# An Tran

📞 647-768-7517 | 💌 <u>a37tran@uwaterloo.ca</u> | **in** linkedin.com/quynhan05 | 🖸 github.com/quynhan-tr | 🋣 <u>antran.dev</u>

## EDUCATION

### University of Waterloo

Waterloo, ON

Honours Bachelor of Computer Science, Co-op

Sep 2024 - May 2029

#### TECHNICAL SKILLS

Languages: C, C++, C#, Python, Java, HTML, CSS, JavaScript, Typescript, SQL, Racket

Technologies: React, React Native, Angular, Next.js, Redux, Express.js, Node.js, Tailwind CSS, Flask, NumPy, SciPy Tools: Git, Bash, Linux, Docker, Postman, Figma, PostgreSQL, MongoDB, Supabase, NeonDB, AWS, GCP, Vercel

#### EXPERIENCE

#### Waterloo Data Science Club

Sep 2024 - Present

Lead Software Developer

Waterloo, ON

- Built a full-stack AI-powered networking tool for 400+ members, automating survey analysis and generated personalized 1:1 pairing, using **OpenAI API**, **Groq LLM**, and **Supabase**.
- Implemented a scalable QR-based check-in system using **Node.js** and **MongoDB**, processing 2000+ entries and improved attendee throughput by 3x.
- Developed reusable responsive frontend for 5+ event tools using **Next.js**, **TypeScript**, and **Tailwind CSS**.

TEDxUWaterloo Mar 2025 - Present

Software Engineer

Waterloo, ON

- Implemented a scalable event management platform using with **PostgreSQL**, **OAuth** login, **Stripe-powered** ticketing, and seamless QR code access for 600+ attendees.
- Developed modular, animated UI with **Next.js**, **TypeScript**, **Tailwind CSS** and **Framer Motion**; streamlined deployment with Git-based peer reviews and GitHub Actions CI/CD.

#### Waterloo Computer Science Club

Sep 2024 - Jan 2025

Technical Organizer

Waterloo, ON

- Created competitive programming, cryptography, and data structure challenges for 40+ participants competition.
- Led technical setup for a typing contest with 700 members, integrating real-time performance tracking and ensuring seamless event flow through automated tools.

Alpha Coding Sep 2023 - Jan 2024

Curriculum Developer & Instructor

Toronto, ON

- Mentored students in debugging, algorithm design, and clean code, boosting engagement by 22%.
- Developed **Python** and **Java** curriculum for 4+ skill levels, integrating hands-on projects with **APIs**, basic **AI** concepts, and algorithm walkthroughs to support learners from beginner to advanced.

#### Projects

#### • Jane Street Estimathon Portal | HTML, CSS, JavaScript, Google Apps Script

- Developed a responsive Estimathon competition UI with HTML, CSS, JavaScript, and Figma.
- Implemented Google Apps Script backend with AJAX-based submission handling, and real-time leaderboard for 400+ users, doubling scoring efficiency over previous terms manual system.

## O UW Love Flow | Flask, HTML, CSS, JavaScript, PostgreSQL, REST APIs

- Built a full-stack matchmaking website with Flask, PostgreSQL, and REST APIs.
- Designed a pairing algorithm using MBTI classification and the Hungarian method via **NumPy**, **SciPy**, to optimize 100+ dynamic pairings.

#### **○ InSync** | React, Python, Spotify Developer API

- Built an interactive React web app that visualizes real-time music playback from Spotify Developer API.
- Created dynamic, chromesthesia-inspired animations using Python-based audio analysis and data processing.