tonyhuiwu.com
h85wu@uwaterloo.ca
(226)-606-1914

huiwu

Skills Summary

Languages: c, c++, c#, perl, python, java, sql, vhdl, assembly, matlab, html, css
Lab Equipment: oscilloscope, power supply, soldering station, function generator, multimeter
Development Tools: bash, vi, teraterm, putty
Programmers: quartus II, jtag fpga programmer, xilinx platform usb II
OS: mac osx, linux (fedora), unix, windows

- Familiar with issue tracking and source control tools, Bugzilla and Subversion
- Experienced with firmware debugging and programming (EEPROM, NOR Flash Chip, Serial EEPROM)

Work Experience

General Electric Markham, Ontario
Hardware Design Validation Intern May 2014 - August 2014

Worked on multiple projects dealing with testing and improving both the hardware and software of substation controllers, gateways, and multifunction intelligent electronic devices (IDE).

- Tested various EEPROM flash chips for potential faults and rejected failed chips
- Wrote scripts to reformat data logs collected from a sequence-of-events recorder and present outlying data for analysis
- Created engineering instructions detailing the programming of EEPROM, FPGA and NOR flash on different boards for customer and manufacturing use
- Determined cause of a broadcast storm occurring on a fiber-copper mixed media network card and offered potential solutions
- Modified code of a network configuration application to allow the setup of two gateways
- Worked with a variety of hardware programmers and their respective software
- Reported to lead software and project engineers
- Participated in weekly code reviews as part of the firmware team

Projects

Microcontroller Circuit

- Designed and created a circuit to control an LCD display powered by a PIC18 microcontroller
- Implements both analog and digital input modules in c (mplab c18)

Personal Website

- Designed and created a personal website hosted on Github Pages

Education

University of Waterloo Waterloo, Ontario
Candidate for Bachelor of Applied Science in Electrical Engineering September 2013 - Present

- *Relevant Courses:* Linear Circuits, Fundamentals of Programming, Digital Circuits and Systems, Engineering Design with Embedded Systems, Data Structures and Algorithms, Electronic Circuits I, Digital Computers

Moira Secondary School Belleville, Ontario
International Baccalaureate Diploma September 2009 - May 2013