

Jason Pan

j7pan@uwaterloo.ca | [/in/jasonpan](https://in/jasonpan) | github.com/jasonnpan | jasonpan.ca

Education

University of Waterloo

2022 - 2027

Bachelor of Computer Science, HCI Specialization

Coursework: Algorithms, Data Structures & Data Management, Object Oriented Programming, Functional Programming

Skills

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

Frameworks: React/React Native, Node, Express, Vite, Next.js

Technologies: Firebase, MongoDB/NoSQL, Supabase/PostgreSQL, Tailwind, Redux, AWS S3, Git, Postman, Figma

Experience

Microart Services

Sep 2024 – Dec 2024

Software Engineer Intern

- Developed end-to-end user-centric features for Microart's mobile app suite using **React Native**, **JavaScript** and **Firebase**
- Constructed **ETL pipeline** using **Node** and **JavaScript**, efficiently converting **100k+** CSV wine data records to JSON
- Automated review scraping and sentiment analysis to sort **30k+** wines by user preference, enhancing wine review accuracy
- Improved **BLE** connections with Microart's thermal sensor boards; improved response time by **18%** and reduced latency
- Implemented **RPC functions** in **PostgreSQL** via **Supabase**, abstracting common queries and streamlining data retrieval

Dandelion Networks

Jan 2024 – Apr 2024

Mobile Developer Intern

- Developed robust **full-stack** features for the flagship DDLN blockchain wallet app leveraging **TypeScript**, **Go**, and **Redux**
- Created dashboard with real-time data visualization, enabling **thousands** of beta testers to monitor personal transactions
- Optimized blockchain penny retrieval via **WebSockets** with asynchronous processing, reducing transaction times by **24%**
- Integrated **push notifications** for direct and group messaging and transaction updates using **Firebase Cloud Messaging**
- Resolved race conditions in concurrent operations with **mutexes**, ensuring token balance accuracy across blockchain

NoTox

Jul 2023 – Aug 2023

Software Engineer Intern

- Refined product suggestion UI using stakeholder and user feedback, achieving a **30%** increase in affiliate link engagement
- Built **REST APIs** to manage **10k+** data points for hundreds of users in **MongoDB**, facilitating efficient data retrieval
- Ensured product consistency across **iOS** and **Android** platforms by regularly conducting **regression** and **functional tests**
- Collaborated with UX team to design user flows and wireframes using **Figma**, adhering to modern UI/UX principles
- Maintained and **optimized app performance** and maintainability by refactoring legacy code and expanding codebase docs

Trinity Robotics

May 2023 – Aug 2023

Software Engineer Intern

- Developed a **full-stack** e-commerce site for Trinity's DIY robotics kits using **React**, **Node**, **Express** and **MongoDB**
- Engineered end-to-end checkout flow, leveraging **Stripe** for payment processing to enable fast and reliable transactions
- Designed and built a library of **20+ reusable stateful components**, driving development efficiency and design uniformity
- Authored **design docs** on Notion for API usage and deployment processes, **facilitating** smooth future intern onboarding
- Collaborated with other engineers in bi-weekly **Agile sprints**, ensuring alignment of product backlog and deliverables

Projects

Flexify – Mobile Exercise Assistant | *React Native, JavaScript, Tailwind, Expo* | [GitHub](#)

- Developed mobile app displaying a library of 100+ bodyweight exercises on various muscles with detailed instructions

Summ.ally – Text Summary Interface | *JavaScript, Vite, React, Tailwind, Redux* | [GitHub](#)

- Built a text summary web app that condenses long articles and stores the user's previous summary results in local storage