

Leander Mathisen

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Skills

Languages: C#, Java, C++, C, Python, SQL, JavaScript, HTML/CSS

Technologies: Kubernetes, .NET, Docker, Kafka, CI/CD, Azure, AWS

Experience

Software Engineer II, Microsoft – Redmond, WA March 2026 – Present

- Developed a custom AKS deployment to detect and clean up orphaned private network connections caused by Strimzi interactions, eliminating recurring stuck pod investigations and unblocking a stalled connector release.
- Delivered two new messaging connectors to production: a Sample Data connector using shared Kafka clusters, optimized file parsing, and persistent volumes to support over **10,000** active instances, and an HTTP connector secured with a custom Java Anti-SSRF library before Public Preview release.
- Reduced production incident volume by shipping reliability fixes across managed identity, encryption key enablement, disaster recovery, and networking services.

Software Engineer, Microsoft – Redmond, WA Oct 2023 – March 2026

- Built an automated daily test pipeline with **Azure Functions** for **Cosmos DB** migration, optimized queries to reduce request costs by **20%**, and implemented object flags that cut the largest production container usage by up to **80%**.
- Delivered **100%** disaster recovery migration to the regional resource provider by refactoring orchestrations into versioned APIs and creating background reconciliation jobs for failed operations.
- Implemented end-to-end private networking support for messaging connectors, including virtual network validation and service association link lifecycle management via a network resource provider client.
- Raised test pipeline success rates from below **20% to 50%** while halving run duration, unblocking over **100 engineers**.

Software Engineering Intern, Microsoft – Redmond, WA May 2022 – Aug 2022

- Created three **Kafka** management protocol handler endpoints for Azure Portal consumer group management: batch offset fetching, partition message queue information fetching, and offset committing.
- Developed end-to-end unit tests with Shared Access Signature authentication that created sample Kafka consumers and validated all three endpoints.

Software Engineering Intern, Digital Global Systems – Tysons, VA May 2021 – May 2022

- Optimized a real-time RF signal analytics module, increasing channel processing capacity by **13x** to support over **10,000** concurrent channels within a 2.5-second cycle.
- Built a Python/Streamlit frequency spectrum visualization tool enabling users to generate, pause, and replay animated 1-hour spectrum analyses.
- Engineered a C++ anomaly detection module with SQL-based mask data retrieval, reducing spectrum anomaly identification latency to under **3 seconds**.

Projects

Geographic Information Systems Software

- Built a **C++** geographic information system with GTK for real-time map rendering, street search, and point-of-interest queries across multiple cities.
- Improved map responsiveness by **25%** by restricting map information data structures and sped up retrieving street intersections by **10 seconds** using preloaded intersections of streets.
- Implemented world resizing for search queries of street names and highlighting intersections and POIs.

Education

University of Toronto – BAsC in Computer Engineering

2019 - 2023