Emma Wang

emmawang9.github.io

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1 (902) 233-2304

Education

Carleton University **Ottawa, ON**

B.Eng. Electrical Engineering, co-op *anticipated 2020*

4th year standing

Available for a 4 months work term starting May 2019

Relevant courses: Computer organization, Computer Communications, Microprocessor systems, Electronics I/II, Computer-Aided Design of Circuit and Systems, Physical Electronics, Systems and Simulations

Work Experience

IPD Hardware Support Engineer Co-op **Nokia,** Kanata, ON

September 2017 – September 2018

Preform board design verification/testing on signal integrity and timing using lab tools such as oscilloscopes, signal analyzer, frequency response analyzer

Rework/debug and bring-up boards by setting up the program image on PLLs, power controller and other devices on the board

Work with hardware designer and board layout designer through the process of modifying schematics and board layouts for new revisions of board design

Hardware Design and Verification Student **NXP Semiconductors,** Gatineau, QC

September 2016 - December 2016

Investigate Platform Architect Multi-Core Optimization tools from Synopsys for simulations and collecting performance analysis data.

Research and Development Student **CarteNav Solutions,** Halifax, NS

May 2016 - September 2016

Parallel computing research on Jetson TK1 Platform using CUDA/OpenCL and NVidia's Nsight GPU debugging and profiler tools

Technical Skills

Experienced with soldering through hole and surface mount (402) components and working in a lab environment with lab tools such as oscilloscopes, multi-meters and analyzing schematics or PCB layouts.

Simulation/Design Tools: MATLAB, Pspice, Allegro/OrCad Physical Viewer, Autodesk's Eagle PCB design tool
Hardware Platforms: Arduino, Raspberry Pi, ARM based processor (Cortex M4), FPGA (Xilinx), Jetson TK1
Languages: MATLAB, C/C++, Perl, Assembly, Verilog

Projects

Microcontroller PCB Design

Designed, Implemented, populated, and programmed a microcontroller using ATmega32U4 microcontroller chip. Autodesk's Eagle PCB design tool was used to implement the schematic and board layout.

Automatic Drink Mixer

An automatic drink mixer with a voice recognition system for ordering drinks

Volunteer Experience

IEEE Ottawa Section Student Representative	May 2018 - present
IEEE Carleton Vice-Chair	Fall 2017 - Winter 2018
CUHacking 2017 Co-lead	Fall 2016 - Winter 2017
IEEE Carleton Women in Engineering Vice chair	Fall 2016 - Winter 2017
IEEE Student Professional Awareness Conference Organizing Committee	Fall 2015 - Winter 2018
Ottawa Senator Foundation 50/50 seller	Fall 2016 - present