EDUCATION & TRAINING

University of British Columbia

2017-present

Bachelor of Applied Science (BASc) in Electrical Engineering + Co-op program.

Henry Wise Wood High School - IB Programme and Honors

2014-2017

WORK EXPERIENCE

Unico Power 2020-present

• Implementing the OCP protocol on Unico's smart charging units.

Canada Youth Robotics Club / SAGER Education / UniTech

2019-2019

- Taught high-school level Math and Physics courses in Wuhan, China
- Outlined and helped produce a middle school curriculum for the Raspberry Pi
- Taught English and robotics to Chinese students aged 6 10

Co-op Test Engineer at General Dynamics Mission Systems - Canada

2018-2018

 Developed test cases for, and tested a variety of communication devices under two GD programs. Testing involved both a hardware and software component, each test was differed in nature.

Co-op Software Developer at General Dynamics Mission Systems - Canada

2017-2017

Worked on software to automate testing of in-development comms equipment (EvO program). Used LabVIEW, Python and Robot Framework to automate hardware tests.

SKILLS

Technologies

- Java, C, Python and LabVIEW languages
- HTML, CSS and JS for web development
- JS libraries: React, Redux, D3, axios, cheerio
- Node.js
- Azure
- Version control git and Github
- Diango Framework
- RobotFramework
- SolidWorks
- MATLAB
- Verilog
- Altium
- JIRA

Technical Skills

- Project planning and schedule maintenance
- Agile methodologies
- User-level knowledge of Windows OS
- Developer-level knowledge of Linux OS
- Debugging, testing and code optimization
- Basic electrical & circuits knowledge
- Basic networking experience, wired and wireless - IPv4, IPv6
- Basic sheet metal work

EXTRACURRICULARS

Co-creator of ByteCycler.com

2019-2020

- Website for crowdsourced sensemaking and news aggregation
- Built frontend with React.js
- Built backend using JavaScript and Azure functions. Formerly using Django Framework
- Used a multitude of JavaScript libraries axios, cheerio, D3, Redux (formerly)

Writing for personal blog / newsletter

2019-2020

- I write podcast summaries, translations, personal essays and explainers dealing with concepts in science and the humanities.
- One of the essays first appeared in the UBC newspaper *The Ubyssey*.

Member of the UBC Formula Electric Design Team

2018-2019

 PCB prototyping, schematic and layout design (Altium), testing and implementation of brake lights.

Member of the UBC Mars Colony Design Team

2017-2018

• Design calculations, fabrication, safety officer role.

Founder and Team Captain of the FIRST® Robotics Competition Team 5897

2015-2017

- Team Captain Organized and motivated high school teammates, created and enforced project schedule, raised funds, lead the strategy and design discussion.
- Programming Implemented and maintained the autonomous code.
- *Mechanical* Design, prototyping and aluminium fabrication.
- Electrical Wiring and soldering electrical components.
- Received the following awards:

geekStarter Certificate of Achievement (from *Mindfuel*, to Team 5897) **geekStarter Special Award - Most Marketable Project** (from *Mindfuel*, to Team 5897)

Rookie All-Star Award (from FRC Western Canada Regional, to Team 5897)

President of the FIRST® Robotics Western Canada Student Board

2016-2017

- Summer camp Helped organize a robotics summer camp for elementary school students.
- Summer project Organized a summer design project to help students develop new skills.

Programmer for the FIRST® Robotics Competition Team 4334

2014-2015

 Was involved in Java programming, website (HTML), public relations and game strategy.

HACKATHONS

Participant at nwHacks 2019, hosted by nwPlus

2019-2019

Built a brief proof of concept of a website using HTML, CSS and Javascript, in 24 hrs.

Participant at LiteHacks Code-Free Hackathon, hosted at UBC

2019-2019

• Brainstormed and presented a business idea + business plan in 12 hrs.

Participant at UBC Local Hack Day, hosted by nwPlus

2018-2018

- Built a brief proof of concept of a website using HTML, CSS and Javascript, in 12 hrs.
- Winner of the LHD Merit: Build award, for best idea and inspiration. One of six major awards.