MAYA M. LASSITER

Philadelphia, Pennsylvania
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EDUCATION

University of Pennsylvania, Philadelphia Fall 2019 - Present
Doctor of Philosophy, Electrical and Systems Engineering

Carnegie Mellon University, Pittsburgh
Master of Science, Electrical and Computer Engineering Graduated 2019
Bachelor of Science, Electrical and Computer Engineering Graduated 2017
Minor in Global Engineering

RESEARCH EXPERIENCE

Doctoral Candidate with the Miskin Nanorobotics Lab
University of Pennsylvania, Philadelphia, PA, with M. Miskin Fall 2019 - Present

Summer Research Program with Advanced Imager Technology Group
MIT Lincoln Laboratory, Lexington, MA, with C. Leitz Summer 2019

Graduate Research Assistant in Electrical and Computer Engineering
Carnegie Mellon University, Pittsburgh, PA, with M. Chamanzar 2017 - 2019

Graduate Student Laboratory Technician in Nanofabrication Facility
Carnegie Mellon University, Pittsburgh, PA, with M. Moneck and G. Piazza 2017 - 2019

TEACHING EXPERIENCE

University of Pennsylvania Teaching Assistant

Engineering Electromagnets Spring 2024
Nanoscale Science and Engineering Fall 2023
Statistics for Data Science ESE 542 Summer 2020

Carnegie Mellon University Teaching Assistant

Micro and Nano Systems Fabrication 18-615 Spring 2019
Fundamentals of Electromagnetics 18-300 Fall 2018
Introduction to Electrical and Computer Engineering 18-100 Summer 2018
Electronic Devices and Analog Circuits 18-220 Academic Year 2016 - 17

PUBLICATIONS

M. Lassiter, J. Lee, K. Skelil, L. Xu, L. Hanson, W. Reinhart, D. Sylvester, M. Yim, D. Blaauw, M. Miskin. Microscopic Robots with Onboard Computers, *Science, Submitted*.

L. Xu, **M. Lassiter**, X. Wu, Y. Kim, J. Lee, M. Yasuda, M. Kawa-minami, M. Miskin, D. Blaauw, D. Sylvester. A 210 x 340 x 50m Integrated CMOS System for Micro-Robots with Energy Harvesting, Sensing, Processing, Communication and Actuation, IEEE International Solid-State Circuits Conference (ISSCC), Invited Paper to the IEEE Journal of Solid-State Circuits (JSSC), Special Issue on ISSCC, February 2022.

J. Reddy, **M. Lassiter**, M. Chamanzar. Parylene Photonics: A Flexible, Broadband Optical Waveguide Planform with Integrated Micro-mirrors for Biointerfaces, Nature Microsystems & Nanoengineering, 2020

J. Reddy, **M. Lassiter**, R. Venkateswaran, M. Chamanzar. Integrated Parylene Photonic Waveguides with Embedded Micromirrors for Light Delivery and Manipulation Deep into Tissue, Conference on Lasers and Electro-Optics, Optical Society of America, 2019.

M. Lassiter, A. Nanavati, E. Pintar, M. Xie, E. A. Teves, M. B. Dias. iSTEP 2015: Cross-cultural technology development toward language access for the Deaf and hard of hearing, tech. report CMU-RI-TR-16-32, Robotics Institute, Carnegie Mellon University, June 2016.

POSTERS AND PRESENTATIONS

M. Lassiter, J. Lee, K. Skelil, W. Reinhardt, L. Xu, D. Blaauw, M. Miskin. Microscopic Robots with Onboard Computers, APS March Meeting Presentation 2024

M. Lassiter, W. Reinhardt, L. Hanson, L. Xu, J. Lee, D. Sylvester, D. Blaauw, M. Miskin. Fabricating Reprogrammable Solar Microscopic Robots, APS March Meeting Presentation 2023

M. Lassiter, J. Reddy, M. Chamanzar. Compact Discrete Light Source Packaging for Standalone Flexible Optical Neural Probes, IEEE EMBS Conference on Neural Engineering 2019.

J. Reddy, **M. Lassiter**, M. Chamanzar. Parylene photonics: A flexible, biocompatible, integrated photonic system for optical monitoring and stimulation of deep tissue. SPIE Photonics West 2019.

M. Lassiter, J. Reddy, M. Chamanzar. Flexible, polymer waveguide arrays with integrated 90-degree input/output ports for high-resolution light delivery to the brain, Society for Neuroscience Nanosymposium 2018.

J. Reddy, **M. Lassiter**, R. Venkateswaran, L. Stewart, A. Barth, M. Chamanzar. Parylene optical waveguides: a new platform for implantable photonics, Carnegie Mellon Forum on Biomedical Engineering 2018. **Awarded Outstanding Poster Presentation*

RECOGNITION

University of Pennsylvania Presidential Fellow	2021
Electrical and Systems Engineering Diversity, Equity, and Inclusion Fellow	2021
GEM PhD Fellow	2019
Carnegie Mellon University Outstanding Woman in Engineering Award	2019
William J. Happel Fellow	2018
GEM MS University Fellow	2017

OUTREACH AND SERVICE

University of Pennsylvania Electrical and Systems Engineering Committee on Diversity and Inclusion (2021)

University of Pennsylvania Advancing Women in Engineering Board Member (2020-21)

University of Pennsylvania School of Engineering Doctoral Student Advisory Board on Diversity and Inclusion (2019-20)

Carnegie Mellon University Leadership Search Committee Member:

- Associate Vice President and Chief Information Officer (2019)
- Executive Director of Counseling and Psychological (2018)
- Vice President for Community Health and Wellness (2017)

Member of Fontaine Society, IEEE, IEEE-HKN, SfN, OSA