

William Pai

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EDUCATION

McMaster University

Hamilton, ON

Bachelor of Engineering, Software Engineering Co-op

Sep. 2020 – Apr. 2025 (Expected)

Relevant Coursework:

Object-Oriented Programming (Java), Data Structures and Algorithms, Databases (SQL), Software Development (C), Concurrent Programming (Java, Go, Python), Software Design, Testing & Requirements (Java)

EXPERIENCE

SOTI Inc.

Sep. 2023 – Present

Software Developer Co-op

Mississauga, ON

- Developed with **Angular**, **Bootstrap**, and **.NET C#** in **full stack development** to drive advancements in XSight, allowing customers to manage diagnostic data of thousands of **iOS**, **Android**, and other **mobile devices**
- Implemented a survey app using **Entity Framework Core** with **SQL databases** and **JWT authentication**
- Proactively resolved **Jira** tickets while integrating **Jenkins** automation and implementing **Jasmine/Karma unit tests** to improve product stability, functionality, and code quality
- Spearheaded several major **Angular** version upgrades, refactoring code to address **package dependencies** and addressing new **Angular Material UI** changes to the **front-end**, ensuring consistency and **long-term support**

McMaster Engineering Society

May 2023 – Present

Infrastructure Technology Lead

Hamilton, ON

- Redesigned McMaster University's outdated booking system using **React.js**, **TypeScript**, **Tailwind CSS**, **Next.js**, and **MongoDB**, with a focus on usability, and speed, to be used by over 5,000+ students
- Crafted a custom **UI/UX design** from scratch, increasing efficiency and optimizing the booking process

InsideDesk Inc.

May 2022 – Sep. 2022

Software Engineer Co-op

Toronto, ON

- Developed additional features using **Angular**, **SQL**, **AWS S3**, **Python**, **Flask**, and **REST APIs**, maintaining **25 JavaScript** and **Python** web scrapers to improve the management of 4+ **million** annual dental insurance claims
- Designed and implemented a **Google Chrome extension** using **React.js**, **Material UI** library, **TypeScript** and **Auth0**, syncing with existing **software architecture** to aid in easy access to client's insurance logins
- Improved **E2E tests** using **Cypress.io**, **GitHub Actions**, and **CI/CD pipelines** to ensure minimal errors

WaveDirect Telecommunications

May 2021 – Aug. 2021

Software Developer Co-op

Leamington, ON

- Developed a desktop app **GUI** to parse **10,000** financial data entries into **Linux** systems using **Python & PyQt**
- Automated handling **2,000** DMCA infringement notices annually using **Python**, **Flask**, **Gmail API**, and **SQL**

PROJECTS

Integrated Learning Platform | *Next.js, PostgreSQL, Supabase Auth, Prisma ORM, PgBouncer, Stripe*

- Developed a **full-stack** tutoring platform utilizing **Next.js** for a performant **frontend**, **PostgreSQL** as a robust **database**, and **Supabase Auth** for secure user management, allowing for effortless scheduling and payment
- Employed **Prisma** and **PgBouncer** for **efficient data interactions** and **optimized database performance**

Cabpool 🚗 | *React Native, Node.js, Express.js, Google Maps API, Google Firebase*

- Created a **React Native mobile application** for a taxi ride-sharing service to add carpool matchmaking
- Engineered a secure and robust, **API** backend system using **Node.js** and **Express.js** to interconnect multiple user devices, leveraging **Google Cloud Platform's Firebase** for encrypted data storage and management
- Composed **Software Requirements Specification** documents with **sequence diagrams**, **class diagrams** and **business events**, effectively illustrating system interactions in **software architecture** and **software design**

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Java, Dart, Python, C, C#, Go, Bash, SQL, Swift, HTML, CSS

Frameworks: Flutter, React Native, React, Next.js, Angular, Vue.js, .NET, SwiftUI, Node.js, Express.js, PyQt, Flask

Tools: Git, Tailwind CSS, AWS, Google Cloud Platform, MongoDB, JUnit, Docker, Cypress.io, Figma, Adobe XD