

John Sullivan

www.theJohnSullivan.com

johnpaulsully@gmail.com

Cell: [REDACTED]

Available July 1st

EDUCATION

Northeastern University

Candidate for Bachelor of Science in Electrical and Computer Engineering

GPA: 3.92

Boston, MA

May 2016

WORK EXPERIENCE

Apple

Electrical Engineering Co-op

Cupertino, CA

July - December 2015

- Supported Mac portables hardware team working on new product.
- Designed diagnostics board for Apple hardware incorporating 2 USB Type C port controllers and AVR microcontroller. Board was able to run from battery or negotiate high voltage charge-through from USB Type C power supply. Wrote C firmware for port controllers and AVR.
- Traveled to Factory in China twice. Supported prototype build during bring-up and did FA on new MLBs. Also oversaw diagnostics board build at factory.
- Performed FA on Macbooks with hardware failures, findings shorts, EOS, and power sequencing issues.
- Characterized low-speed protocols and power electronics on prototype MLBs.
- Designed 2 flexible circuits and one breakout board for test fixtures.

Amazon Robotics

Firmware Co-op

North Reading, MA

May - December 2014

- First intern to commit to firmware Git repository, wrote bare-metal C for robotic charging logic and binary data logging as well as special firmware to debug issues.
- Worked extensively on robotic embedded system, performing firmware updates and debugging.
- Designed majority of safety system prototype. Combined RaspberryPi with barcode reader and an LED light tower. Designed smaller controller board to control LEDs from RaspberryPi.
- Wrote python script to control ~500 robots to perform a WiFi scan at cell locations in large grid, robots 'swarmed' until all locations scanned. Used OOD and finite state machine paradigms.
- Wrote python application to automate form submission to internal website by making html requests. Flew to Dallas, TX to ramp-up employees with tool.
- Helped maintain and update life-test fixtures.
- Analyzed firmware issues and performance by querying large databases.

Bright Star Engineering

Position: Programing/Design Intern

Wilmington, MA

April - August 2013

- Worked on embedded Linux system used for automotive diagnostics over CAN.
- Wrote C program for proprietary automotive scanning device to emulate commercially available hardware for use with cell phone and PC Apps.
- Worked on i/o daughter board schematic and PCB layout as well as 2 other boards for test fixture.
- Worked on HTML5 App using websockets to display dashboard data from automotive scanner
- Implemented UPS XML shipping API in custom shipping webpage using HTML, JavaScript, and PHP

TECHNICAL SKILLS

Applications: Cadence, Altium, LabVIEW, Eclipse, GCC, Git

Languages: Very strong in C, C++, Python. Familiar with Bash, Make, PHP, HTML, CSS, JavaScript, MATLAB, Verilog, MIPS, SQL, PostgreSQL, LabVIEW

Operating Systems: Linux, Mac, Windows

Other: Surface mount soldering and rework, PCB design, Oscilloscopes