

BRIAN SO

+ Student + Developer + Designer +



— EDUCATION —

Candidate for Bachelor of Applied Science
Systems Design Engineering
Computer Science Minor

Class of 2018

University of Waterloo, ON



— TECH STACK —

S P E A K Java C C++ Python Bash
Javascript HTML5 CSS3 Sass
MatLab R JQuery

T O O L S Apache Hadoop HBase
ElasticSearch Jenkins Github
Vagrant Asana Unity Maven

**F R A M E
W O R K S** Django Angular.js Backbone.js
Underscore.js

P L A T F O R M Shell Ubuntu Macintosh Windows
Openstack iOS Android

**I T E R A T I V E
D E S I G N** Flavours of Agile



— CONTACT —

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— WORK EXPERIENCE —

ONTARIO INSTITUTE FOR CANCER REASEARCH Software Engineer

Toronto, ON / Dec 2013- April 2014

- > Designed and implemented an **optimized Map Reduce Strategy** using HBase, yielding **90% faster search speed** over several Hadoop clusters for a specific set of genomic search queries.
- > Independantly designed and implemented a **benchmarking tool using ElasticSearch** to guage query performance of patient files to retrieve **actionable insights**. Insights were presented to the software engineering team, I **suggested improvements** to enhance performance.

WRIBER

Machine Learning Developer

Kitchener, ON / June 2013- July 2013

- > Led a small team to design and build an **intelligent content-based question generator** with Python using **Natural Language Processing** tools.
- > Built a **data-mining application** to gather large amounts of text as input to the engine, increasing the portion of accurate questions asked by 70%.

SESAMEIO

Machine Learning Developer

Kitchener, ON / July 2013- August 2013

- > Utilized Django, Javascript and HTML5 to apply **MVC methodology** to create a batch-upload and edit application of teacher and class enrollment tables. Utilized UNIX command line to setup environment dependencies.



— PROJECTS —

{ MYOURTUAL REALITY }

Gesture control of a
virtual object placed in an
augmented reality environment.
Qualcomm Vuforia API + Thalmic API
Winner of BoilerMake Hackathon

{ WANDERLUST }

Kinect motion controlled,
Multi-platform and Multiplayer
First Person Shooter game.
Microsoft Kinect + Azure + Unity
YHack Hackthon

{ PEBBLE RUNNER }

Step counter / tracker
via Pebble SmartWatch.
Novel walking animation.
Pebble API + C
Hack the North Hackathon

{ HOME ALARM SYSTEM }

Arduino powered alarm system
with multiple interrupts as trip sensors.
False alarm recognition with key unlock.
Arduino + C#
Digital Systems Final Project

{ THE GEM STORE }

Toy web application
using Angular.JS allowing
users to create and sell gems.
Angular.JS + HTML + CSS
Personal Project

{ TEXT CONVERT }

Optical Character Recognition
Android application to convert
camera captured text to digital text.
Android + JavaOCR
Personal Project