

IRTEZA ARIF

4B ELECTRICAL ENGINEERING

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Github; <https://github.com/iarif123> Portfolio: <https://iarif123.github.io>



SKILLS

- **Software Engineering:**
Applicable knowledge of programming languages such as C#, Java, C++, Objective C, embedded C, Visual Basic, MATLAB, PHP, Python and a strong understanding of the fundamentals of object-oriented programming as well as algorithms and data structures.
- **Front-end Development:**
Experience in development of User Interfaces using JavaScript, CSS3, HTML5, AngularJS modern libraries such as JQuery and a solid understanding of web development concepts such as DHTML, AJAX.
- **Back-end Development and Testing:**
Experience coding on the server-side using PHP and Python. Some exposure to a variety of J2EE application servers including JBOSS, Tomcat and IBM WebSphere. Knowledge of server-side technologies such as ColdFusion, JSP, JavaServer Faces and relational databases. Experience writing unit tests using JUNIT, Selenium etc. Experience in mobile applications performance and usability testing.
- **Development Environments:**
Comfortable with Microsoft Visual Studio, Eclipse, NetBeans and Adobe Dreamweaver. Experience using UI development tools such as JQuery UI and Kendo UI.
- **Application and Design Software:**
Experience working with Lotus Notes, Multisim. Applicable skills in AutoCAD and DraftSight. Graphic Design experience working with Vector and Raster graphics (Adobe Illustrator and Photoshop).
- **Hardware Knowledge and experience:**
Experience working with hardware systems and lab equipment such as FPGA's, Microcontrollers (Arduino), Oscilloscopes, Multimeters. Surface mount soldering experience on printed circuit boards. Good foundation in sensor technology and required signal conditioning circuitry and mathematics. Experience with network protocols - HTTP, HTTPS, and TCP-IP. Experience with hardware description language (VHDL), Altera Quartus Software and a sound understanding of digital hardware.



EXPERIENCE

Bazaarvoice

Automation
Developer
September -
December
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.

Validus Group

Application
Developer
September -
December

- 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.

**Canadian
Medical
Protective
Association**

Web Developer
Jan – April
2014

- Added significant usability enhancements to legacy pages using dynamic HTML and the jQuery JavaScript framework.
- UI enhancements included drag-n-drop DOM elements, tree views, specialize etc.
- Created HTML content for posting on CMPA's member portal, employee portal and public web site.
- 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.

**eHealth
Ontario**

Java Developer
May- August
2013

- Involved in architecting various Business Layer and Data Management components of this multi-tiered web based system over J2EE architecture.
- Enhanced and supported core business web applications for programs.
- Wrote and modified UI components using JQuery and Kendo UI.
- Provided web UI expertise to design sessions, documented technical designs and supported QA and performance testing.
- Debugging and fixing JavaScript and CSS issues.
- Developed and maintained SharePoint site for the Portal Services team and provided user support to the business team.



EDUCATION

2011 - 2016

University of Waterloo:

Candidate for BSc. In Honors Electrical Engineering (Co-op)



RELEVANT PROJECTS

WAV Music Player– University of Waterloo (Winter 2015)

- Interfaced SD Card and an audio CODEC to a NIOS II processor using SD bus for the SD Card and I²C bus for the audio CODEC
- Designed and implemented both hardware and software required to implement a WAV file player

Lego NXT Robot Project – University of Waterloo (Spring 2012)

- Programmed a Lego NXT robot using C# to go through complex mazes

IEEE Robotics Workshop – University of Waterloo (Winter 2013)

- Worked in a team of three to build a robot which is able to go through a maze
- Used Freeduino microcontrollers, LEDs, Infrared sensors, motors, capacitors, resistors to established the circuitry using a breadboard
- Programmed the robot using embedded C

Guitar Effects Pedal Design – Personal Project (Fall 2013)

- Soldered electrical components on printed circuit boards and monitored changes in output effect of a Fuzz pedal.
- Conducted research on the components required for different effects combined with knowledge from courses to read and implement circuit design layouts.

FPGA Programming – University of Waterloo (Spring 2012)

- Designed a traffic light system by programming an FPGA board using VHDL.

yHack – Yale University (Winter 2012)

- Collaborated in a team of 3 to design and program an android application.
- Designed, implemented and tested user interface using Android SDK and jQuery Mobile