BRIAN
SO

+ Student + Developer + Designer +

— EDUCATION —

Candidate for Bachelor of Applied Science

Systems Design Engineering

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

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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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