BRIAN
SO

+ Student + Developer + Designer +

EDUCATION

Candidate for Bachelor of Applied Science

Systems Design Engineering
Computer Science Minor

University of Waterloo, ON

TECH STACK

SPEAK
Java C C++ Python Bash
Javascript HTML5 CSS3 Sass
MatLab R JQuery

TOOLS
Apache Hadoop HBase
ElasticSearch Jenkins Github
Vagrant Asana Unity Maven

FRAME WORKS
Django Angular.js Backbone.js
Underscore.js

PLATFORM
Shell Ubuntu Macintosh Windows
Openstack iOS Android

ITERATIVE DESIGN
Flavours of Agile

CONTACT

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github.com/bcso

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