

Daniel Chen

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Education

University of Waterloo

B.A.Sc. in Computer Engineering, Honours — 3.7/4.0 GPA

Sep 2022 – Apr 2027

Waterloo, ON

- **Involvements:** UW Orbital Satellite Design Team, Intramurals (Beach Volleyball), Creative Writing Club (Founder)
- **Hackathons:** TreeHacks 2025, StormHacks 2022 (EdTech Winner), YRHacks 2022 (IBM Open Source Winner)

Experience

Rippling

Software Engineering Intern (Incoming Winter 2026)

Feb 2026 – Apr 2026

New York, NY

Squint

Software Engineering Intern

May 2025 – Aug 2025

San Francisco, CA

- Architected **real-time pub/sub notifications framework & pipeline**, enabling **SLA-compliant alerts** for enterprise clients by routing system events to create **300+ daily** downstream notifications
- Integrated notifications system with **roles and subscriptions** to deliver targeted email, in-app, or SMS messages
- Built dependency-aware deployment system that performs static analysis on import graphs and code diffs to identify impacted services, **enabling automated partial rollouts** and **cutting deployment latency by 90%**
- Engineered **multi-language data models transformer** by parsing and editing **TypeScript & Python ASTs**, enabling **unified type safety** across the entire stack: web, mobile, and backend

Hack the North

Backend & Infrastructure Lead

Mar 2023 – Jan 2025

Waterloo, ON

- **Led 6-person engineering team** to ship shift scheduling and hardware inventory tools to **1500+ event attendees**
- **Launched bus registration platform** to **1000+ hackers**, featuring live capacity tracking and email confirmations
- Overhauled CI/CD pipelines, **speeding up builds by 35%** by parallelising testing and type checking with Buildkite
- Profiled performance bottlenecks by adding **OpenTelemetry tracing** to Grafana dashboards on **Kubernetes**

Magna (YC W22)

Software Engineering Intern

Sep 2024 – Dec 2024

New York, NY

- Enabled **one-click creation and deployment** of claim portals, scaling to distribute **1M+** digital asset allocations
- Investigated and **improved initial load times by >60%** for client sites by caching blockchain reads in **Redis**
- Migrated internal systems & libraries to an event-based architecture, reducing query boilerplate by **50%**

Dropbase (YC W20)

Software Engineering Intern

May 2023 – Aug 2023

Remote

- **Shipped static analysis tool** for platform's **custom SQL dialect** by recursively processing an abstract syntax tree
- Architected platform to clone, sync, and visualise databases for **3000+ enterprise users** in **Python** and **React**
- **Designed merge conflict resolution system** to handle data mismatches, reducing user-reported errors by **20%**
- Built a unified API to seamlessly query and filter **8 data sources** such as MySQL, Airtable, and Stripe

Projects

Mandown 📄 | Python, Qt

- Created a CLI and GUI to download and convert webcomics into e-ink-optimised files open-source over **3 years**
- Expanded support for new formats and features based on user demand, minimising regressions with E2E tests
- Implemented **image caching and multithreading** to increase download and processing speeds by **300%**

Technical Skills

Languages: Python, TypeScript/JavaScript, Rust, Java, C/C++, SQL, HTML/CSS

Frameworks: Node, React, Vue, GraphQL, Spring Boot, Express, Redis, Terraform, Prisma, Apollo, Axum

Tools: Linux, Postgres, Git, Docker, AWS, GCP, Kubernetes, Figma, Jenkins, nginx