

SKILLS

- **Languages:** Java, Python, SQL, Rust, R, Bash
- **Cloud:** AWS, Distributed Systems, High Availability, Scalability, Serverless, Microservices
- **Development Tools:** Git, Linux, CI/CD, Test Automation, Monitoring, Logging
- **Methodologies + Other:** Agile/Scrum, System Design, Data Management, Compliance

EXPERIENCE

- **Amazon Web Services (AWS) DynamoDB** Seattle, WA
Software Engineer *January 2023 – Present*
 - **Metadata Cleanup Sweeper:** Built sweeper that reduced 1.1M table entries to 100K, preventing future buildup; cut anti-entropy job runtime from 6 hours to 5 minutes.
 - **Multi-Region Strong Consistency Launch:** Conducted 750K TPS scale test, benchmarked latency, and identified 15 launch-blocking bugs; ensured stability for early access and public launch.
 - **Load Balancing Algorithm:** Designed and implemented round-robin assignment for multi-region replication, sustaining 99.99% availability while meeting internal latency SLAs.
 - **Control Plane Canary Framework:** Developed robust framework for multi-region strong consistency, enabling consistent, reliable, and thorough creation of 59 canaries.
 - **Robust Delete Path Retries:** Added retries to the multi-region consistency delete path, reducing non-actionable or redundant oncall pages by 28 per month.
 - **Availability & Oncall:** Participated in oncall rotation before and through launch of multi-region strong consistency, maintaining 99.99% availability for customers.
 - **Monitoring & Dashboards:** Designed initial dashboard for multi-region strong consistency and defined 22 critical KPIs for leadership visibility and operational health.
 - **Operational Alarming & Runbooks:** Added 10 new tickets and alarms to guide operators in maintaining 99.99% availability; authored runbooks to direct responses.
 - **GDPR Cleanup Automation:** Designed cross-service automation for account-deletion cleanup (GTV1, GTV2, multi-region), eliminating ~40 manual tickets monthly across 3 teams.
 - **Service-to-Service Security:** Implemented resilient service-to-service interactions using jittered retries and IAM policies, adhering to the rule of least privilege.
 - **Mentorship:** Guided 2 interns and 4 junior engineers with technical teaching and code reviews, accelerating onboarding and enabling delivery of production-ready code.
- **Amazon Web Services (AWS) DynamoDB** Seattle, WA
Software Engineering Intern *June 2022 – September 2022*
 - **Parallelization Project:** Parallelized a core engineering workflow in Python using multi-threading, saving an estimated 5 software engineering years annually.

VOLUNTEER

- **Camp Oasis** Seattle, WA
Volunteer Instructor *Summer 2025*
 - **Teaching:** Led and taught a class of 50+ students (ages 6–13) living with Crohn's disease or ulcerative colitis, introducing programming fundamentals through Scratch.

PROJECTS

- **GDPR-Friendly Key-Value Store:** Designed prototype data store with compliance-focused API for GDPR workflows: create, put, export, and delete with full audit logging.

EDUCATION

- **University of Washington** Seattle, WA
BA with Concentration in Information Systems; GPA: 3.89 *Sep. 2018 – Dec. 2021*