(403) 393-7144 jihoonog@gmail.com

Education

Edmonton, AB **University of Alberta**

Fall 2018 – December 2021

• B.Sc. Honors in Computing Science – GPA: 3.5.

(Expected)

- 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 hardare 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

- 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 Student

University of Lethbridge

Summer 2018

- 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)