Eric Mikulin

http://erismik.github.io/

Email : ericm99@gmail.com
Mobile : +1-403-992-5497
4523 W 12th Ave, Vancouver BC

SOFTWARE DEVELOPER

- Experienced embedded Linux and full-stack cloud Software Developer looking for internship and Co-op opportunities.

- Experienced in Agile scrum development.

- Excellent teamwork and communication skills.

PROGRAMMING SKILLS

- **Languages**
  - **Fluent**: C/C++, Java, Python, Javascript, Bash
  - **Proficient**: Ruby/Rails, Assembly, Verilog, Wiring, Rust
  - **Familiar**: iOS (Swift), Android (Java)

- **Technologies**
  - **Operating Systems**: Linux, OSX, Windows, iOS, Android
  - **Frameworks & Libraries**: Django, Rails (Ruby), React, Python Fabric
  - **Tools**: Yocto, Jenkins, Terraform
  - **Database**: MySQl, MongoDB, Redis
  - **Cloud**: AWS, Docker, Google Cloud Vision API, Azure Cognitive Systems

EXPERIENCE

- **D-Wave Systems Inc.** Burnaby, BC
  Systems Software Co-op *May 2018 – Present*
  - Created an automated docs website publishing pipeline using Terraform and Jenkins that enabled the technical writers to publish docs without involving developers. Saving both developer and writer time by completely automating a long manual build process.
  - Wrote API endpoints in Django back-end to enable critical front-end user interface functionality to Leap such as maintenance notifications.
  - Created a large number of relevant Django unit tests alongside the API endpoints that increased test coverage and reduced the number of regression bugs introduced.
  - Created multiple frontend views for maintenance notifications, QPU solver availability and user profile using the React JS framework.
  - Wrote and maintained back-end integration between the Leap web service and the Business's teams Zendesk and Salesforce systems that allowed for the Business Team to access new leads and generate important reports.

- **Novax Industries** Delta, BC
  Software Programmer *October 2017 – March 2018*
  - Wrote C userspace Linux drivers for an ARM based embedded system to enable use of the i2c gpio and sd card reader devices on custom hardware.
  - Python and Bash scripting for log management on the embedded ARM system.
  - Updated the XML configuration library in order for the embedded system to be faster and more robust, and to align with additional new specs.
  - Created Yocto recipes and layers for the embedded device, improving the time to deploy to the embedded device and saving developer time during development and testing.

- **Minesense Technologies Ltd.** Vancouver, BC
  Software Intern *May 2017 – August 2017*
  - General C/C++ Application development and maintenance for x86 Linux embedded system.
  - Rewrote existing C++ code for transferring large amounts of spectrum data across devices into object oriented C++ classes that improved system performance and reduced the time to integrate new features

- Wrote a kernel module to expose embedded application settings in the Linux /proc filesystem, saving embedded system configuration time and complexity and therefore speeding up application development and testing.
- Wrote an automated update utility for the embedded system that allowed for automated updates across multiple write-protected disk partitions which reduced the developer time needed to perform updates and eliminating human error.
- Created over 10 new Yocto recipes and modified several existing recipes in order to integrate into a new automated build system, helping to reduce the time to configure builds by making it a single configuration line to change.
- Created a web based remote testing and install application, turning a 30 minute or longer manual install and configuration processes into simple automated tasks and preventing human error. The application could also automatically test the system configuration, making the developer time to test the device negligible.

- **Minesense Technologies Ltd.**   Vancouver, BC
  Software Intern   *June 2016 – August 2016*
  - Created several Unix shell and Python scripts for use in x86 embedded Linux system.
  - Manually patched and compiled the Linux kernel with real time and custom patches in order to improve IO throughput of embedded system, helping to achieve critical system performance requirements.
  - Modified the Linux kernel init script and initramfs to boot with overlayfs (Union filesystem) to make the system read-only from the disk. This improved the embedded system robustness and reliability during frequent but unexpected power cuts.

- **Minesense Technologies Ltd.**   Vancouver, BC
  Software Intern   *June 2015 – August 2015*
  - Created a Python unittest framework using Python unittest and Fabric to test on remote embedded Linux systems, saving developer testing time by allowing remote testing from local machines.
  - Setup and integrated unittest framework into Jenkins for continuous integration, improving testing coverage by automating tedious manual testing tasks.
  - Wrote over 100 Python unittests, creating critical test coverage where there was none previously and preventing further regression bugs from appearing in development.

EDUCATION

- **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

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

AWARDS

- **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
- **2nd place**: Calgary Collegiate Coding Competition, University of Calgary; Achieved 2016

CLUBS & DESIGN TEAMS

- **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 Sub-team, microcontroller sensor project; 2016 – 2017
- **FRC Team 4719 - Technetronic Bulldogs**: Mechanical and Software Teams; 2013 – 2016

HOBBIES

- **Outdoor Activities**: Enjoys hiking and camping; Mountain and road biking; Intermediate longboarder
- **3D Printing**: Designs and 3D prints objects
- **Film Enthusiast**: Enjoys watching classic movies; Enrolled in Film Studies classes