# BRIAN
## SO
### Student + Developer + Designer

## TECH STACK

**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.

> 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. 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**