

ADELSON AGUASVIVAS

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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, and distributed systems; builds full-stack products end to end with AI-accelerated workflows (Claude Code, Codex, Cursor).

TECHNICAL SKILLS & INTERESTS

Programming Languages: Python, TypeScript, JavaScript, Java, SQL, C++, C, R | **Frameworks:** React, Node.js, Rails, Flask
Cloud & Tools: AWS, Cloudflare Workers, Git, Docker, CI/CD, LLVM, MySQL, SQLite | **Concepts:** Distributed Systems, Data Pipelines, Security Hardening, Full-Stack Development, REST APIs, LLM Integration (Claude API), AI-Accelerated Development (Claude Code, Codex, Cursor) | **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, and startups.
- 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, including LLM-powered resume-generation and delivery pipelines, improving coach-to-student efficiency by 50%.
- Coached 200+ students in data structures, algorithms, and problem-solving fundamentals; guided students through 1,000+ mock interviews resulting in hundreds of offers.
- Collaborated with the founding team to scale operations, contributing to 300%+ year-over-year user growth.

Amazon

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 Alexa customer experiences and analytics.

- 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 and 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

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

- Built an idempotent, tamper-evident event-stream API on Cloudflare Workers and 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; 68 tests (Vitest + Miniflare) with CI on every push; deployed live at ledgerline.adelsonaguasvivas.workers.dev.

Automated CS Grading System, LLVM Research (github.com/aaguasvivas/pdg) *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.

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