

EMPLOYMENT

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| Research Assistant | University of Waterloo | Fall 2016, Winter 2017 |
| <ul style="list-style-type: none">Implemented a data structure library for the programming language Flix, including functionality for List, Set, Map, Option, Result, Int8, Int16, Int32, Int64, BigInt, Float32, and Float64. | | |
| Full Stack Developer, Intern | AdRoll – San Francisco | Spring 2016 |
| <ul style="list-style-type: none">Leveraged Apache Storm, AWS DynamoDB, and BackboneJS to implement Impression Segments, a feature that enables customers to target buyers based on the number of previously shown advertisements.Used Hadoop MapReduce and MD5 Hashing to find matching cookie sets within two cluster groups. | | |
| Software Developer, Intern | Oracle – Toronto | Fall 2015 |
| <ul style="list-style-type: none">Utilized ReactJS with the Flux Pattern to design a dynamic Bulk API learning tool for third-party developers. | | |
| Software Developer, Intern | SideFX Software Inc – Toronto | Spring 2015 |
| <ul style="list-style-type: none">Worked with C++ and OpenGL to build a viewport handle for manipulating cones with non-uniform angles.Developed a tool for initializing a ragdoll's joint limits through analysis of animation clips. | | |

EDUCATION

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| Waterloo, ON | University of Waterloo | Fall 2013 – Present |
| <ul style="list-style-type: none">Bachelor of Mathematics in Computer Science, Applied Math, and Computational Math. GPA: 4.0Undergraduate Coursework: Big Data Infrastructure, Machine Learning, Computer Graphics, Algorithms, User Interfaces, Operating Systems, Compilers, Computer Architecture | | |

TECHNICAL EXPERIENCE

Hackathons

- Hack Holyoke** (Nov 2016): Used ReactJS and AWS S3 to build giddit.io, a site for sharing and searching for unique advice. Winner of Best AWS Hack Prize (two-person team).
- Hack PSU** (Nov 2016): Used ReactJS and three APIs to create a workflow for growing your own food based on climate data and local gardeners. Winner of Food for Thought Prize (three-person team).
- Hack OSU** (Nov 2016): Developed an app on Mac for the Myo Armband that allows users to draw in a virtual 3D plane with their arm. Various gestures activated a variety of drawing utensils (three-person team).
- Hack Harvard** (Oct 2016): Leveraged Microsoft's Computer Vision and Emotion APIs to generate short stories based on photographs (solo project).

Course Projects

- Machine Learning** (Winter 2017): Used MATLAB to find optimal parameters for the k-nearest neighbor and weighted linear regression algorithms on various data sets.
- Big Data** (Winter 2017): Developed Hadoop MapReduce and Spark programs for analysis on large text data sets. Operated on both local and distributed environments.
- Graphics** (Winter 2017): Built OpenGL primitives and leveraged transformations to develop various apps.

AWARDS

- Ronald G. Scoins National Scholarship** (2013-2017): Math contests and extracurricular activities.
- President's Research Award** (2016-2017): Undergraduate research and academic average.
- Google Games Second Place** (2016): Coding challenges, logic puzzles, trivia, and word association.
- Electrohome 75th Anniversary Scholarship** (2016): Top grades in 3rd year Computer Science.
- Computational Math Scholarship** (2016): Top grades in Computational Math.
- R.A. Wentzell Memorial Scholarship** (2016): Top grades in Applied Math.
- Odyssey of the Mind Second Place** (2016): Theatrical presence and creativity.
- Beach Volleyball National Gold Medalist** (2013-2014): 18U and 22U age categories.

Languages and Technologies

- C++, Hadoop, MATLAB, Spark, ReactJS, HTML, CSS, Java, Python, Storm, Android, AWS (S3, DynamoDB)