

# Lauren R. Finkenauer

lrfinken@gmail.com

Address: 5524 Kentucky Avenue, Apartment 1 • Pittsburgh, PA 15232 • (301) 801-1651

## EDUCATION

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<b>Carnegie Mellon University</b> , Pittsburgh, PA <i>Ph.D. Materials Science &amp; Engineering</i>	Anticipated June 2017
<b>Carnegie Mellon University</b> , Pittsburgh, PA <i>M.S. Mechanical Engineering</i>	May 2016
<b>University of Maryland</b> , College Park, MD <i>B.S. Mechanical Engineering</i>	May 2012

## HONORS & FELLOWSHIPS

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• NSF Graduate Research Fellowship Recipient	Spring 2014
• NSF Graduate Research Fellowship: <i>Honorable Mention</i>	Spring 2013
• Women in Engineering Undergraduate Research Fellowship	Fall 2011 – Spring 2012
• Pi Tau Sigma Mechanical Engineering Honor Society	Spring 2010 – Spring 2012
• Primannum Honor Society, University of Maryland	Spring 2009 – Spring 2012
• University of Maryland Honors Program	Fall 2008 – Spring 2012

## PUBLICATIONS

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- Finkenauer, L., Wissman, J., Majidi, C., & Deseri, L, “*Modeling of curved cantilever dielectric elastomer actuator using universal solution in finite bending*,” Proceedings of the Society of Engineering Science 51st Annual Technical Meeting, October 2014.
- J. Wissman\*, L. Finkenauer\* L. Deseri and C. Majidi (\*co-authors), “Saddle-like deformation in a dielectric elastomer actuator embedded with liquid-phase gallium-indium electrodes,” *Journal of Applied Physics*, **116**, 144905 (2014).
- L. R. Finkenauer and C. Majidi, “Compliant liquid metal electrodes for dielectric elastomer actuators,” 2014, p. 905631.
- T. Lu, L. Finkenauer, J. Wissman, and C. Majidi, “Rapid Prototyping for Soft-Matter Electronics,” *Advanced Functional Materials*, p. n/a–n/a, Feb. 2014.

## PRESENTATIONS

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<b>ACS Colloid and Surface Science Symposium</b> <i>Participant Presenting Scientific Poster</i>	<b>Cambridge, MA</b> June 2016
• Surfactant enabled stabilization and dispersion of liquid metal nanoparticles	
<b>SPIE Conference 9056: Electroactive Polymer Actuators and Devices</b> <i>Participant Presenting Scientific Poster</i>	<b>San Diego, CA</b> March 2014
• Compliant Liquid Metal Electrodes for Dielectric Elastomer Actuators	
<b>University of Maryland Undergraduate Research Day</b> <b>Mid-Atlantic Micro/Nano Alliance Conference</b> <i>Participant Presenting Scientific Poster</i>	<b>College Park, MD</b> <b>Annapolis, MD</b> April, March 2012
• High-Resolution All Polymer Capacitive Skins	
<b>Society of Women Engineers Annual Conference</b> <i>Presenter – Region E Joint Collegiate and Professional Meeting</i>	<b>Long Beach, CA</b> October 2009
• Co-led briefing to Region E professional and collegiate section members	
• Demonstrated new and more efficient blog format created after being elected to position of Regional Collegiate Communications Editor (RCCE)	

## TECHNICAL SKILLS

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- ANSYS, Pro/ENGINEER, SolidWorks, MATLAB and SIMULINK, Mathematica, LabVIEW, AutoCAD, OriginPro
- Transmission electron microscopy (TEM), Scanning electron microscopy (SEM), Dynamic light scattering (DLS), Static light scattering (SLS), UV/Vis spectroscopy, CO<sub>2</sub> and UV laser patterning/micromachining, 3D printing, Photolithography, Cryomilling, Cryo/Ultramicrotomy
- Experience with Instron tensile loaders, Bubble pressure tensiometer, Rotation rheometer, Ultracentrifuge