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

github.com/bcso

(647) - 609 - 9168

bcso@uwaterloo.ca

briansoboiler.azurewebsites.net

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 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. 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 }

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 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

{ LEAGUEFETCH }

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

Python
Personal Project