

# Michael Huang

<https://www.linkedin.com/in/sibulus0/>

[chengjie.michael.huang@gmail.com](mailto:chengjie.michael.huang@gmail.com)

<https://michaelhuang.vercel.app/>

## Work

### Full Stack Software Engineer

GrainFox

10/2022 – 10/2023

- Developed industrial Agri-Tech software solutions serving 5k+ users following an agile framework.
- Decreased system down time and bug-fix turnaround time by up to 90% through system cloud monitoring integration.
- Implemented 25+ Agri-Tech software systems, features, and custom components with 100+ related test procedures.

### Robotics Developer

MapaRobo

10/2021 – 03/2022

- Spearheaded the creation of a cross platform native app to enable semi-autonomous localization.
- Established local connection between app and robot to activate remote control capabilities via WebSocket.
- Worked closely with project manager, developers, and engineers to refine project requirements based on user story.

### Control Engineering Co-op

Ballard Power Systems Inc.

01/2020 – 08/2020

- Implemented control strategies to expand automation capabilities of Industrial Fuel Cell test stations.
- Upgraded sensors and database server connection to improve system reliability and availability.
- Upgraded system architecture, performed analysis, and tuned systems and firmware to improve station performance.

### Outreach Robotic Instructor

Sticks and Stars Program

06/2016 – 07/2017

- Instructed classes of 30+ students in the application of robotics through team-based project building sessions.
- Mentored 5+ teams simultaneously to meet demanding project deadlines in a competitive environment.

## Projects

### Smart Stock Trader

Personal

Winter 2022

- Created autonomous data pipeline for processing comprehensive stock datasets to enable real time prediction.
- Performed data analysis and back tested trade algorithms to achieve up to 90% accuracy with lenient scoring heuristics.
- Bridged prediction models, trading platform APIs, and GUI to enable supervised semi-autonomous algorithmic trading.

## Skills

### Specialties

Googling, GUI/HMI, software development, system design, testing, debugging, simulation

### Languages

Python 3, JavaScript, SQL, HTML/CSS, Markdown,

### Frameworks / Libraries

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

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

**Robotics:** ROS

### Software / Tools

GitHub, Docker, Datadog, Confluence, Jira, Google Maps / Cloud Platform, Firebase, SendGrid, Netlify, Vercel, Notion, WordPress, ChatGPT, LabVIEW, MATLAB, SOLIDWORKS, Windows, Linux

### Hardware

Beckhoff, Siemens, SCADA, Arduino, Raspberry Pi, I2C, CAN, SPI, UART

## Education

BASc Mechatronic Systems Engineering with Computer Science Minor (Artificial Intelligence)

Simon Fraser University

10/2021

- Siemens Mechatronic Systems Assistant Certification

HTML, SQL, C, C++, C#, Java Certifications

SOLOLEARN

11/2019

## Extracurriculars

### Executive -> Vice President

SFU-S Badminton Club

09/2018 – 11/2021

### Technical Mentor

Technovation Girls

12/2020 – 04/2021

### MSE Student Body Year Representative

MSE Student Society

09/2018 – 09/2019