Xiao (Nancy) Huang

Personal Information

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Website:	http://xiaohuang.in/
Languages:	English (fluent), French (basic), Mandarin Chinese (proficient)

Education

May 2017 Bachelor of Engineering (Electrical)
McGill University, Montreal,Quebec
Gpa: 3.55/4

Skills

Programming Languages:	Java,Javascript HTML,CSS,C,C++, MIPS Assembly
Operating Systems:	Windows, Mac OS X, Linux
Softwares:	Wireshark, LabVIEW, SilkTest, PowerShell, Spice, MATLAB
Hardwares:	VHDL, Circuits analysis and measurement

Work Experience

May - Dec 2015 | LambdaGain Engineering Intern at Fonex Data Systems, Montreal
A carrier-class telecom equipment supplier

- Communicated with telecommunications vendors to obtain pricing and technical specifications for available hardware, software, or services
- Developed basic schematic drawings and engineering instructions for assembling optical modules, applying knowledge of optics theory and components.
- Documented and write reports using Microsoft Outlook, Word, PowerPoint and SharePoint.
- Prepared and assisted in the delivery of presentations on the new product introduction projects to internal customers.
- Operated optical test and measurement equipment such as power meters, wavelength meters, camera scopes, optical spectrum analysers, telecommunication equipment such as switches, BERT, traffic analysers.

Jan - May 2015 | SQA Developer Intern at Matrox Electronic Systems, Montreal
Providing software and hardware solutions for graphics, video, and imaging/machine vision applications

- Maintained ownership of design, execution and maintenance of automated testing framework, scripts and utilities
- Developed test cases for a video error detecting software and debug
- Developed an automatic task scheduler application using Java and PowerShell

May - Dec 2013 | Web Communication Assistant at McGill University, Montreal
Communications and External Relations Department

- Helped maintain and continuously improve the contents of McGill websites
- Troubleshot some bugs such as link errors using HTML
- Set up web traffic reports using Google Analytics
- Photo editing using Photoshop

Academic Projects

Sep 2016 - May 2017 | High-Performance Digital Musical Synthesis using FPGA with Embedded ARM Processor Cores

- Worked on the hard processor side of Terrasic DE0-Nano-SoC Board
- Created a customized Linux kernel image with Debian filesystem
- Programmed the MIDI (Musical Instrument Digital Interface) controller to process musical information from the keyboard using C++
- would work on programming the LCD display

Sep-Dec 2016 | Telecommunication Network Laboratory

- Measured network traffic and performance characteristics using the tools of Traceroute, Ping and Wireshark
- Implemented a DNS client program using sockets in Java
- Investigated the behavior of the TCP by using Wireshark to capture packets and analyze the traces
- Configured the forwarding and firewall rules using the iptables application in Linux

Jan - Apr 2016 | Embedded System Project
Programming a myRIO development board to use machine learning and its accelerometer to recognize its orientation relative to Earths gravitational field.

- Gained neural networks machine learning knowledge
- Designed the whole system using Java first to get a better understanding
- Implemented the design using LabVIEW System Design Software
- Tested and Documented the design

Sep - Dec 2014 | Digital System Design
Using Altera Quartus II FPGA design software to design combinational logic circuits

- Designed implemented a Digital Rowing Machine circuits described in VHDL and tested the final product satisfying requirements.
- Documented the design and testing process thoroughly.

Jan - Apr 2014 | Robotic Competition
Identifying and manipulating Styrofoam blocks, while navigating within an enclosed area with randomly obstacles

- Led a team of 6 to design a fully autonomous robot using LEGO Mindstorms NXT kits to manipulate colored Styrofoam block
- Programmed the robot with Java using Eclipse IDE to execute multiple tasks
- Documented the entire design process (Mechanical, Software and Testing)

Scholarships and Certificates

Sept 2012 McGill International Entrance Award scholarship