

Summary of Qualifications

- **Languages:** Java (3+ years), C++ (3+ years), NodeJs, Angular, MongoDB (2 years)
- **Web Management:** HTML 5, (S)CSS3, MySQL, and JavaScript
- Certified Scrum Master in an Agile team and with strong background in 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

Fulltime Work Experiences

Software Developer (Full stack), SOTI Inc. Mississauga *Nov 2016 - Present*

- Developing a highly scalable streaming analytics platform to support metadata driven queries
- Using Angular 4/5, NodeJs, MongoDB, and Kafka technologies to build a data lake platform based on micro-services architecture to support big data and data analytics for data scientists
- Mentor intern and Junior developers by providing guidance as well as insights into creating a testable and maintainable code

Technologies Used: MongoDB, Typescript, Angular 4/5, NodeJs, Kafka, and Git

Use of Time: 60% development, 20% testing, 10 % mentoring, 10% deployment and management

Application Developer, Symcor Inc, Mississauga *Sep 2015 – Oct 2016*

- 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

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 - 2016*

- 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