

Edward Qin

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EDUCATION

University of Washington

Seattle, WA

Master of Science in Computer Science

March 2025

- GPA: 3.96

- Coursework: Distributed Systems, Operating Systems, Database Systems, Compilers, Cryptography, NLP

Bachelor of Science in Computer Science

December 2023

EXPERIENCE

Software Engineer

March 2025 – Present

Snowflake

Bellevue, WA

- Driving customer adoption 30pp by building out Trust Center Platform observability and notifications to help customers identify security violations in their Snowflake accounts
- Increased internal observability and operational readiness by defining Production availability and latency SLOs, building dashboards and PagerDuty alerts on Grafana and internal Snowflake metrics
- Drove internal adoption of notification platform, launching critical violation digests and core extensibility feature
- Resolved customer-impacting metadata issues by diagnosing and cleaning up duplicated state in replicated slices

Software Engineer Intern

September 2024 – December 2024

Amazon

Seattle, WA

- Demonstrated direct value of the *Explore with Alexa* service to hundreds of thousands of users by designing system and tradeoffs for Alexa feature to generate on-demand reports of user learning progress
- Led end-to-end integration using prompt engineering and retrieval-augmented generation on LLM architecture; spearheaded design, wrote full-stack architecture and prompt instructions, and tested on device
- Architected full data flow, utilizing AWS DynamoDB for the backend and CloudFront and S3 for the frontend

Software Engineer Intern

June 2024 – September 2024

Snowflake

Bellevue, WA

- Expanded team's insight into optimizer's query plan and cardinality estimation quality for thousands of customer queries across 100 production deployments by coding internal Python query execution script and Java compiler-side random query plan generation
- Took ownership over design by writing design documents with multiple approaches, theoretically analyzing confidence bounds for the metric generated, and testing the metrics empirically on customer queries

Software Engineer Intern

June 2023 – September 2023

Snowflake

Bellevue, WA

- Improved production-level observability on all user-defined functions (UDFs), providing 67% more UDF-level granular CPU/memory usage statistics on both Java and Python UDFs
- Designed and implemented logic to gather stats from execution runtime in C++; pipelined data and incorporated visualization in JavaScript front-end

RESEARCH/PROJECTS

Undergraduate Research

April 2024 – June 2024

University of Washington Systems Lab

Seattle, WA

- Developed Python event-based network simulation to measure effects of I/O patterns, SSD congestion, and network congestion on read latency of disaggregated storage data placement scheme
- Gained hands-on experience reading academic papers to learn complex computer networks and storage systems

Distributed Key-Value Store | Java

September 2023 – December 2023

- Implemented course project for distributed key-value store that was linearizable, fault-tolerant, dynamically sharded, and supported multi-key cross-shard transactions
- Created design doc for each project phase and implemented core 2-Phase Commit and MultiPaxos protocols

TECHNICAL SKILLS

Languages: C/C++, Java, Python, SQL, OCaml, Scheme, Ruby, Go, x86, R, TypeScript, JavaScript, HTML/CSS

Frameworks/Platforms: AWS, GCP, Kubernetes, Docker, React, React Native, Spark, PyTorch, TensorFlow

Tools: Git, Linux, JIRA, PagerDuty, Jenkins, macOS, Cursor, VSCode, IntelliJ, Windows, Figma