

# QUYNH AN TRAN

647-768-7517 | [a37tran@uwaterloo.ca](mailto:a37tran@uwaterloo.ca) | [linkedin.com/quynhan05](https://www.linkedin.com/in/quynhan05) | [github.com/quynhan-tr](https://github.com/quynhan-tr)

## TECHNICAL SKILLS

**Languages:** Python, JavaScript, Typescript, HTML, CSS, Java, C/C++ , SQL

**Libraries/Frameworks:** Flask, React, Next.js, Tailwind CSS, Framer Motion, NumPy, SciPy, Google Apps Script

**Development Tools:** Git, Bash, Linux, Google Cloud, PostgreSQL, SQLite, MongoDB, GitHub CI/CD, Linux, Vercel, Render

## EXPERIENCE

**TEDxUW** | *React, Next.js, Tailwind CSS, Supabase Auth, PostgreSQL, Oracle*

Mar 2025 - Present

*Software Engineer*

*Waterloo, ON*

- Building a scalable event management platform using Next.js and Supabase to support **600+** attendees with secure OAuth authentication, Stripe-powered ticketing, and seamless QR code access.
- Developed modular, animated React components with Framer Motion, standardizing frontend designs and behaviors; increased team productivity by streamlining deployment with CI/CD pipelines and Git-based peer reviews.

**UW Data Science Club** | *Node.js, MongoDB, Python, SQL*

Sep 2024 - Present

*Lead Software Developer*

*Waterloo, ON*

- Developed a peer pairing engine using Python and Groq LLM to extract structured insights from survey data and auto-generate optimized 1:1 pairing for **140+** networking event participants
- Built a scalable QR-based check-in system using Node.js and MongoDB, processing **2000+** entries with real-time analytics; eliminated a key process bottleneck and improved attendee throughput by **3x**.
- Designed a 3-tiered SQL challenge set for **170+ participants** at Canada's largest student-run datathon, integrating progressively complex queries and automated grading.

**UW Computer Science Club**

Sep 2024 - Jan 2025

*Technical Organizer*

*Waterloo, ON*

- Created competitive programming challenges on cryptography, dynamic programming, and data structure manipulation for over **40 participants** in termly coding competitions.
- Led the technical setup and execution of a typing contest for **700 members**, integrating real-time performance tracking and ensuring seamless event flow through automated tools.

**Alpha Coding** | *Java, Python, Pygame, API Integration*

Sep 2023 - Jan 2024

*Curriculum Developer & Instructor*

*Toronto, ON*

- Designed beginner-to-intermediate Python and Java curricula (API integration, Pygame games, OOP projects), fostering hands-on learning and curriculum scalability across student cohorts.
- Mentored students in debugging, algorithm design, and clean code practices across individual and group sessions, raising student engagement by **22%** based on attendance metrics.

## PROJECTS

🔗 **Jane Street Estimathon Portal** | *HTML, CSS, JavaScript, Google Apps Script*

Mar 2025

- Built a responsive Estimathon game portal with AJAX-driven UI and real-time leaderboard updates, enabling seamless form interactions and live scoring for **400+** users via Google Apps Script backend.

🔗 **UW Love Flow** | *Flask, HTML, CSS, JavaScript, PostgreSQL, REST APIs*

Feb 2025

- Developed a full-stack matchmaking app using Flask, PostgreSQL, and RESTful APIs; automated deployment via CI/CD pipelines and optimized UI for responsiveness across devices.
- Designed a data-driven matchmaking algorithm utilizing MBTI classifications and the Hungarian method (via NumPy, SciPy) to optimize **100+** dynamic pairings.

🎧 **InSync** | *React, Python, Spotify Developer API*

Jan 2025

- Developed an interactive music visualization web app using Spotify Developer API, dynamically rendering real-time playback data into animations influenced by the chromesthesia condition with responsive React frontend.

## EDUCATION

**University of Waterloo**

Waterloo, ON

*Honours Bachelor of Computer Science, Co-op*

*Sep 2024 - May 2028*