Nat Comeau

Relevant Skills

- **Python** (Numpy), **C, C++**, Java, MATLAB, R, LaTeX.
- CentOS/Debian **Linux**, **bash, Arduino RTOS**, Kubernetes, Raspberry Pi Web Server

Employment

Research Intern **National Research Council** **May 2018 – August 2018**

- Worked independently towards a publication in a peer-reviewed journal.
- Analyzed pettabyte datasets with Python, SQL and Bayesian Markov-Chain Monte Carlo.

Science Intern **Gemini Observatory- Chile** **September 2017 – December 2017**

- Used Python, Numpy, and C on CentOS Linux machines to reduce terrabyte datasets to scientific measurements.
- Implemented computationally efficient algorithms written in C.

Software Engineering Intern **Gemini Observatory- Hawaii** **May 2017 – September 2017**

- Built a data reduction pipeline with Python, C, and legacy code. github.com/mrlb05/Nifty4Gemini
- Self-managed and delivered a working product on schedule.

Research Assistant **UVic Computational Chemistry** **May 2016 – January 2017**

- Used MATLAB and **Bash** scripts to run materials design simulations.
- Ran simulations on 128 core **Cloud Linux clusters** and 512 core Compute Canada clusters.

Computational Research Chemist **SeaStar Chemicals** **May 2016 – January 2017**

- **Shell scripted** to improve high throughput screening times by 300%.
- Helped discover two new materials for Atomic Layer Deposition through simulations.

Education

Victoria, BC **University of Victoria** **Fall 2015 – Spring 2020**

- B.Sc. Computer Science (software engineering option), Co-op.
- Undergraduate Coursework: Computer Science, Electronics, Computer Hardware, Physics.

Technical Experience

Projects

- Nifty4Gemini (Python software package). Created and maintains the *Nifty4Gemini* Data Reduction pipeline.

Additional Experience and Awards

- **NSERC Industry Research Award** (Summer 2016): Atomic Layer Deposition Precursors through simulation.
- Trilingual (Conversational Spanish and French)