

Samuel Huang

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EDUCATION

University of Waterloo

BASc, Systems Design Engineering | GPA: 3.93

Relevant Coursework: Digital Computation (C++), Introduction to Design, Visual Communications (SolidWorks)

Waterloo, ON

Sep. 2025 – Present

TECHNICAL SKILLS

Languages: Python, C++, SQL (PostgreSQL), JavaScript/TypeScript, HTML/CSS, Tailwind CSS

Frameworks: React, React Native, Next.js, Expo, Express, Node.js, FastAPI, LangChain, Firebase, Supabase

Developer Tools: Git, GitHub, GitLab, VS Code, Cursor, GitHub Copilot, Vercel, Render, Figma, SolidWorks

EXPERIENCE

Technical Project Manager

NeedList.ORG

Jan. 2026 – Present

Toronto, ON

- Led **migration** of platform from **FlutterFlow to React + NestJS** by writing PRDs and ERDs, enabling **weekly deployments** and **faster iteration cycles**
- Ran **agile workflows** (daily standups, sprint planning, demos) across Coda and GitHub, improving delivery consistency and **reducing sprint spillover**
- Worked with charity clients to onboard them onto the platform, created documentation, and identified bugs through testing, improving **platform usability** and **stability**

Software Engineer

WAT.ai

Jan. 2026 – Present

Waterloo, ON

- Developed an AI sentiment analysis dashboard for **York Region Health** to visualize vaccine-related social trends
- Integrated backend data into UI components by fetching and rendering sentiment insights via **API calls**, ensuring **accurate real-time** data presentation
- Built components to display sentiment trends and key topics, iterating based on **user stories** and requirements

Product Designer

Electrium Mobility

Oct. 2025 – Jan. 2026

Waterloo, ON

- Designed mobile screens for **Electriumap**, a crowdsourced EV charging platform, ensuring **responsiveness**
- Collaborated with engineers to ensure **technical feasibility**, improving implementation efficiency and reducing future design rework
- Applied modern UI patterns, including **glassmorphism**, to elevate visual design while keeping interfaces intuitive

PROJECTS

The Archives 🗄️ | *React, FastAPI, Express, PostgreSQL, Firebase*

Mar. 2026

- Built a visual **full-stack** book recommendation platform with an interactive 3D graph UI using React, enabling users to explore relationships between **10k+ books** instead of static lists
- Developed a **hybrid ML model** (TF-IDF + collaborative filtering) combining text, genre, and user rating data into a **weighted scoring system** to generate accurate book recommendations
- Optimized API performance by implementing **batched API requests and caching** with TanStack Query, reducing **redundant data fetching** and improving load times

Munch 🍴 | *React Native, Expo, Express, PostgreSQL, Figma*

Jan. 2026 – Present

- Building a React Native recipe social media app and designed the **backend architecture** with PostgreSQL, enabling **scalable** data management
- Generated **100+** pre-launch signups in **24 hours** by leading an organic waitlist campaign, validating product demand
- Refined MVP direction by prototyping core user flows and running **A/B tests** on key features, improving product-market fit and user experience

SwiftER 🗄️ | *Python, JavaScript, Express, HTML, CSS*

Aug. 2024 – Feb. 2025

- Built a real-time ER web app for **40+** hospitals using Mapbox API, enabling quick hospital wait time comparisons
- Automated data collection with a **Python + Selenium** pipeline to scrape and update wait times, delivering **JSON** to the frontend via **async requests**
- Improved triage efficiency by integrating **Gemini**, earning **DMZ Microgrants Finalist** from pool of **100+ projects**