# BRIAN SO

Student + Developer + Designer

## TECH STACK

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|---|---|
| SPEAK | Java C C++ Python Bash Javascript HTML5 CSS3 Sass MatLab R JQuery |
| TOOLS | Apache Hadoop HBase Eclipse ElasticSearch Jenkins Github Vagrant Asana Unity Maven |
| FRAME WORKS | Django Angular.js Backbone.js Underscore.js |
| PLATFORM | Android iOS Openstack Shell Ubuntu Macintosh Windows |
| ITERATIVE DESIGN | Flavours of Agile |

## CONTACT


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## EDUCATION

Candidate for Bachelor of Applied Science

**Systems Design Engineering**
**Computer Science Minor**

Class of 2018

University of Waterloo, ON

## WORK EXPERIENCE

### ONTARIO INSTITUTE FOR CANCER REASEARCH

**Software Developer** — 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.
- Independently designed and implemented a **benchmarking tool using ElasticSearch** to gauge query performance of patient files to retrieve **actionable insights**. Insights were presented to the software engineering team. Query performance data was gathered through the **analysis of 100000 randomly generated documents.**

### 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. **Increased generation of accurate questions generated by 70%**.

### SESAMEIO

**Software 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 }

Android application featuring 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**
**Yale University Hackathon**

### { 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**

### { LEAGUEFETCH }

A modularly designed python package that wraps the League of Legends API giving developers intuitive access to the webservice endpoints.

**Python**
**Personal Project**