

DANIEL TIAN

danieltian059@gmail.com | LinkedIn | 343-987-9173

SUMMARY

- **M.Sc. Computer Science new graduate** specializing in backend engineering and cloud-native applications on AWS, seeking **junior software engineer / backend** roles.
- Hands-on experience building **Java Spring Boot microservices**, designing relational schemas, and integrating message queues, caches, and REST APIs in both an industry internship and academic projects.
- Comfortable with **DevOps practices** (Docker, Linux, GitHub Actions CI/CD, CloudFormation) and writing unit tests (JUnit, Mockito) to keep services maintainable and reliable.
- Eligible to work in Canada under PGWP until 2028.

EDUCATION

Master of Science (M.Sc.) in Computer Science

University of Ottawa, Ottawa, Canada

Sep 2023 – Mar 2025

Bachelor of Engineering (B.Eng.) in Computer Science

Hunan Normal University, Changsha, China

Sep 2019 – Jun 2023

SKILLS

- **Languages:** Java, Python, JavaScript, SQL
- **Backend:** Spring Frameworks(Boot and Cloud), REST APIs, Microservices, Security (JWT, Spring Security), Swagger
- **Cloud Platforms:** AWS (EC2, RDS, DynamoDB, Lambda, SQS, CloudFormation, CloudWatch), AliCloud
- **DevOps:** Docker, Linux, Git, GitHub Actions (CI/CD),
- **Database/Cache:** PostgreSQL, MySQL, Redis, Elasticsearch
- **Practices:** Agile/Scrum, Unit Testing (JUnit, Mockito), LLM API Integration

WORK EXPERIENCE

Invision Inc.

Software Development Engineer Intern

Toronto, ON, Canada

May 2025 – Aug 2025

- Contributed as a backend engineer to **Financial Pulse**, Invision's social-style financial tracking platform built on **AWS** (EC2, RDS, DynamoDB, SQS, Lambda).
- Implemented and maintained **Spring Boot microservices** (e.g., account and content services), including RESTful APIs, request/response DTOs, and PostgreSQL database schemas for features such as post publishing, following, and personalized feeds.
- Added asynchronous processing using **SQS + Lambda** to offload non-critical tasks (notifications and analytics), reducing average response time for write APIs by approximately **40%** in staging load tests.
- Helped design and refine **CI/CD pipelines** with GitHub Actions and AWS CloudFormation templates, automating build, test, and deployment to development, staging, and production environments.
- Secured internal and public APIs with **Spring Security (JWT)** and role-based authorization, and documented endpoints with Swagger/OpenAPI to improve collaboration with frontend and QA teams.

PROJECTS

High-Availability E-commerce Platform

Dec 2022 – May 2023

Academic Project

Stack: Java, Spring Cloud, RabbitMQ, Redis, Elasticsearch, Docker

- Developed a **microservices-based e-commerce system** with 10+ Spring Cloud services, supporting horizontal scaling and clear fault isolation between modules.
- Used **RabbitMQ** and distributed locks (**Redisson**) to handle high-concurrency flash-sale ordering in test scenarios, reducing perceived order latency from roughly **2s** to about **200ms**.
- Integrated **Elasticsearch** for product search and ranking, significantly improving query performance and user experience in search-heavy use cases.
- Containerized all services with **Docker**.