 PB of data) across distributed S3 buckets, achieving \$1.3M in quarterly cost savings through optimized lifecycle policies and automation in Python and Java.
- Served as Security Lead for the team, identifying and resolving 80+ security risks (including 25+ high-risk and 2 critical, org-wide escalations) through IAM hardening, encryption enforcement, and privacy compliance.
- Owned and maintained the data deletion job ensuring GDPR and CCPA compliance across petabyte-scale datasets, collaborating with privacy/legal teams to ensure zero violations.
- Owned the monthly on-call rotation, resolving 300+ tickets at 99.9% SLA.
- Partnered with cross-functional teams to enhance data observability and improve pipeline recovery times by 40%.

SELECTED PROJECTS

Automated CS Grading System ([LLVM Research](#))

University of Illinois Urbana-Champaign

- Developed an automated grading and hint-generation system for large CS courses using LLVM, C/C++, and Python, improving grading throughput by 10x.
- One of ~40 students nationally selected for the DREU Research Program, collaborating directly with graduate students and faculty.

Ledgerline - Edge-Native Event-Stream API (github.com/aaguasvivas/ledgerline)

- Built an idempotent, tamper-evident event-stream API on Cloudflare Workers + Durable Objects: strong per-stream ordering, exactly-once appends via idempotency keys, and a SHA-256 hash-chained audit log with O(1) head and full-chain verification.
- Added per-key token-bucket rate limiting, real-time windowed rollups, and a D1 read model for paginated history; fully tested with Vitest/Miniflare and deployed globally on the edge.

EDUCATION

Harvard University: Cambridge, MA

May 2021

A.B. Computer Science | Secondary in Ethnicity, Migration and Rights | Spanish Citation

Honors: Forbes 30 Under 30 Scholar, HSF Scholar, Tuskegee Airmen Scholar, NSA Scholar, Dominican Day Parade Scholar, Harvard Business School Virtual Venture in Management Program (VVM), Google Summer Series Participant