

Logan Sweet

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+ education

Olin College of Engineering

BS, Electrical Engineering GPA: 3.65, 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

+ skills

Technical: PCB Design, Jira, MATLAB, LTSpice, LaTeX, Keysight PLTS & ADS, Arduino, Calibration & Characterization, Vector Network Analyzer, ShopBot (CNC router), Time Domain Reflectometer, Python, SolidWorks, Laser Cutting, Adobe InDesign & Illustrator, AutoCAD, Verilog, CAM350

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

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

+ projects

Differential Difference Amplifier

May 2017

Used a breadboard to measure and LTSpice to simulate three differential difference amplifier circuits using nMOS and pMOS transistors with a partner. Measured incremental output resistance, differential mode voltage gain, and incremental transconductance gain for each.

Constant Velocity Pendulum and Inverted Pendulum

May 2017

Created hardware-only circuits to drive a rigid pendulum at a constant velocity and to return to an inverted position with a team of three. Deliverables included a presentation, live demo, and a paper detailing the mathematics behind the control system.

ASL Glove

Oct 2015 to Dec 2015

Designed and fabricated 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.

SUITable

Jun 2016 to Aug 2016

Worked on a team of four to create an adaptive jacket for a quadriplegic client. The final product had push-pockets and adjustable concealed ventilation flaps for temperature regulation that allow the client to adjust his clothing without help throughout the day.

+ employment experience

TE Connectivity

Signal Integrity Intern for Aerospace, Defense & Marine
May 2017 to Aug 2017, May 2017 to Aug 2017

Harrisburg, PA

Characterized PCB connectors with TDR and network analyzers. Designed custom high-speed wafer connectors for clients. Established benchmarks for TRL and AFR calibrations and created procedure documents for new methods.

MIT Open Style Lab

Summer Engineering Fellow
Jun 2016 to Aug 2016

Cambridge, MA

One of twelve fellows selected internationally to work on a team with fashion designers and occupational therapists to create a customized jacket for a quadriplegic client. Focused on usability for the client's physical ability and fabric testing for heat retention and moisture wicking to ensure his comfort and independence throughout the day.

Olin College of Engineering

Principles of Engineering Lead Course Assistant
Aug 2016 to Dec 2016, Aug 2017 to Dec 2017

Needham, MA

Assisted faculty members in a project-based course in mechatronics. Course responsibilities included providing feedback for student projects and lab assignments, guiding project and team development, holding weekly and by-appointment office hours, and answering questions about hardware, software, and successful integration of systems. In 2017, served as lead of the 8 person course assistant team and organized TA meetings, led establishment of rubrics and grading policies, and served as a point of contact for instructors.

Museum of Science

Technical Studio Intern
Jun 2016 to Aug 2016

Boston, MA

Engaged students of all ages, especially those underrepresented in STEM, in engineering activities. Created and facilitated engineering design challenges for museum visitors.

Phone2Action

Product Management Intern
Feb 2016 to May 2016

Washington DC

Worked with the engineering, customer success, and sales teams to increase communication and streamline the monthly release schedule. Created documentation of new feature requirements, and facilitated feedback about new products. Made user-centric changes to UI and UX of the platform, including creating a style guide. Assisted the engineering team with the design of new features and conducted client trainings.

Olin College of Engineering Library

Summer Intern
Jun 2015 to Aug 2015

Needham, MA

Worked on a team of nine students, alumni, faculty, and staff to change the culture and use of the Olin College library. Designed, prototyped, fabricated, and implemented ideas using an agile development strategy.

Vanderbilt University

Lab Assistant
Jun 2012 to Aug 2012

Nashville, TN

Graphene synthesis and nanocarbon properties studies under principal investigator Dr. Yaqiong Xu. Synthesized and analyzed graphene samples and prepared a poster presentation.