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*
- Minimized cascading failure rate in external services by **80%** by implementing error lumping for Shopify toolkit.
- Reduced **80%** of unnecessary Shopify traffic by implementing **Cloudflare WAF** rules to rate limit web-crawlers.
- 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, 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