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Education

2022–2026 **PhD**, *University of Toronto*, Toronto
Electrical and Computer Engineering
- Bell Graduate Scholarship

2020–2022 **MASc**, *University of Toronto*, Toronto,
Electrical and Computer Engineering
- Edward S Rogers Sr. Graduate Scholarship

2015-2020 **BASc in Engineering Science**, *University of Toronto*, Toronto
Electrical and Computer Engineering
- President's Entrance Scholarship
- Dean's list 2015-2016, 2016-2017, 2017-2018, 2019-2020

Research

2022 **Publication**, *A Scalable Architecture for Reprioritizing Ordered Parallelism*, ISCA 2022, DOI: 10.1145/3470496.3527387

2022 **Masters Thesis**, *A Speculative Hardware Scheduler Supporting Priority Updates*

2020 **Undergraduate Thesis**, *Extending Multi-path Execution to a Multiprocessor Context*

Experience

2020-2023 **Teaching Assistant**, *University of Toronto*
- ESC180/ESC190 Intro to Computer Programming
- ECE243 Computer Organization
- ECE344/ECE353 Operating Systems
- ECE552 Computer Architecture
- ECE1755 Parallel Computer Architecture and Programming

2018-2019 **SoC Design Engineering Intern**, *Intel Corporation*, Toronto
Developed and maintained tools used for silicon correlation and test pattern generation
- Designed and ran ML-based analysis of silicon correlation results for previous design families to inform correlation test stamp allocation for new Agilex device family;
- Maintained an updated internal silicon correlation and pattern generation tools:
  - Documented and automated update process for pattern generation tools;
  - Architected major refactor of silicon correlation flow to enable new analysis types;
- Designed and created new pattern generation tools;
  - Automated previously manual pattern generation processes for some test pattern types;
  - Improved wire coverage of previously manual pattern types by an order of magnitude;

2017-2017 **Research Assistant**, *Intelligent Sensory Microsystems Lab*, University of Toronto
NSERC USRA funded position
Developed FPGA/C++ interface to send commands to and receive output from two-bucket camera sensor prototype.

Skills

Programming: C/C++, Java, Python, Perl
CAD Tools: IAR, Quartus, Vivado
FPGAs: Verilog
Other: Arduino, Matlab, etc