

Sabrina Xue

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EDUCATION

University of Michigan - Ann Arbor

Bachelor of Science in Computer Science

Ann Arbor, MI

August 2022 - December 2025

Relevant Coursework: Data Structures & Algorithms | Programming & Data Structures | Web Systems | Databases | User Interface

Development | Computer Organization | Human-Centered Software Development | Introduction to Artificial Intelligence | Git Operations

Leadership: Director of Web Dev - Kappa Theta Pi Professional Technology Fraternity | Web Dev Executive - Michigan Snowboarding Club

PROJECTS

Instructor Recommendation AI System

Chicago, IL

AI Systems Engineer (Independent Project)

November 2025 - December 2025

- Designed and deployed a multi-agent AI system using Google's ADK to deliver personalized snow-sport instructor recommendations
- Engineered a secure MCP server on Google Cloud Run, enabling AI agents to retrieve authenticated instructor data via tool queries
- Integrated ADK agents with Cloud Run-hosted MCP server using IAM identity tokens for secure end-to-end tool execution
- Augmented internal instructor data with external knowledge sources like the Wikipedia API to improve recommendation quality
- Containerized AI agent and MCP services using Docker, Artifact Registry, and ADK CLI, enabling serverless scaling on Cloud Run
- Tested system with multi-step queries, combining private instructor data and public knowledge for context-aware recommendations

EXPERIENCE

Target Corporation

Minneapolis, Minnesota

Software Engineering Intern (Mobile)

June 2025 - August 2025

- Deployed full-stack serial number scanning feature impacting 12,000+ daily users in Android App Maestro for fraud protection
- Achieved projected annual savings of \$15M-\$60M by reducing fraudulent returns with comprehensive serial number logging
- Enabled image display for regulated items in Maestro by updating backend data model, API response, and UI screens
- Wrote Kotlin unit tests, Compose UI tests, and performed regression testing to ensure feature reliability and app stability
- Integrated Android localization framework using string resources, improving multilingual user experiences for 40,000+ employees
- Implemented logging and monitoring with Grafana and Kibana, allowing performance tracking and backend issue diagnostics

Obce Na Wu

Prague, Czech Republic

Software Developer (Web)

January 2025 - May 2025

- Developed 30+ RESTful Flask API endpoints to support core admin functionality in a language-learning app, tested with Postman
- Engineered and implemented a PostgreSQL database with 15+ relational tables to facilitate core platform features
- Built a system logging feature with SQLAlchemy to track backend events, supporting future filtering and UI display for diagnostics
- Collaborated with frontend developers and client stakeholders to refine API design and database schema for evolving needs

Ithaca Harbors, Inc.

Ann Arbor, Michigan

Software Engineering Intern (Platform)

May 2024 - August 2024

- Deployed app that created dynamic AWS app configuration profiles with automatic documentation and repository mirroring
- Created and maintained GitLab CI/CD pipelines to automate deployment for 10+ apps for scalable, dependable, and efficient code
- Migrated 12 apps from Sidecar to Sirius, using VMware CloudHealth to identify a projected 120 thousand dollars in annual savings.
- Enabled New Relic trial for 60 apps on a production Kubernetes cluster by configuring an external secret and AWS SSM access

AMOpportunities

Chicago, Illinois

Software Engineering Intern (DevOps)

May 2023 - August 2023

- Leveraged GitHub Actions to migrate 30+ code repositories from GitLab to GitHub while updating pipelines for each repository
- Configured observability for 12 applications with DataDog and AWS CloudWatch to enable application monitoring
- Operated serverless framework and Boto3 module to automate secrets per region with lambda functions for application maintenance
- Utilized AWS-CLI to dynamically build a new staging environment by automatically generating ports, listeners, and secrets

PROFICIENCIES

- Frameworks:** Kotlin, Jetpack Compose, C++, Python, JavaScript, Dart, React, HTML, CSS, SQL, Shell scripting, YAML
- Cloud/DevOps:** AWS (EC2, SSM, Lambda, CLI), Kubernetes, Docker, GitHub Actions, CI/CD pipelines, Git
- Monitoring/Management:** New Relic, DataDog, OpenLens, Grafana, Kibana, JFrog Artifactory, JIRA, Confluence, Agile