

# Aaron Wubshet

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## EXPERIENCE

### DRAPER | SIGNAL ENGINEERING INTERN

Jan 2017 & June - Aug 2017 | Cambridge, MA

- Used a universal software radio peripheral (USRP) and laptop set up using GNU Radio to create local GSM network.
- Created a sector level LTE simulator implemented using MatLab to model aggregate power levels with variable input channel propagation models

### BAIN & COMPANY | BUILDING ENTREPRENEURIAL LEADERS PROGRAM PARTICIPANT

Aug 2017 | Atlanta, GA

- Introduced to strategic consulting and accelerated learning opportunities for prospective consultants
- Worked alongside Bain case team to tackle real Bain client's business issue

### MIT CONSULTING GROUP | TREASURER AND TECHNICAL CONSULTANT

Feb 2016 - Present | Cambridge, MA

- Manage a quarterly budget of approximately \$ 20,000 as treasurer while providing clients with a wide array of consulting services including prototype testing, market penetration strategies, employee retention plans, wage matrix evaluation, geographic market analysis, and partnership evaluation.
- Clients range from big tech to start-ups to cash-in-transit

### MIT MAKERLODGE | ELECTRONICS TEAM LEAD AND PR CHAIR

Feb 2017 - Present | Cambridge, MA

- MIT MakerLodge is an initiative to create a centralized shop training infrastructure for undergraduates to learn how to use shop tools ranging from laser cutters to drill presses to soldering irons.
- Served as the co-head of the electronics training team guiding students through basic a training involving soldering, circuit design, and debugging as well as PR Chair to manage interactions with the MIT community.

## PROJECTS

### PHOTODIODE AMPLIFICATION

May 2017 - Present | Cambridge, MA

- Designed circuitry and helped structure control software for nanosatellite in Prof. Kerri Cahoy's STAR Lab
- Worked with Eagle, LTSpice, Python, and C++ for implementation

### SPEAKER TRACKING SYSTEM

Apr - May 2017 | Cambridge, MA

- Created a target following speaker system that turned to face the target as it moved around as well automatically adjusting the volume
- Designed and implemented the system using an Intel microcontroller as well as Cypress PSoC Bluetooth module

### NOISE CANCELLATION

Mar - Apr 2017 | Cambridge, MA

- Investigated and simulated noise cancellation methods using basic feedback control patterns as well as designed custom physical speaker system enclosure
- Built circuitry to recreate the simulation results on the physical speaker



## EDUCATION

### MASSACHUSETTS INSTITUTE OF TECHNOLOGY

BS IN ELECTRICAL ENGINEERING

June 2019 | Cambridge, MA

GPA: 4.3

### RELEVANT COURSEWORK

6.302: Feedback Systems and Controls  
6.115: Microcomputer Project Laboratory  
6.111: Introduction to Digital Systems Laboratory

## SKILLS

### TECHNICAL

MatLab	.....
Eagle	.....
Python	....
LTSpice	....
Computer Architecture	...
Mechanical CAD Software	...

### LEADERSHIP

Cash flow and Accounting	....
Logistics and Organization	...
Resource Management	.....

## RESEARCH

### RESEARCH LABORATORY OF ELECTRONICS (RLE) AT MIT

Experimentalist under Prof. Marin Sojatic creating transparent displays with nanoparticles dispersed in polymer matrix

### COLD MOLECULES AND QUANTUM INFORMATION LAB AT GT

Experimental apparatus designer under Prof. Ken Brown working with laser modulation system to ion trap  $\text{Ca}^{2+}$