Irteza Arif 4B Electrical & Computer Engineering

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TECHNICAL SKILLLS

Programming Languages: Applicable knowledge of C#, Java, C++, Objective C, embedded C, Visual Basic, MATLAB, PHP, Python, VHDL, JavaScript, Bash shell scripting, SQL

Platforms: Android, iOS, Windows, Linux, UNIX, Blackberry 10, Mac OSX

Web: HTTP, REST, JSON, XML, HTML, CSS, General TCP/IP networking concepts, AngularJS, React,

Content Management Systems (CMSs)

IDEs: IntelliJ, Xcode, Android Studio, Visual Studio, Robotics Studio, Eclipse, MATLAB

Hardware: Arduino, ARM MCB1700 Board, Altera DE2 FPGA board

Software Development: Object-oriented programming principles, multi-threaded programming, kernel level programming, Model View Controller paradigm, Agile Scrum Development, Software Development Life cycle and Unified Model Language

Application Software: Git, Tortoise SVN, Selenium, JIRA

PERSONAL PROJECTS

Android Apps Contributed to: Toronto Now, Tech Deals, Shopping Flyers Canada

Google Play: https://play.google.com/store/apps/developer?id=CuriousDevAndroid
Other Projects: ParkAid (Assistive Device for Parkinson's Disease Patients), Sunshine

Github: https://github.com/iarif123 **Portfolio:** https://iarif123.github.io

WORK EXPERIENCE

Automation Developer Bazaarvoice, Austin, Texas

Sept 2015 - Dec 2015

- Designed test modules for all layers of core web services (Unit Tests, Integration Tests and System Level Tests)
- Wrote orchestration code and set up test environments locally and on the cloud (Jenkins and Amazon Web Services)
- Automated integration of mock test data and created SDKs to efficiently add and remove test data while writing tests.
- Wrote UI code for test result analytics and algorithms to identify core processes that required extensive testing
- Wrote UI and load tests for core applications.

Application Developer

Validus Research Inc., Waterloo, Ontario

Sept 2014 – Dec 2014

- Created a custom, single-page, responsive web application using AngularJS to replace a legacy line-of-business web application.
- Worked with a team of developers to upgrade an existing ASP.NET business web application for a critical 2014 release.
- Created new and updated existing ASP.NET template-based server controls that were used in various places throughout the application.
- Updated the data access layer when needed. Created and modified SQL DDL scripts.
- Added significant usability enhancements to legacy pages using dynamic HTML and the jQuery JavaScript framework.

Web Developer

Canadian Medical Protective Association, Ottawa, Ontario

Jan 2014 - April 2014

- UI enhancements included drag-n-drop DOM elements, tree views, specialize etc.
- Crated HTML content for posting on CMPA's member portal, employee portal and public web
- Developed Web applications for internal CMPA users.
- Wrote unit tests and performed extensive debugging on existing and new code.
- Performed large scale code reviews and restructures.

Java Developer

eHealth Ontario, Toronto, Ontario

May 2013 – Aug 2013

- Designed test modules for all layers of core web services (Unit Tests, Integration Tests and System Level Tests)
- Wrote orchestration code and set up test environments locally and on the cloud (Jenkins and Amazon Web Services)
- Automated integration of mock test data and created SDKs to efficiently add and remove test data while writing tests.
- Wrote UI code for test result analytics and algorithms to identify core processes that required extensive testing
- Wrote UI and load tests for core applications.

Quality Assurance Engineering Intern STX ClydeUnion, Burlington, Ontario

Sept 2012 - Dec 2012

- Participated in implementing test-plans and test-cases build on high-level and detailed design
- Broadly done manual testing, constraints verification testing and functional testing
- Performed test cases throughout the integration and regression environments
- Tested critical bug fixes and coordinated with developers in release if bug fixes meeting tight deadlines

EDUCATION

Bachelor of Applied Science (BASc), Electrical and Computer Engineering,

University of Waterloo, Waterloo, Ontario

Sept 2011 – Apr 2016

Relevant Courses:

Algorithm Design and Analysis, Cooperative and Adaptive Algorithms, Software Design and Architecture, Algorithms and Data Structures, Compilers, Databases, Operating Systems

Relevant Projects:

- Implemented Traveling Salesman Optimization Algorithms using Tabu Search, Simulated Annealing, Genetic Algorithms, Particle Swarm Optimization and Ant Colony Optimization
- Implemented the Kirsch Edge Detector algorithm in VHDL
- Used Altera's DE2 board to implement a simple WAV player
- Implemented stack, queue, hash table, tree and graph data structures in C++
- Programmed LEGO Mindstorm NXT using C# to navigate through a maze
- Designed a traffic light system on an Altera DE2 board using VHDL

AWARDS AND SCHOLARSHIPS

- President's Scholarship of Distinction, University of Waterloo
- Engineering International Student Scholarship, University of Waterloo
- Daily Star Award for achieving 1 A star and 2 A grades in A Levels
- Daily Star Award for achieving 8 A grades in 8 subjects in O levels