

Jihoon Og

(403) 393-7144
jihoonog@gmail.com

Education

Edmonton, AB	University of Alberta	Fall 2018 – April 2022 (Expected)
---------------------	------------------------------	--

- B.Sc. Honors in Computing Science – GPA: 3.5.
- **Undergraduate Coursework:** Operating System Concepts, File and Database Systems, Computer Systems and Architecture II, Calculus II, Image Recognition, Software Process and Product Management, GPU Programming, Web Application and Architecture.
- **Dean's Honor Roll:** For the 2018-2019 academic year.

Lethbridge, AB	University of Lethbridge	Fall 2016 – Spring 2018
-----------------------	---------------------------------	--------------------------------

- B.Sc. in Computer Science with a minor in Economics - GPA: 3.96.
- **Undergraduate Coursework:** Fundamentals of Programming, Discrete Mathematics, Digital Systems, Linear Algebra I, Computer Architecture, Data Structure and Algorithms, Artificial Intelligence, Music Software Design, Statistics I, Practical Software Development.
- **Dean's Honor Roll:** For the 2016 - 2017 and 2017 - 2018 academic years.

Employment

Assistant Engineer, Intern	Huawei Canada	May 2020 – August 2021
-----------------------------------	----------------------	-------------------------------

- Created an automated testing and performance analysis infrastructure to help developers improve compiler performance.
- Performed profiling analysis on AI specific algorithms and improve upon them.
- Performed performance analysis on the benefit of Out-of-Order Commit using gem5 and LLVM to show hardware and software benefits.
- Developed an ML-guided performance prediction model for LLVM IR.

Undergraduate Research	University of Alberta	September 2019 – January 2020
-------------------------------	------------------------------	--------------------------------------

Assistant

- Explored Software Defined Radio using GNU Radio on the ADALM-PLUTO platform.
- Researched real time storage and processing of multiple radio bands on the Ettus X310 SDR platform.

Research Assistant, Summer	University of Alberta	Summer 2019
-----------------------------------	------------------------------	--------------------

Student

- Developed a real-time occupancy flow and recognition algorithm for a low resolution infrared camera.
- Established 2 Linux servers for machine learning, and algorithmic testing for the university's sustainable computing and networking lab.

Research Assistant, Summer	University of Lethbridge	Summer 2018
-----------------------------------	---------------------------------	--------------------

Student

- Developed an API written in C++ for a neuromorphic camera using software development techniques to streamline algorithm development and testing.
- Created a comprehensive dataset using the neuromorphic camera to be used by researchers for algorithmic testing and evaluation.

Projects and Competitions

-
- **2017 Rocky Mountain Regional ACM ICPC:** Placed 31st out of 52.
 - **2017 Alberta Collegiate Programming Contest:** Placed 28th out of 53.
 - **2017 Lethbridge Collegiate Programming Contest:** Place 4th in Division 2.

Additional Experience and Awards

-
- **Teaching Assistant (Fall 2019):** Created assignments for Operating Systems Concepts, and attended lab sessions to help students with course content.

Skills

-
- (*Proficient*): C/C++, Python, Linux, Git, Bash, R (*Familiar*): Java, SQL, Scheme, SQLite, Arduino.

- *(Proficient)*: GDB, Valgrind *(Familiar)*: gprof, gcov, CppUnit
- *(Familiar)*: ROS
- Microsoft Office Suite (Word, Excel)

Leadership and Extracurriculars

- **Undergraduate Association of Computing Science:** Senior Representative (2019-2020)