Andrew Qiao

% andrewqiao.com | ♠ qiaoandrew | in andrewqiao | ■ andrew.qiao@uwaterloo.ca | ६ 647-621-0369

EDUCATION

University of Waterloo

Waterloo, ON

Bachelor of Computer Science

Sept. 2022 - Aug. 2026

- GPA: 3.9, Dean's List (2022 Present)
- Courses: Data Structures and Algorithms, Object-Oriented Programming, Linear Algebra, Calculus, Probability

SKILLS

Languages: JavaScript, TypeScript, Python, SQL, C++, C, HTML, CSS

Libraries/Frameworks: React.js, Next.js, React Native, Django, Flask, Node.js, LangChain, Tailwind CSS Databases/Cloud: PostgreSQL, SQL Server, MongoDB, Redis, Vercel, Google Cloud, AWS, Firebase, Upstash

EXPERIENCE

Snowflake Apr. 2024 – Present

Software Engineer Intern

Bellevue. WA

- Architecting UI component APIs using **React.js and TypeScript**, empowering developers across **5 teams** to build more performant, accessible, and intuitive interfaces
- Deploying user experience enhancements across platforms used by 15,000+ users from 3,000+ organizations
- Designing and implementing a novel E2E testing framework using Jenkins cron jobs, Docker, Groovy, Bash, Git, and Datadog, saving **200+ hours annually** in manual testing before weekly product releases
- Driving the adoption of a unified system to author, maintain, and analyze 100+ E2E tests across 7 teams

IBM
Software Developer Intern

Jan. 2024 - Apr. 2024

• Shipped a generative AI application for code explanation and test-case generation on 12M+ lines of code for

- 100+ developers using Amazon Web Services (AWS), React.js, and IBM's WatsonX AI platform
 Increased code explanation accuracy from 30% to 90% by implementing retrieval-augmented generation (RAG) using LangChain, a FAISS vector database, Python, and the Mixtral 8x7B LLM
- Engineered a rules-based anomaly detection system to verify \$10B+ in insurance claims using Python and SQL

University Health Network

Oct. 2023 – Dec. 2023

Software Developer Intern

Toronto, ON

Toronto, ON

- Developed an app integrated with GPT-4V to evaluate AI's effectiveness in diagnosing 100+ medical conditions using Next.js, React.js, and Google Cloud
- Assisted 8 clinicians at Canada's largest research hospital in assessing AI's applicability for clinical care and education, contributing to published medical research \square

TD Bank May 2023 – Aug. 2023

 $Software\ Developer\ Intern$

Toronto, ON

- Saved Portfolio Managers 10+ hours a week in waiting on synchronous tasks by developing a distributed system to defer lengthy portfolio model recalculations using Celery and Python
- Removed 5+ hours a week of data entry by automating financial report generation with Django and SQL
- Reduced tool loading speed by 67%, removing unnecessary API calls and adhering to React.js best practices
- Fixed 20+ bugs by implementing thorough testing frameworks using the Python unittest library

University of Toronto

Oct. 2022 – Apr. 2023

Research Developer Intern

Toronto, ON

- Contributed to a **university-partnered study with OpenAI** on AI alignment in the workplace under the supervision of Dr. M. Andiappan of and Dr. G. Hadfield
- Streamlined data collection for the study's 500+ participants by deploying an AI-powered survey platform

Projects

Pethsapp 🗷 | React Native, Firebase, Google Cloud, Sanity

Jun. 2021 – Present

- Led team of 5 in developing my former high school's mobile app, used by 1200+ students, staff, and parents
- Reached Top 15 on the Apple App Store Education Chart