

## Summary of Qualifications

- **Languages:** Java (3+ years), C++ (3+ years), C# (4+ years), MATLAB (3+ Years), Python (1 year)
- **Web Management:** HTML, CSS, MySQL, and JavaScript (Personal Projects)
- Experience with Image Processing Algorithms (3+ years) and Android development (1.5 years)
- Proficient working in Agile environment and strong background in various SDLC methodologies
- Excellent teamwork skills acquired through competitive sports and leading a small team of computer science/engineering students to assist international students through UWIC
- Passionate about developing outstanding products and learning new technologies

## Work Experience

### **Application Developer**, Symcor Inc, Mississauga *Sep 2015 – Present*

- Developed a program to generate, compress, and decompress thousands TIFF images
- Test and analyze core and web cheque processing applications with unit tests
- Determined and documented gaps between existing platform and upcoming platform
- Analyzed and fixed existing web application for critical security vulnerabilities
- Deploy and manage new versions of web application for internal testing

**Technologies Used:** Java, JavaScript, ASP.Net, C#, MsSql, Sql Server 2012, SVN

**Use of Time:** 60% development, 30% testing and analysis, 10% deployment and management

## Internship Experience

### **Bioinformatics Research Assistant**, McMaster University, Hamilton *Sep-Dec 2013*

- Developed a pipeline for QIIME to allow biologists to analyze human micro biome data with a PHD candidate in Perl
- Researched and implemented the best OTU (Operational Taxonomic Unit) picking method for pipeline to improve speed and accuracy using Python

**Technologies Used:** Pearl, Python, Github

**Use of Time:** 75% development, 20% research of optimal methods, 5% support

### **Software Engineering Intern**, Qualcomm Technologies Inc, Markham *Sep-Dec 2012*

- Developed an internal tool using Agile methodologies in C# and MATLAB to conduct psychometric image studies for gamut mapping of display technologies
- Implemented database system using SQL to securely store statistics from studies

**Technologies Used:** C#, ASP.Net, SQL Server, XML

**Use of Time:** 60% development, 20% design, 15% testing, 5% research and optimization

### **Application Programmer**, Ontario Ministry of Health and Long Term Care, Toronto *Jan-Apr 2012*

- Critically analyzed and fixed inaccessible websites for people with a disability using various web technologies in ASP .NET and PHP

- Recommended 13 critical changes to web portal applications and over 60 moderate recommendations to improve the experience for visually impaired visitors

**Technologies Used:** ASP.Net, PHP, C#, JavaScript, SQL Server, HTML, CSS

**Use of Time:** 70% analysis and testing of existing website, 20% fixes, 10% executive recommendations

**Junior Web Developer**, University of Waterloo, Waterloo      *Aug 2010-Dec 2010, May-Aug 2011*

- Developed and maintained web systems for the Housing department of University of Waterloo using ASP.NET, C#, Visual Studio 2010, MsSql, and front-end technologies
- Transferred web applications coded in Visual Basic to C#

**Technologies Used:** C#, HTML, CSS, JavaScript, Visual Studio, MsSQL, SQL server 2008,

**Use of Time:** 90% Development, 10% fixes

## Projects

**Android App: Gita in English with Audio** *2013 - Present*

- Developed a successful Android app for users to stream audio book while reading using Java and Android SDK

**Technologies Used:** Android SDK 13+, Android studio, Java, Eclipse

**Android App: PhysioBuddy** *2014 - Present*

- Developing an Android application in Java that presents real-time visualization and feedback for shoulder rehabilitation exercises using a wearable device called Myo

**Technologies Used:** Azure cloud services, ASP.NET MVC, C#, HTML, CSS, XML, Java, Android Studio

**High-SNR Real-Time 3D Visualization of Raw Ultrasound Scans** *2013-2014*

- Worked with a group of 5 electrical and computer engineering students to develop a MATLAB suit in to generate 3D rendering for Ultrasound Scans
- Implemented a filtering algorithm that improved Signal to Noise (SNR) ratio by 13 dB and Contrast to noise ratio (CNR) by 12 dB

**Technologies Used:** MATLAB, C++

**Cricket Ball Tracker** *2011-2013*

- Created a desktop application using C++ to track red cricket ball using image processing algorithms at 10 frames per second (fps)

**Technologies Used:** C++, OpenCV

## Education

**University of Waterloo:** Honors Bachelor of Applied Science  
Computer Engineering with Biomechanics Option

Graduated: June 2015

[www.github.com/varunsdave](http://www.github.com/varunsdave)