Conrad Mo

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EDUCATION

University of Toronto

Toronto, Ontario

Honours Bachelor of Science in Computer Science (CO-OP)

Sep. 2022 - Apr. 2027

• Relevant Coursework: Data Structures & Algorithms, Object-Oriented Programming

EXPERIENCE

Shopify

May 2025 – August 2025

Infrastructure Engineering Intern

Toronto, ON

- $\bullet \ \ \text{Minimized cascading failure rate in external services by } \ 80\% \ \ \text{by implementing error lumping for Shopify toolkit}.$
- Reduced 80% of unnecessary Shopify traffic by implementing Cloudflare WAF rules to rate limit web-crawlers.
- \bullet Cut incident response time by 98% by implementing an LLM to streamline blackhole job command generation.
- Reduced post-mitigation errors by 20% through impact analysis of blackholing across all Shopify job classes.
- Accelerated incident mitigation by 35% with automated Grafana alerts on RPM thresholds in Shopify services.
- Increased test coverage to 95% by writing 70+ test cases for untested features in Shopify internal tools.

Hack the Valley

February 2024 – Present

Software Developer

Toronto, ON

- Built food-logging features with **TypeScript** and **React** in QR code app to improve tracking for **400**+ hackers.
- Resolved over **250** type errors by migrating legacy code to newer **TypeScript** frameworks and **Node.js** versions.
- Overhauled admin panels to support mobile devices, improving the volunteering experience for 30+ volunteers.

Northern Labs

January 2024 – April 2024

Software Engineer Intern

Toronto, ON

- Spearheaded the development of a proprietary **Web3** microtransaction paywall with a team of 2 interns, resulting in a **40%** improvement in user transaction processing times, using **React** and **TypeScript**.
- Devised scalable backend components with **NestJS**, using **PostgreSQL** and **Prisma ORM** to store user data.
- Improved deployment time by 30% by deploying containerized apps with Docker, Kubernetes, and AWS ECS.
- Wrote over 40 UI tests with 95% coverage for paywall components to guarantee reliability for customer use.

Projects

Eventful | Javascript, React Native, Rust, Docker, AWS, Github Actions, OpenAI API

- Guided a team of three close collaborators in conceiving, designing, and engineering a mobile application that autonomously generates event items and efficiently tailors costs to accommodate users' budget constraints.
- Designed and built the **React Native** frontend for the app, ensuring an intuitive UI for mobile devices.
- Leveraged Rust to construct the backend to reduce any latency between REST API calls and calculations.
- Implemented **concurrency** to execute multiple **REST API** calls in parallel instead of sequentially, boosting backend performance by **92%** by significantly reducing wait times during high-volume request processing.

SpeechSummarizer | Dart, Flutter, NodeJS, GCP, Cohere API

- Oversaw a 3-member team in developing the award-winning mobile app, recognized as the Best Mobile Hack at Ignition Hacks 2023, which efficiently condenses lengthy meetings into concise minutes.
- Architected the frontend in **Flutter** for the project, guaranteeing a cross platform responsive user experience.
- Utilized **Dart** to convert files into audio and seamlessly upload them to **Google Cloud Storage Buckets**, which in collaboration with our **NodeJS** backend was used to generate concise content summaries.

TECHNICAL SKILLS

Languages: Python, Java, C, C++, Ruby, JavaScript, TypeScript, Dart, Bash, Rust, SQL

Technologies: React, React Native, Flutter, NodeJS, FastAPI, Flask, Rails, PostgreSQL, NestJS, Prisma, Django Tools: Git, Docker, Kubernetes, Linux, GCP, Azure, AWS, Firebase, Github, JUnit, Mockito, Android Studio, Jira