Education

Edmonton, AB University of Alberta

Fall 2022 - Winter 2024

(Expected)

• M.Sc (Thesis) in Computing Science

• Graduate Coursework: Mobile and IoT Systems, Parallel and Distributed Systems

• Supervisor: Ioanis Nikolaidis

Edmonton, AB

University of Alberta

Fall 2018 - Winter 2022

- 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

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.
- 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.
- Teaching Assistant (Winter 2022): Marked assignments and managed group projects in Web Applications and Architecture, 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)