# Logan Sweet

# Education

# **Olin College of Engineering**

BS Electrical and Computer Engineering GPA 3.6, May 2018

## **Tufts University**

Gap Year, School of Engineering 2014

#### **Harvard Business School HBX CORe**

Course on fundamental business practices. Topics included business analytics, financial accounting, and economics for managers. 2015

# **Projects**

#### Microcontroller Arcade Game

March 2018 - May 2018

Worked on a team of 4 to create a penny-operated bomb defusing game using the Microchip PIC24 microcontroller. Developed I2C code from scratch and created a variety of modular puzzles using nested state machines.

### **Raytheon Senior Capstone Project**

Sept. 2017 - May 2018

Working on a team of 5 to use additive manufacturing processes with magnetic inks to improve the efficacy of passive PCB components. We use software modeling and lab testing to evaluate different materials and test vehicles. Currently developing a more complex RF circuit to test the most promising magnetic materials.

#### **ASL Glove**

Oct. 2015 - Dec. 2015

Designed and fabricateed a glove that interprets American Sign Language Fingerspelling and outputs translated text to a phone via Bluetooth using flex sensors, an accelerometer, and an Arduino. My team of four publicly posted the final design and code so that others can replicate the glove.

# Skills

**Technical:** LTSpice, KiCad, MATLAB, C, Python, Oscilloscope, Function Generator, Vector Network Analyzer, Time Domain Reflectometer, PCB Design, CAM350, LaTeX,

Arduino, Verilog, SolidWorks, AutoCAD, Keysight PLTS & ADS, Jira, Adobe InDesign & Illustrator, ShopBot, Laser Cutting

**Leadership:** Rapid Prototyping, Product Management, User-Centered Design, Lean Product Development, Scrum Methodologies

#### **Elected Positions:**

Freshman class student government representative, Student government vice president for finance, Senior class student government representative

# Experience

## **Signal Integrity Intern**

**TE Connectivity** · Harrisburg, PA

May 2017 - Aug. 2017

- Designed custom high speed connectors for clients
- Characterized PCB connectors with TDR and VNA
- Established benchmarks for TRL and AFR calibrations and created procedure documentation

## Principles of Engineering Lead Course Assistant Olin College of Engineering · Neehdam, MA Fall 2016, Fall 2017

- Assisted faculty in a project-based mechatronics course
- Held office hours to guide student project development, answer technical and teaming questions, and provide feedback
- Served as lead of 8 student course assistants in 2017: organized meetings, led grading and rubric development, and served as main point of contact for instructors

## **Engineering Fellow**

MIT Open Style Lab · Cambridge, MA

June 2016 - Aug. 2016

- Designed a custom modular jacket for a quadriplegic client
- Performed materials research on fabric candidates
- Worked with interdisciplinary team of occupational therapists and fashion designers

#### **Technical Studio Intern**

Boston Museum of Science · Boston, MA June 2016 - Aug. 2016

- Engaged visitors of all ages in engineering activities
- Created and facilitated new design challenges for the museum

# **Product Management Intern**

**Phone2Action** · Washington DC

Feb. 2016 - May 2016

- Worked with engineering, sales, and customer success teams to streamline the monthly software release process
- Created documentation of new feature requirements and facilitated internal and external product feedback
- Conducted trainings and served as point of contact for new clients

## **Summer Intern**

Olin College of Engineering Library · Needham, MA

June 2015 - Aug. 2015

- Worked on a team of students, alumni, and faculty to change the space and culture of use of the Olin library
- Designed, prototyped, and implemented ideas using an agile development strategy

#### **Lab Assistant**

Vanderbilt University · Nashville, TN

June 2012 - Aug. 2012

- Graphene synthesis and nanocarbon properties studies under principal investigator Dr Yaqiong Xu
- Synthesized and analyzed graphene samples
- Presented results at a poster symposium