

Michael Huang

+1 236.996.4848

<http://www.michaelhuang.ca/>

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

Work History

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.

Control Technician Co-op

Northwest Tech-Con Systems Ltd. 05/2018– 08/2018

Outreach Robotic Instructor

Sticks and Stars Program 06/2016 – 07/2017

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, LabVIEW, MATLAB, SOLIDWORKS

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

Extracurricular Experiences

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