

## PROGRAMMING SKILLS

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- **Languages**
  - **Fluent:** C, C++, Java, Python, Javascript, Bash, HTML/CSS
  - **Proficient:** Ruby/Rails, Assembly, Verilog, Wiring, Rust
  - **Familiar:** iOS (Swift), Android (Java), MySQL
- **Technologies**
  - **Frameworks & Libraries:** Django, Rails (Ruby), Terraform
  - **Tools:** Yocto, Jenkins, AWS

## EXPERIENCE

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- **D-Wave Systems** Burnaby, BC  
*Systems Software Coop* May 2018 -> Present
  - : Created automated docs website publishing pipeline with Terraform and Jenkins, saving time by completely automating a long manual build process
  - : Wrote API endpoints in Django backend to add critical functionality
  - : Created a large number of relevant django unit tests alongside endpoints that increased test coverage and reduced the number of regression bugs introduced into continuous integration
  - : Created multiple frontend views using React framework
  - : Wrote and maintained backend integration with Zendesk and Salesforce that allowed for the Business Team to access new leads and generate reports
- **Novax Industries** Delta, BC  
*Software Programmer* October 2017 -> March 2018
  - : Wrote C userspace drivers in embedded system for i2c gpio and sd card
  - : Python and Bash scripting, to increase the capabilities of the embedded system
  - : Updated XML configuration library, to be faster and more robust, as well as align with new specs
  - : Created Yocto recipes and layers for embedded device, to improving time deploy to embedded devices during development
- **Minesense** Vancouver, BC  
*Software Intern* May 2017 -> Aug 2017
  - : C/C++ Application development and maintenance for embedded system
  - : Rewrote existing C++ code into object oriented C++ classes that improved embedded system performance and time to integrate new features
  - : Wrote kernel module to expose application settings in the proc filesystem, saving embedded system configuration time and complexity
  - : Created Yocto recipes and modified recipes to integrate with new build system, reducing time to configure builds into a single configuration line
  - : Created web based remote testing and install application, turning 30 minute or longer manual processes into simple automated tasks and preventing human error
- **Minesense** Vancouver, BC  
*Software Intern* June 2016 -> August 2016
  - : Created Unix shell and Python scripts for use in embedded system
  - : Manually patched and compiled Linux kernel with real time and custom patches, to improve IO throughput of embedded system
  - : Modified kernel init and initramfs to boot with overlayfs (Union filesystem), to improve embedded system robustness and reliability during frequent unexpected power cuts
- **Minesense** Vancouver, BC  
*Software Intern* June 2015 -> August 2015
  - : Created a Python unittest framework using python unittest and fabric to test on remote systems, saving developer time by allowing remote testing from local machines
  - : Setup and integrated unittest framework into Jenkins for continuous integration, improving testing coverage by automating manual testing tasks

## EDUCATION

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- **University of British Columbia** Vancouver, BC  
*Bachelors of Applied Science in Computer Engineering* Sept. 2016 – Expected May 2021
- **Sir Winston Churchill HS** Calgary, AB  
*International Baccalaureate Curriculum* Sept. 2013 – July. 2016

## QUALIFICATIONS

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- **Canadian Amateur Radio License:** Basic w/ Honors; Achieved 2017

## AWARDS

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- **Best use of AWS, et al.:** NW Hacks 2018, University of British Columbia; Achieved 2018
- **Best Domain:** NW Hacks 2017, University of British Columbia; Achieved 2017
- **2<sup>nd</sup> place:** Calgary Collegiate Coding Competition, University of Calgary; Achieved 2016

## CLUBS & DESIGN TEAMS

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- **UBC Unmanned Aircraft Team:** Software developer for Ground Control Systems; 2018
- **UBC Code the Change:** Full Stack Developer on Chingari project; 2017 -> 2018
- **UBC Baja Team:** Suspension Subteam, microcontroller sensor project; 2016 -> 2017