

Matt Tsai

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SKILLS

Programming Languages: C/C++, Java, Python, JavaScript, TypeScript

Web Development: Node.js, React, Express JS, Spring Boot, REST API, HTML, CSS, EJS

Database Management: SQL, PostgreSQL, MongoDB

DevOps & System Administration: Git, Docker, GitHub CI/CD, GitHub Actions, AWS, Maven, Linux, WebLogic, Oracle SOA suite, WildFly, JBoss, GlassFish, Glowroot

EXPERIENCE

SFU & Hope Health Action

Jan 2024 – Present

Full-stack Developer (Part time)

Vancouver, BC, Canada

- Developed with a non-profit organization for Haiti hospitals using **React, Express, Typescript, Node.js and MongoDB**.
- Orchestrated a streamlined **Docker** setup process through an automated script, facilitating effortless deployment for clients on their server environments.
- Transitioned node version of **GitHub CI/CD pipelines** and **Docker**, which optimized build processes and enhanced compatibility with latest **TypeScript** features.

Expo-Growth Marketing Corp.

Dec 2023 – Present

Software Engineer (Part time)

Vancouver, BC, Canada

- Redesigned an advanced AI-driven chatbot leveraging **Python**, significantly enhancing customer engagement by autonomously resolving 95% of inquiries.
- Implemented **OpenAI API, Shopify API and Gmail API** to give accurate customer service responses.

BC Liquor Distribution Branch

May 2022 – Dec 2022

Database/Middleware Admin Co-op

Burnaby, BC, Canada

- Transitioned **JBoss** services to **WildFly** with other teams, resulting in an annual cost reduction equivalent to approximately 15% of the previous expenditure.
- Configured **RWP*Load Simulator** to accurately simulate real-world workloads on an Oracle database, ensuring robust testing and performance evaluation.
- Managed and optimized multiple application components in **middleware and database**.

TECHNICAL PROJECTS

Security Camera System |

- Implemented a home security full-stack and embedded system with remote monitoring, using **C, JavaScript, React, Express, Node.js, HTML/CSS**.
- Utilized Beaglebone hardware with to capture, process, and synchronize audio, video, and motion sensor data.
- Employed **UDP protocol** to enable real-time audio and video streaming to a website.

SFU Online Chat Website |

- Built the full-stack chat website, including a login system, chat room, video room and dashboard using **JavaScript, React, HTML/CSS, Express, Node.js, PostgreSQL**.
- Designed group channel features to allow many entities with CRUD through 6 **REST API** endpoints.

LEADERSHIP EXPERIENCE

SFU Taiwanese Association

Jun 2021 – Aug 2023

Vice President of Marketing

Burnaby, BC, Canada

- Created the digital membership card by Pass2U with **HTML/CSS**, achieving a 56% increase in revenue.
- Applied graphic design and photography to social media posting, resulting in a 129% view growth in non-followers.

EDUCATION

Simon Fraser University

Bachelor of Science in Computing Science

Burnaby, BC, Canada

Sep 2020 – Dec 2024 (Expected)