

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

Data Science & Analysis: NumPy, Pandas, Apache Spark

EXPERIENCE

SFU & Hope Health Action

Jan 2024 – Present

Full-stack Developer (Part-time)

Vancouver, BC, Canada

- Developed a report platform for Haiti hospitals using **React, Express, Typescript, Node.js and MongoDB**.
- Automated **Docker** setup with a script, ensuring seamless deployment for clients on their virtual private server.
- Deployed **AWS S3** Backup and Restore Functionality, enhancing data security and disaster recovery measures.

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

H&M Recommendation Engine |

- Recommended the product based on the customer's transaction history using **Python**.
- Analyzed in-depth analysis of H&M customer transaction data to extract valuable insights and identify trends.
- Developed a sequential model for product recommendations, resulting in a 13% increase in the accuracy rate.

Human Activity Analysis |

- Trained a predictive model using cellphone data to analyze and predict human activity patterns.
- Utilized the **Matplotlib** library to visualize data and identify optimal filter parameters for preprocessing.
- Analyzed various machine learning models for human activity recognition with **Scikit-learn**.

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

Burnaby, BC, Canada

Bachelor of Science in Computing Science

Sep 2020 – Dec 2024 (Expected)