

M i c h a e l H u a n g

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Work Experience

GrainFox

Software Engineer – Full Stack

Oct 2022 – Jan 2024

- Built and maintained industrial web application serving over 5000 users through the implementation of core features and components while achieving and sustaining over 90% test coverage.
- Developed an AI-driven recommendation system that streamlined content discovery by providing a more personalized browsing experience, resulting in increased user engagement.
- Enhanced platform security and observability by integrating a cloud security solution, implemented alarms and monitors to ensure optimal performance, and significantly decreased system down time and debugging lead time.
- Developed an advanced cashflow planning tool, empowering users to efficiently plan and visualize their fiscal years, thereby improving financial management and forecasting capabilities.
- Established automated email pipelines from data processing to the creation of email templates, ensuring consistent weekly communication and scheduled sends.

MapaRobo

Software Engineer

Oct 2021 – Mar 2022

- Independently developed a cross-platform mobile app using React Native, enabling wireless communication with the in-house robot system to provide comprehensive monitoring, remote-control, and task scheduling capabilities.
- Designed intuitive interfaces and conducted thorough testing, gathered user feedback to continuously improve app functionality in order to provide a consistent user experience.
- Worked closely with product manager, engineers, and designers to refine product requirements via user story. Actively participated in regular strategy sessions to ensure the app met user needs.

Ballard Power Systems Inc.

Control Engineer Co-op

Jan 2020 – Aug 2020

Surrey Schools

Robotic Instructor

Jun 2016 – 07/2017

Projects

Auto Trader Joe: AI powered autonomous stock day trader that scans 13 high profile symbols for per minute trading potential.

MSE Course Scheduler: Tool for creating minimal conflict timetables based on per class constraints.

Wait.dc: Automated Discord bot built to handle a priority queue waitlist for the students of SFUS Badminton Club post COVID-19.

Wonka Bot: AI text generator trained from over 100000 labels to create novel meme labeling for Condescending Wonka.

Skills

Specialties: Googling, Full Stack, Web Development, Mechatronics, GUI/HMI, SaaS, Agile

Languages: Python, JavaScript, TypeScript, SQL, HTML/CSS, Rust, Markdown, C++, Ladder logic, English, Chinese Mandarin

Frameworks & Libraries: Vue.js, Next.js, React, React Native, Django, Tailwind CSS, Jest, Selenium, Playwright, Pandas, Matplotlib

Tools & Platforms: NoSQL, Git, Docker, Confluence, Jira, Google Cloud, Google Map, Firebase, SendGrid, Vercel, LabVIEW

Hardware: SCADA, PLC, Beckhoff TwinCAT, Siemens, Raspberry Pi, Arduino, CAN, SPI, UART

Education

Simon Fraser University

Bachelor of Applied Science in Mechatronic Systems Engineering, minor in Artificial Intelligence

Oct 2021

Certifications

Certified ScrumMaster (CSM) | Scrum Alliance

Nov 2023

C, C++, C#, Java, SQL, HTML Certification | Sololearn

Nov 2019

Mechatronic Systems Assistant | Siemens

Aug 2018