

# Stephen Guo

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## EDUCATION

### University of Toronto

Honours Bachelor of Science, Computer Science

cGPA: 3.57 / 4.0

Toronto, ON

September 2019 - April 2024

## EXPERIENCE

### Leap Softwares

Software Engineer

Toronto, ON

October 2024 - Present

- Built secure, type-safe **GraphQL** endpoints and automated PDF/Excel reporting tools for a financial services management system, using **TypeScript**, **NestJS**, **PostgreSQL**, **TypeORM**, and **Redis**, ensuring reliable data delivery and improved decision-making
- Introduced **Azure** Monitor alerts and health checks integrated with Slack via **Terraform**, **Rust**, and websockets, cutting service downtime by 95% and improving ticket response times to under 5 minutes
- Optimized core reporting features by analyzing **PostgreSQL** query plans and adding targeted indexes, cutting average response times from 2s to under 400ms
- Migrated data from a legacy financial application with a non-normalized schema and redundant records to a modern platform, designing scripts that cleaned, and transformed 100,000+ rows with zero downtime or data loss

### BlueCat Networks

Software Engineer Co-op

Toronto, ON

May 2021 - April 2022

- Deployed and configured **Kubernetes** clusters on **AWS** using **Helm**, **Terraform**, **Terragrunt** and **GitLab CI**, to automate and scale production deployments, reducing errors and accelerating release cycles.
- Developed a **Python** query microservice using **SQL**, **Docker**, and **Apache Airflow**, to automate daily report generation from terabytes of data, cutting report time to under 5 minutes
- Wrote **Kubernetes** horizontal and vertical pod autoscalers to dynamically adjust resources, increasing max traffic by over 9 times and improving service stability during spikes.
- Built REST APIs, integration tests, and end-to-end tests for a **Java** codebase with **Gradle** and **Jenkins**, ensuring higher code quality and seamless deployment in CI/CD pipelines.
- Configured **Prometheus** Alertmanager and **Grafana** dashboards for production monitoring, reducing alert response times by 85% through improved error tracking and timely notifications.
- Merged 7 pull requests for highly requested features for the open source Trino Helm chart on GitHub, enhancing database security and scalability features based on user feedback, leading to broader adoption and improved reliability.

## PROJECTS

### GoRust Recipe Gallery

🐙 GitHub

- Developed a fault-tolerant recipe sharing application featuring a responsive, modern UI styled with **Tailwind CSS**, leveraging **Rust** for the frontend and **Go** for the backend to deliver high performance and maintainable code.
- Designed and implemented RESTful APIs, complemented by comprehensive end-to-end test coverage using **Playwright**, ensuring code reliability and enabling automated validation of complex user interactions.

## TECHNICAL SKILLS

**Languages:** JavaScript/TypeScript, Python, Java, Go, Rust, C, Bash/Shell, SQL

**Libraries/Frameworks:** GraphQL, NestJS, TypeORM, Tailwind CSS, Svelte, Jest, Playwright

**Other:** Kubernetes, Helm, Terraform, AWS, Azure, GitLab CI, Docker, Unix/Linux, Git, Vim