

KEVIN ZHANG

✉ k366zhan@uwaterloo.ca [in linkedin.com/in/kevin-zhang-uwaterloo](https://www.linkedin.com/in/kevin-zhang-uwaterloo) github.com/kevinzhang03 www.kevinistaking.pictures

EXPERIENCE

Software Engineering Intern [Blair Health](#)

Toronto, ON | Jan 2025 – Apr 2025

- Designed a **HIPAA/PIPEDA-compliant PostgreSQL** schema with encryption and **RBAC** to safely manage **100+** treatment plans, medication, contraindications, and **sensitive patient data**
- Deployed **serverless microservices** in **TypeScript** on **GCP Cloud Run** to handle proprietary medical scoring algorithms
- Released weekly production builds of the healthcare platform using **Next.js**, **TypeScript**, and **Supabase**, implementing appointment booking, EHR integration, secure video chat via **Twilio**, and **Stripe** payment processing for **600+** users
- Developed the **MVP** in time for on-site testing with **30+** initial patients, gathering critical feedback for iterative development

Software Engineering Intern [BCharity](#)

Calgary, AB | May 2024 – Aug 2024

- Designed a web-based volunteer reward interface and poll feature using **Next.js**, **TypeScript**, and **Tailwind**, streamlining user reward requests for a charity with **\$70,000+** global contributions
- Developed a tokenization **API** using **TypeScript**, **WAGMI**, and **Zustand** to reward volunteers by converting hours and donations into tokens and securely logging transactions on the **Polygon** blockchain
- Wrote efficient **GraphQL** resolvers using **Prisma** and **PostgreSQL**, enabling publication queries to scale as metadata becomes more complex and diverse
- Refactored Next app to leverage **server-side rendering** and app routing, reducing load times and network usage by **30%**

Software Engineering Intern [ecobee](#)

Toronto, ON | Sep 2023 – Dec 2023

- Built an admin dashboard with **React** to remotely configure ecobee devices for devs and customer support agents
- Wrote WiFi tests and resolved wireless issues using **pytest**, addressing critical connectivity and communication issues
- Wrote automated deployment scripts for OpenWRT router configurations, implementing standardized network protocols and WiFi settings to reduce manual configuration and improving WiFi compatibility in ecobee devices by **66%**

Software Engineering Intern [ecobee](#)

Toronto, ON | May 2022 – Aug 2022

- Authored **70+ Cypress** tests in **TypeScript** to validate **100%** of new website features for a product launch
- Built custom testing utilities and API mocking services in **Node.js** to simulate real network traffic and device interactions
- Configured **CircleCI** with **YAML** and shell scripts to automate and parallelize tests, reducing runtime by **40%**

PROJECTS

[Lodestone](#) [Next.js](#), [TypeScript](#), [Figma](#), [Netlify](#)

- Developed an **open source** multiplayer game server management suite with **900+ GitHub stars** and **1000+ monthly users**
- Built a dashboard to display real-time metrics like user count, player status, and CPU usage on a game server

[Holograph](#) [C++](#), [PlatformIO](#), [ESP32](#), [Python](#), [Fusion360](#), [KiCad](#)

- A holographic viewfinder that mounts on top of most cameras, providing a digital HUD while you compose your photos

[Refractions of Waterloo](#) [Made with love](#)

- A photobook to document overlooked spaces and everyday moments on the UWaterloo campus with my own artistic twist
- Presented on stage at the [W25 Socratica Symposium](#) in front of an audience of **4000+** people

EDUCATION

University of Waterloo [Computer Engineering, Bachelor of Applied Science](#)

Waterloo, ON | Class of 2026

- Scholarships: \$4500 - Animusic Ensembles lead and Jazz Ensemble - UW Photography Club executive
- Relevant courses: Database Systems, Data Structures and Algorithms, Operating Systems, Distributed Systems, Robotics

TECHNICAL SKILLS

- Languages:** TypeScript/JavaScript, Python, C++, C, C#, HTML, CSS, SQL, Java, Thrift
- Frameworks:** Next.js, React, React Native, Cypress, GraphQL, Lens Protocol, Expo, Shadcn
- Tools:** Git, AWS, GCP, PostgreSQL, Supabase, Figma, Postman, Jenkins, CircleCI, Linux, Adobe Suite, Fusion360
- Interests:** Film photography, guitar, music production, birdwatching, running, graphic and motion design, coffee, hardware