Wayne Ho

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EDUCATION

University of British Columbia   **Vancouver, BC**
Bachelor of Applied Science, Electrical Engineering   **Sept 2010 – Nov 2014**

PROJECTS

Strength Training Program Generator   **Nov 2015**
- Developed a responsive single page web app using the MEAN stack (mongoDB, express.js, angular.js, node.js) and Bootstrap
- Implemented a secured RESTful API to retrieve users' statistics in JSON format and prevent unauthenticated users from changing the backend data

Open Movie Database Loader   **Sept 2015**
- Used jQuery to develop a responsive web app to make AJAX requests to the Open Movie Database API
- Movies are continuously loaded as you scroll to the bottom of the page and additional information is retrieved when clicked

Remote Linux Video Player   **Aug 2015**
- Created a TCP server in C that accepts a string containing a download URL to a video file
- Parses the URL for the file name and downloads the video if it does not exist in the system and plays the video automatically

Microcontroller Hand-held Game Design   **Jun 2015**
- Designed a hand-held game in C using an ARM 32-bit microcontroller
- Developed peripheral drivers to interface LCD, joystick, audio jack, EEPROM memory and analog to digital converters
- Reduced memory size by 36% by encoding the 16-bit pixel data as an index in the 8-bit color palette lookup table

Barometer with Bluetooth Capability   **Jan 2014**
- Interfaced an Arduino with a barometric pressure and temperature sensor via I^2C communication
- Implemented a two-way handshake protocol to reliably transmit altitude readings to an Android phone via Bluetooth
- Reduced power consumption by over 60% by implementing sleep states and configuring an UART interrupt to restore power to the Arduino

TECHNICAL SKILLS

Languages and Frameworks
- *Proficient*: C, JavaScript, jQuery, HTML, CSS
- *Familiar*: Bootstrap, Skeleton, Angular.js , Node.js, Express.js, Processing.js, Ruby

Software
- GitHub, WebStorm, GitHub , Quartus 2, Code Composer Studio 6

INTERESTS

- Physical Activities – Playing sports, powerlifting, hiking