

# Maya M Lassiter

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## EDUCATION

### Carnegie Mellon University, Pittsburgh, PA

Master of Science in Electrical and Computer Engineering May 2019  
QPA: 3.6/4.0

Bachelor of Science in Electrical and Computer Engineering May 2017  
QPA: 3.1/4.0 Minor: Global Engineering

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## RELEVANT EXPERIENCE

### Graduate Research Assistant

Dec 2017 – Present

Prof. Maysam Chamanzar, Dept. of Electrical and Computer Engineering,  
Carnegie Mellon University

- Designed packaging for in-vivo optogenetic experiments
- Characterized flexible Parylene-C waveguides
- Integrated discrete light sources for channelrhodopsin stimulation

### Nanofab Support Staff

October 2017 – Present

Carnegie Mellon University

- Supported daily activity of all nanofabrication facilities
- Maintained inventory and coordinated supplies for cleanrooms
- Involved with the transportation and installation of equipment

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## PROJECTS

### Piezoelectric MEMS Resonators

Carnegie Mellon University 2017

- Fabricated and characterized AlN resonators
- Designed a multi-mode, multi-geometry system for reconfiguring AlN resonators
- Conducted theoretical analysis, COMSOL finite element analysis, and modified butterworth van dyke characterization in Cadence

### Hall Effect Based Proximity Sensing

Carnegie Mellon University Spring 2017

- Fabricated Hall elements via Nickel electroless plating on P-Silicon
- Tested I-V characteristics and magnetic flux responses of Hall elements

### Compassionate Engineering

Robotics Institute, Carnegie Mellon University Summer 2015

- Implemented a study on the role of compassion in engineering funded by the Fetzer Institute: *"iSTEP 2015: Cross-Cultural Technology Development Toward Language Access for the Deaf and Hard of Hearing,"* Maya Lassiter, Amal Nanavati, Erik Pintar, Minnar Xie, Ermine A. Teves, and M Bernardine Dias. tech. report CMU-RI-TR-16-32, Robotics Institute, Carnegie Mellon University, June, 2016.
- Created suite of voice-powered computer games for Deaf students' verbal language acquisition in Python using Pygame framework

### Solar Powered Dinghy

Contracted Prototype with SunRa LLC Winter 2015

- Retrofitted steel fishing hull with a solar canopy for in-harbor use as a passenger-ready water taxi
- Designed regenerative solar-electric system with Torqueedo propeller and custom circuit housing
- Field tested prototype in English Harbor, Antigua

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## SKILLS

IRB protocol  
process flow development  
soldering  
wire bonding  
flip chip device bonding  
epoxy bonding  
composite materials  
photolithography  
soft lithography  
electro-less plating  
sputtering  
silicon etching  
MEMS characterization  
CMOS circuit analysis  
Optics characterization  
waveguide design

Atmel Studio  
Autodesk Fusion 360  
COMSOL  
Cadence  
Eagle PCB  
MATLAB  
Python  
C  
SystemVerilog

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## AWARDS AND LEADERSHIP

### GEM University Fellow

### Teaching Assistant:

Electronic Devices and  
Analog Circuits

Aug 2016 – Present

### Community Advisor:

Steuer House

Jan 2016 – May 2017

### President's Task Force for Student Health and Well-Being

May 2016 - May 2017

### University Leadership Student Advisory Council

Aug 2015 – May 2017

### IEEE Member