(519) 984-9526
liampalmer43@gmail.com
liampalmer43.github.io

LIAM PALMER

github.com/liampalmer43
devpost.com/liampalmer43
linkedin.com/in/liampalmer43

EMPLOYMENT

Research Assistant — **University of Waterloo** — **Fall 2016, Winter 2017**
- 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**
- 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**
- 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**
- 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

Waterloo, ON — **University of Waterloo** — **Fall 2013 – Present**
- Bachelor of Mathematics in Computer Science, Applied Math, and Computational Math. GPA: 4.0
- Undergraduate 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)