Alan Wang

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EDUCATION

University of Waterloo   **September 2020 - April 2025**
Bachelor of Computer Science   *Waterloo, Ontario*

TECHNICAL SKILLS

Languages: JavaScript/TypeScript, Java, Kotlin, HTML/CSS, C++, C, SQL
Technologies: React/React Native, Redux, Next.js, Node.js, Express, Spring Boot, Tailwind
Tools: Git, Docker, Azure, PostgreSQL, MySQL, MongoDB, Splunk, Visual Studio Code, IntelliJ, Linux

EXPERIENCE

Canadian Imperial Bank of Commerce   **January 2023 - April 2023**
Backend Developer Intern   *Toronto, ON*

- Delivered key digital cards API changes to **affect 300,000+ users**, using **Java**, **Spring Boot** and **MySQL**
- Built and refactored account information backend services and data objects to enable new CIBC Smart Planner Features
- Overhauled **integration test suite** for account information micro-service, **decreasing build times by 17%**
- Debugged and fixed **25+ critical production issues**, analyzing logs in **Splunk** and managing redeployments

PointClickCare   **May 2022 - August 2022**
Software Engineering Intern   *Waterloo, ON*

- Led development of new API to autofill PDF medical forms from XML form data, using **Kotlin** and **Spring Boot**
- Built backend service using **Azure file storage** to save/retrieve PDF templates, for new medical form flow
- Optimized **SQL stored procedures and queries** for manipulating test data, **reducing dev environment startup by 25%**
- Wrote **unit tests** in Kotlin, and **end-to-end tests in Cypress**, increasing **overall test coverage by 20%**

PBSC Urban Solutions   **May 2021 - August 2021**
Software Developer Intern   *Longueuil, QC (remote)*

- Developed new UI components and views for bike provider payment flows, using **TypeScript**, **React Native**, and **Redux**
- Implemented **bluetooth connectivity** for locking e-bikes, using native APIs, garnering **4000+ users in first month**
- Spearheaded new automated end-to-end testing system using **Mocha, Appium and WebdriverIO**, speeding up **regression workflow by 30%**
- Wrote **unit and snapshot tests** using **Jest and Enzyme**, increasing **overall test coverage from 42% to 70%**

PROJECTS

Aitomind | *React, Node.js, Express, Azure, MongoDB*

- Developed full stack web app that transcribes speech and generates conceptual mindmaps for educational videos
- Built responsive frontend in **React** and backend services and RESTful endpoints in **Node.js** and **Express**
- Leveraged **Azure Cognitive Services REST APIs** and deployed **ML model** to extract connected keywords and concepts
- Connected backend to **MongoDB database** using **Mongoose** object modelling library to save mindmaps

No Laughing Matter | *Node.js, Express, Websockets (Socket.IO), WebRTC*

- Developed **realtime video chat game**, that detects and measures player laughter to score a player's jokes
- Utilized **Socket.IO** to manage video chat lobbies, and **WebRTC** to facilitate **real time video streaming**
- Integrated **Tensorflow.js library** to measure user laughter from analyzing facial expression and sentiment

Personal Interests: Digital Ethics, Music Production, Guitar, Martial Arts, Philosophy, Art History