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Jihoon Og

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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 framework to help developers improve compiler performance.
- Performed profiling analysis on AI specific algorithms and improve upon them by 39%.
- 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 Assistant **University of Alberta** **September 2019 – January 2020**

- 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 Student **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.

- **Teaching Assistant (Fall 2020):** Created worksheets for Introduction to Tangible Computing 1, created midterm materials for algorithms and data structures, and attended lab sessions to help students with course content.
- **Teaching Assistant (Winter 2021):** Created weekly weekly assignments for Introduction to Tangible Computing 2, 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, LLVM
- *(Familiar):* ROS
- Microsoft Office Suite (Word, Excel)

Leadership and Extracurriculars

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