

Maya M Lassiter

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EDUCATION

Carnegie Mellon University, Pittsburgh, PA

Master of Science in Electrical and Computer Engineering May 2019
QPA: 3.8/4.0

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

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

PROJECTS

Piezoelectric MEMS Resonator Fabrication

Carnegie Mellon University

Fall 2017 – Spring 2018

- 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 Fabrication

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

SKILLS

IRB protocol
process flow development
soldering
wire bonding
flip chip device bonding
epoxy bonding
carbon fiber casting
laser cutting
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

AWARDS AND LEADERSHIP

GEM University Fellow

William J. Happel Fellow

Future Faculty Program

IEEE Member

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