

# Claire Shen

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## EDUCATION

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**University of Waterloo**, Bachelor of Computer Science 09.2021 – 04.2027  
**Wilfrid Laurier University**, Bachelor of Business Administration, Finance Concentration 09.2021 – 04.2027

## SKILLS

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### Programming Languages

Java, Python, TypeScript, JavaScript, Go, C++, C, Rust, R

### Tools, Frameworks, and Libraries

Kubernetes, Docker, AWS (EC2, S3, IAM, CloudWatch, EMR, Glue, RDS, DynamoDB, Athena), Spring Boot, Node.js, React, Angular, PySpark, MySQL, REST APIs, Terraform, CI/CD, SonarQube, Veracode, JaCoCo, Postman, Mockito, GitHub, Bitbucket, Tomcat, Flask, Redis

## EXPERIENCE

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**Software Development Engineer Intern**, Amazon Web Services 10.2025 – Present  
Seattle, USA

- Centralized **200TB/day DynamoDB** request-router log analysis using **EMR + Athena**, cutting ad-hoc incident query time by **1–2 hours per event** and reducing on-call load.
- Shipped a forecasting dashboard projecting host ingestion demand, accelerating **CAPEX planning** for **20+ internal DynamoDB teams**.
- Built **REST APIs** surfacing live **CloudWatch metrics** into a consolidated dashboard used by **50+ TPMs** for weekly and quarterly reviews.

**Software Development Engineer Intern**, Amazon Web Services 05.2025 – 08.2025  
Vancouver, Canada

- Accelerated delivery of **12 RDS control-plane features** by **6–9 months** by **reducing deployment coupling** and **improving rollback safety** across control-plane services.
- Engineered a **thread-safe transient state store** for job tracking, enabling **reliable concurrent execution of Rhai scripts at 100 TPS** in a high-throughput orchestrator.
- Designed and implemented a **durable persistence layer** to preserve data integrity across **server crashes and EC2 instance restarts**, reducing recovery time by **30%**

**Solutions Architect Intern**, Fidelity Investments 01.2025 – 04.2025  
Toronto, Canada

- Built a Java-based fund launch platform that streamlined the launch of **300+** mutual funds for portfolio managers and their **80+** team members, replacing Excel workflows.
- Worked on a backend **migration to Spring Boot**, refactoring the DAO, service, and controller layers for cleaner, more maintainable architecture.
- Containerized the application with **Docker**, creating an image deployable on **Tomcat** for consistent and simplified deployment.

**Backend Software Engineer Intern**, Toronto Dominion Bank (TD) 01.2024 – 05.2024  
Toronto, Canada


- Initiated a developer-facing Python application that automated the gathering of **code quality metrics** from SonarQube for **80+ APIs**.
- Achieved **90%+** code coverage on JaCoCo report with **JUnit4** test cases.

**Frontend Software Engineer Intern**, Toronto Dominion Bank (TD) 01.2023 – 04.2023  
Toronto, Canada


- Implemented pop-up features using Angular for the Easy Apply credit card web application, used by **1000+** applicants daily.
- Created an age verification checkpoint based on province to streamline the credit card **eligibility process**, increasing retention by **15%**.

## PROJECTS

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**Pizza Macro Calculator**, JavaScript, HTML/CSS, Bootstrap 

- A website that eliminates the manual task of searching a PDF to calculate nutritional information for pizzas.
- Used by **50+** UWaterloo students monthly to reduce the time spent calculating from **10 minutes to 1 minute**

**Strength Club Website**, React, Tailwind CSS, TypeScript, Yarn 

- A React web application designed to highlight the achievements and initiatives of the UWaterloo Strength Club