LEIF PEDERSEN

http://leifcnp.com

Email: Leifcnp@gmail.com
Phone:(778) 927-4522

TECHNICAL SKILLS

Languages:	Java, Python, C++
Software:	Eclipse, IntelliJ, WebStorm, Arduino
Tools/Testing:	JUnit, AssertJ, Mockito, git, Gerrit
Knowledge:	Object oriented Design, Operating systems, Algorithms and Data structures

WORK EXPERIENCE

Tasktop Technologies: Junior Software Engineer (Java) September 2017 – present

- Developing and maintaining REST and SOAP communication to 15 ALM software systems (BMC Remedy, VersionOne, Sparx Pro Cloud Server and many more).
- Breaking down, building, demoing and release testing customer requested production features in a continuous delivery environment.
- Triaging, debugging and testing high priority customer blocking defects with a 2-day turn-around guarantee.

TECHNICAL EXTRACURRICULAR ACTIVITIES

UBC Rocket: Engineering Design Team Project Lead   https://goo.gl/3Sg6vP   May 2017 – present

- Directly managing an interdisciplinary team of 21 engineering and science students as the person responsible for production of the electronic systems on the team's sub-orbital rockets. Successful first launch and recovery.
- Performing design and code reviews to certify high quality safety critical software and hardware.
- Designed and performed the PCB and wiring integration with the rocket body complying with all IREC wiring and mounting requirements. Won 1st place in the most popular division at the Spaceport America Cup.

UBC Rocket: Developer (C++)   June 2016 – present

- Designed rocket avionics algorithms for redundant parachute systems complying with all IREC Safety and Requirements Documents.
- Integrated IMU, altimeter and magnetomic sensors with flight algorithms using custom written libraries for improved freefall accelerometer measurements.
- Optimized software to consider hardware interactions that could cause possible failure scenarios ensuring a failsafe product.

UBC iGEM: Developer and technician (Python)   https://goo.gl/TPkaZi   January 2017- January 2018

- Worked with microbiology students developing a program for informed designed CRISPR guide sequences. Software nominated for Best Model at the 2017 International Genetically Engineered Machinery Competition.
- Improved the performance of the program by applying multi-threading and algorithmic changes to reduce duplicated processing.

ACADEMIC PROJECT

UBC INSIGHT: Web UI and Server (TypeScript/JavaScript)   January 2017 – April 2017

- Designed a Node.js RESTful server to parse, save, and query UBC Course data in JSON format.
- Implemented a querying language to request subset of data. Refactored query engine to allow nested filtering and reduced the query time from 10 seconds to 0.1 seconds.
- Built a frontend web UI for intuitive querying of the course data and allowing full use of the underlying system.

EDUCATION

University of British Columbia   September 2016 – Present
3rd Year Bachelor of Science, Honours Computer Science (GPA: 89.60%)

Langara College   September 2014 – May 2016
General Sciences