# Michael Huang

Chengjie.michael.huang@gmail.com http://www.michaelhuang.ca/

## **Work Experience**

## Full Stack Software Engineer

GrainFox

10/2022 - 09/2023

- Developed industrial Agri-Tech solutions serving 5k+ users following an agile framework using a Vue.js and Django Stack.
- Integrated DataDog as a cloud monitoring solution to decreased system down time and bug-fix time by up to 90%.
- Implemented and maintained 25+ services, features, and components with corresponding unit test and e2e test procedures.

#### Software Developer

MapaRobo

10/2021 - 03/2022

- Architected a cross platform app to enable machine localization using React Native and Google Maps Platform.
- Established remote control capabilities via WebSocket and ROS to enable real time tracking and controlling capabilities.
- Worked closely with product manager, engineers, and designers to refine product requirements via user story.

### Control Engineering Co-op

Ballard Power Systems Inc.

01/2020 - 08/2020

- Upgraded SCADA systems and HMIs using LabVIEW to advance industrial Fuel Cell test station performance.
- Migrated legacy C# DLL functionalities to improve Historian InSQL database connectivity.
- Automated test station reporting using Excel and generated comprehensive documentation to provide stakeholders with regular updates on efficiency and consumption.

#### Control Technician

Northwest Tech-Con Systems Ltd.

05/2018-08/2018

Optimized sump pump manufacturing process to reduce downtime and ensure continuous production.

#### Outreach Robotic Instructor

Sticks and Stars

Inspired and mentored over 25 students/cohort in a collaborative project-based competition setting on the application of code and robotics using LEGO Mindstorm.

## **Projects**

## Supervised Algorithmic Stock Trader

Personal Winter 2022

Engineered a data pipeline, overseen back testing strategy development, and integrated GUI using Python to enable high frequency trading via Interactive Brokers.

#### Skills

#### **Specialties**

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

### Languages

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

#### Frameworks / Libraries

Full Stack: Vue.js, Next.js, React, React Native, Django, Tailwind CSS, Jest, Selenium, **Playwright** 

ML/AI: Pandas, NumPy, Matplotlib, Scikit-

#### Software / Tools

NoSQL, Git, Docker, Confluence, Jira, Google Cloud Platform, Google Map Platform, Firebase, SendGrid, Netlify, Vercel, LabVIEW

#### Hardware

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

#### Education

BASc Mechatronic Systems Engineering, Computer Science Minor – Al Simon Fraser University 10/2021

#### Certifications

Certified ScrumMaster (CSM)

Scrum Alliance 12/2023

06/2016 - 07/2017 C, C++, C#, Java SQL, HTML Certifications Sololearn 11/2019

Mechatronic Systems Assistant

12/2018

> 20 hours troubleshooting Siemens PLCs.

## Extracurricular Experience

Executive -> Vice President

SFU-S Badminton Club 09/2018 - 11/2021

Technical Mentor

Technovation Girls 12/2020 - 04/2021