Kris L. DORSEY

Kris+site at Kris Dorsey dot com KrisDorsey.com

Education

PhD in Electrical and Computer Engineering 2013
Carnegie Mellon University, Pittsburgh, PA
Dissertation title: “Dielectric Charging in CMOS MEMS”

MS in Electrical and Computer Engineering 2011
Carnegie Mellon University, Pittsburgh, PA

BS in Electrical and Computer Engineering 2007
Olin College of Engineering, Needham, MA

Academic Appointments

Associate Professor 2021−Present
Department of Electrical and Computer Engineering
Department of Physical Therapy, Movement, and Rehabilitation Sciences
Northeastern University, Boston, MA

Visiting Scholar 2018−Present
School of Engineering and Applied Sciences
Harvard University, Cambridge, MA

Dr. Martin Luther King, Jr, Visiting Associate Professor 2021−2022
Media Arts and Sciences
Massachusetts Institute of Technology, Cambridge, MA

Assistant Professor of Engineering 2015−2021
Picker Engineering Program
Smith College, Northampton, MA

UC President’s and UC Chancellor’s Postdoctoral Fellow 2013−2015
PRIME Systems Laboratory
University of California, San Diego, San Diego, CA and
University of California, Berkeley, Berkeley, CA

Other Professional Positions

Intellectual Property Consultant 2023−2024
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C (“Mintz”), Boston, MA

Industry Positions and Internships

Graduate Intern Technical, Intel Corporation, Hillsboro, OR 2012

Engineering Intern, Lexmark, Inc., Lexington, KY 2007

Journal Articles

§PhD advisee
*Ugrad advisee

J10 N. Hanson§, I. Ampomah Mensah§, S.F. Roberts, J. Healey*, C. Wu*, and K.L. Dorsey, "Controlling the Fold: Proprioceptive Feedback in a Soft Origami Robot," *Frontiers of Robotics and AI*, vol. 11, 2024.

J9 K.A. Kim, F.S. Bagci, and K.L. Dorsey, "Design Considerations for Photovoltaic Energy Harvesting in Wearable Devices," *Scientific Reports*, 12, 2022.

J8 K.L. Dorsey, H. Huang*, and Y. Wen*, "Origami-patterned capacitor with programmed strain sensitivity," *Multifunctional Materials*, vol. 5, no. 2, 2022.

J7 K.L. Dorsey, S.F. Roberts, J. Forman, and H. Ishii, "Analysis of Defextiles: a 3D printed textile towards garments and accessories," J*ournal of Micromechanics and Microengineering*, vol. 32, no 3, 2022. (**won JMM Emerging Leaders award**)

J6 K.L. Dorsey and N. Lazarus, "Lifetime of liquid metal wires for stretchable platforms," *Advanced Materials Technologies*, no. 4, vol. 6, 2021.

J5 O.A. Araromi, M.A. Graule, K.L. Dorsey, S. Castellanos, J.R. Foster, W.H. Hsu, J.J. Vlassak, W.H. Hsu, A.E. Passy, J.J. Vlassak, J.C. Weaver, C.J. Walsh, R.J. Wood, "Ultra-sensitive and resilient compliant strain gauges for soft machines," *Nature*, no. 587, pp. 219–224, 2020.

J4 K.L. Dorsey, M. Cao*, G.A. Slipher, and N. Lazarus, "Mechanical isolation and temperature compensation in soft elastomer components," *IEEE Journal of Sensors*, vol. 18, no. 18, 2018.

J3 D.A. Rolfe, K.L. Dorsey, J.C. Cheng, and A.P. Pisano, "A surface acoustic resonator with template-patterned interdigitated fingers," *Sensors and Actuators A: Physical*, vol. 248, pp. 73-77, 2016.

J2 K.L. Dorsey and A.P. Pisano, "Stability and Control of a Metal Oxide Gas Sensor Under Air Flow," *IEEE Journal of Sensors*, vol. 16, no. 3, 2016.

J1 K.L. Dorsey, S.S. Bedair, and G.K. Fedder, "Gas chemical sensitivity of a CMOS MEMS cantilever functionalized by evaporative assembly," *Journal of Micromechanics and Microengineering*, vol. 24, no. 7, 2014.

Editorial Articles in Journals

E1 K.L. Dorsey, "Electronics-free soft robot has a nice ring to it," *Science Robotics*, 7, eabg5812, 2022. (**Focus article**)

Conference Articles with Full Manuscript Review

CR5 J. Forman, O. Kilic Afsar, S. Nicita, R. Lin, L. Yang, M. Hofmann, A. Kothakonda, Z. Gordon, C. Honnet, K.L. Dorsey, N. Gershenfeld, H. Ishii, "FibeRobo: Fabricating 4D Fiber Interfaces by Continuous Drawing of Temperature Tunable Liquid Crystal Elastomers," in *Proceedings of the ACM Symposium on User Interface Software and Technology*, San Francisco, USA, 2023.

CR4 N. Hanson§, H. Hochsztein, A. Vaidya, J. Willick, K.L. Dorsey, T. Padır, "In-Hand Object Recognition with Innervated Fiber Optic Spectroscopy for Soft Grippers," in *Proceedings of the IEEE RoboSoft Conference*, Edinburgh, UK, 2022.

CR3 K.L. Dorsey, “Reconfigurable Soft Capacitor with Variable Stiffness Ring,” in *Proceedings of the IEEE RoboSoft Conference*, Seoul, Korea, 2019.

CR2 N. Terasaki, K. L. Dorsey, M. Makihata, A.P. Pisano, “Micro printing using microfluidics for printed biodegradable devices in trillion sensing,” in *Electrochemical Society (ECS) Transactions*, New Orleans, USA, 2017.

CR1 D.A. Rolfe, K.L. Dorsey, and A.P. Pisano, “A model to guide template-based nanoparticle printing development,” in *Proceedings of the ASME International Conference on Nanochannels, Microchannels, and Minichannels*, San Francisco, USA, 2015.

Conference Articles with 2-Page Abstract Review

CA6 K.L. Dorsey, J. Forman, S. Roberts, and H. Ishii, “Mechanical sensing in 3D-printed wearable devices using under-extruded conductive filament,” Hilton Head Workshop, Hilton Head Island, USA, 2022.

CA5 K.L. Dorsey, M. Cao*, and N. Lazarus, “Mechanical Isolation Structures for Soft Elastomer Components,” in *Proceedings of the IEEE Sensors Conference*, Glasgow, UK, 2017.

CA4 K.L. Dorsey, D.A. Rolfe, G.D. Hoople, and A.P. Pisano, “Functionalized micromolded nanoparticles towards gas sensor arrays,” in *Proceedings of the IEEE Sensors Conference*, Valencia, Spain, 2014.

CA3 K.L. Dorsey and G.K. Fedder, "A test structure to inform the effects of dielectric charging on CMOS MEMS inertial sensors," in *Proceedings of the IEEE Microelectromechanical Systems Conference*, Paris, France, 2012.

CA2 K.L. Dorsey and G.K. Fedder, "A Frenkel-Poole model of dielectric charging in CMOS MEMS," in *Proceedings of the Solid-State Sensors, Actuators, and Microsystems Conference*, Beijing, China, 2011.

CA1 K.L. Dorsey and G.K. Fedder, "Dielectric charging effects in electrostatically actuated CMOS MEMS resonators,” in *Proceedings of the IEEE Sensors Conference*, Kona, USA, 2010.

Other Conference Articles

M.M. Makihata, B. Eovino, X. Jiang, A. Toor, K.L. Dorsey, and A.P. Pisano, “Non-invasive and remote pipeline rehabilitation technology using reactive and magnetic particles,” ACSE Pipelines Conference, Baltimore, USA, 2015.

K.L. Dorsey, J.R. Herr, and A.P. Pisano, “Sensor selection for outdoor air quality monitoring,” in Proc. Next-Generation Robots and Systems SPIE Sensing Technology+Applications Conference, Baltimore, USA, 2014.

Manuscripts in Submission

J N. Hanson[§], Benjamin Pyatski, Samuel Hibbard, Gary Lvov, Oscar De La Garza, Charles DiMarzio, K.L. Dorsey, and Taskin Padir, “Field calibration of hyperspectral cameras for autonomous terrain inference,” 2024.

CR D. Leblebicioglu[§], I. Ampomah Mensah[§], H. Gao*, M.S. Khan[§], and K.L. Dorsey, “Soft Capacitive Sensor and Wearable Sleeve Towards Measuring Fluid Retention,” 2024.

Patents and Patent Applications

US 20230249368 A1, “Systems and Methods for Robotic Grippers with Fiber Optic Spectroscopy,” T. Padir, A. Vaidya, H. Hochsztein, N. Hanson[§], K. Dorsey, J.B. Willick, T. Kelestemur, D. Erdogmus (application filed)

US 9,150,402, “MEMS Devices Utilizing a Thick Metal Layer of an Interconnect Metal Film Stack,” R. Mahameed, K.L. Dorsey, M.O. Abdelmejeed, M. Abdelmoneum, 2015.

Conference and Workshop Presentations

“Programmable and reconfigurable soft engineered systems,” Japan American Frontiers of Engineering (JAFOE) Symposium, Tokyo, Japan, 2023

Lightning talk, Humans in Complex Systems Symposium, Northeastern University, Boston, USA, 2023

“Controlling the fold,” NSF Foundational Robotics Research Aspiring PIs Meeting, Arlington, VA, USA 2023

“Monitoring exercise-induced arm swelling with flexible sensors using Matlab ML toolbox,” Mathworks Bio-Applications Symposium, Northeastern University, Boston, USA, 2023

“Mechanical sensing in 3D-printed wearable devices using under-extruded conductive filament,” Hilton Head Workshop, Hilton Head Island, USA, 2022

“A tunable, 3D printed “textile” for soft or wearable robots,” Leveraging Advancements in Smart Materials Science Workshop at ICRA Conference, 2022

“An origami-patterned, flexible pressure sensor fabricated with vacuum forming,” Materials Research Society Fall Meeting, Boston, USA, 2019

“Reconfigurable soft capacitor with variable stiffness ring,” IEEE RoboSoft Conference, Seoul, Korea, 2019

“Reconfigurable soft capacitor,” Southwestern Robotics Symposium, Tempe, USA, 2019

“A strain isolated capacitor in a hyper-elastic substrate,” Academic and Research Leadership Network Faculty Development Symposium, Pittsburgh, USA, 2018

“Mechanical Isolation Structures for Soft Elastomer Components,” IEEE Sensors Conference, Glasgow, UK, 2017

“A strain isolated capacitor in a hyper-elastic substrate,” Material Robotics Workshop, Robotics: Science and Systems Conference, Cambridge, USA, 2017

“The effect of airflow on metal oxide gas chemical sensor stability,” Academic and Research Leadership Network Faculty Development Symposium, Boston, USA, 2016

“Functionalized micromolded nanoparticles towards gas sensor arrays,” IEEE Sensors Conference, Valencia, Spain, 2014

“Sensor selection for outdoor air quality monitoring,” Next-Generation Robots and Systems SPIE Sensing Technology+Applications Conference, Baltimore, USA, 2014

"A test structure to inform the effects of dielectric charging on CMOS MEMS inertial sensors," IEEE Microelectromechanical Systems Conference, Paris, France, 2012.

"A Frenkel-Poole model of dielectric charging in CMOS MEMS," Solid State Sensors,

Actuators, and Microsystems Conference (TRANSDUCERS), Beijing, China, 2011

"Dielectric charging effects in electrostatically actuated CMOS MEMS resonators," IEEE Sensors Conference, Kona, USA, 2010

Invited Academic Seminars and Colloquia

"Challenges of power management in soft wearable robotics," Department of Electrical and Computer Engineering Seminar, National Taiwan University, 2024

"Where the rubber meets the code: Designing sensorized, controllable soft robots," Squishy Physics Seminar, Harvard University, 2023

"Designing tunable and reconfigurable soft sensors and robots," Institute of Industrial Science, University of Tokyo, 2023

"Designing tunable and reconfigurable soft sensors and robots," Department of Mechanical Engineering Seminar, Rice University, 2023

"Designing tunable and reconfigurable soft sensors and robots," Center for Information and Systems Engineering Seminar, Boston University, 2022

"Where the rubber meets the code," Department of Computer Science Seminar, Wellesley College, 2022

"Where the rubber meets the code," Grace Hopper Celebration, 2022

"Origami for tunable soft sensors and actuators," Robotic Materials for Advanced Machine Intelligence Symposium, Materials Research Society Spring Meeting, 2022

"From dielectric charging to soft sensors," Stanford University, 2022

"Sensing and active compression challenges for monitoring persistent edema," Department of Computer Science and Engineering Robotics Seminar, University of California San Diego, 2022

"Design and applications of tunable, soft mechanical sensors," Department of Electrical and Computer Engineering Colloquium, Cornell University, 2022

"The future is flexible," Institute Community and Equity Office Seminar, Massachusetts Institute of Technology 2022

"Challenges and opportunities in designing tunable, soft mechanical sensors," Robotics Seminar Series, University of Massachusetts Amherst, 2021

"It's a bit of a stretch," Engineering Department Seminar, Hope College, 2021

"Reconfigurable sensing," Expert Panelist, NSF-NIH Smart Health Principal Investigators meeting, 2021

"Challenges and opportunities in designing tunable, soft mechanical sensors," Toyota Research Institute, 2021

"Challenges and opportunities in designing tunable, soft mechanical sensors", Robotics Institute/Mechanical Engineering/Electrical and Computer Engineering joint seminar, Carnegie Mellon University, 2021

"Challenges and opportunities in designing tunable, soft mechanical sensors," Robotics Engineering Colloquium, Worcester Polytechnic Institute, 2021

"Challenges and opportunities in designing tunable, soft mechanical sensors," Department of Electrical and Computer Engineering Seminar, Northeastern University, 2021

"Soft, shape, sense," Department of Mechanical Engineering Seminar, Johns Hopkins University, 2020

"Soft, shape, sense," Department of Mechanical and Materials Engineering Seminar, Florida International University, 2020

"Soft, shape, sense," Sung, Yang, and Kod* Labs, University of Pennsylvania, 2020

"Soft, shape, sense," Department of Electrical and Computer Engineering Seminar, Duke University, 2020

"Soft, shape, sense," Safer-at-home Seminar Series: Materials Science and Engineering Virtual Research and Networking, NC State University, 2020

"What's hard about soft sensors?" Department of Electrical and Computer Engineering Colloquium, Tufts University, 2019

"It's a bit of a stretch: selective, flexible mechanical sensors," Department of Mechanical Engineering Seminar, University of Connecticut–Storrs, 2019

"It's a bit of a stretch: selective, flexible mechanical sensors," joint Mechanical Engineering/Electrical, Computer, and Biomedical Engineering/Computer Science Seminar, Union College, 2019

"It's a bit of a stretch: selective, flexible mechanical sensors," Physics Seminar, Mount Holyoke College, 2019

"What's hard about soft sensors?" MOSIS Distinguished Lecturer Seminar, University of Connecticut–Storrs, 2019

"What's hard about soft sensors?" Valve L.L.C., Bellevue, WA, 2019

"What's hard about soft sensors?" Sigma Xi, Smith College, 2018

"Strain isolation in elastomer-based capacitors," National Institute of Standards and Technology, Gaithersburg, MD, 2018

"Strain isolation in elastomer-based capacitors," Sensors and Electron Devices Directorate, Army Research Laboratory, Adelphi, MD, 2017

"Sensor in the wind: improving metal oxide sensor stability in airflow," Materials Science and Engineering and Mechanical Engineering Seminar Series, Boston University, 2016

"Metal oxide sensor stability in airflow," UC Berkeley, 2014

"Metal oxide sensor stability in airflow," UC Los Angeles, 2014

General Audience Presentations and Panel Appearances

"Your next favorite outfit might be a robot," TEDxGateway, Mumbai, India, 2024

STEM Panelist, Boston Book Fair Just Kids! 2023

"Where the rubber meets the code: the promising world of soft robots and stretchable sensors," Boston Museum of Science, 2023

Panelist, Women of Color in Data Science, WiDS Cambridge Conference, 2022

Panelist, Vanguard STEM Mentoring Workshop, 2022

"Where the rubber meets the code," Nerd Nite, Northampton, MA, 2019

"What's hard about soft sensors?" SciTech Café, Northampton, MA, 2018

"Tactile sensors on people and robots," Summer Science and Engineering Program, Smith College, Northampton, MA, USA, 2017

"Skin-worn sensors: Why can't I buy one yet?" Celebration of American Science and Engineering, University of Maryland, College Park, MD, USA, 2017

"What is Engineering for Everyone?" Smith College Alumnae Club of Pittsburgh, Pittsburgh, PA, USA, 2017

External Funding Awarded

Total: $866,333
Dorsey share: $826,456

National Science Foundation, "Conference: Mid-scale RI-EW: Nano Systems Innovation (NanoSI)," 09/01/2022 – 02/28/2023, $49,361, Co-PI, Dorsey share $9,484

Mathworks, "Determining limb swelling during physical exertion from a sensing band," 05/06/2022-04/30/2023, $25,000, PI

Amazon Robotics, "Rapid and soft tactile sensors using conductive buckled beams," 12/21/2021, $250,000, PI

National Science Foundation, "CAREER: Rigidity tuned elastomer origami tessellations for fast, reconfigurable, and soft mechanoreceptors," 1846954, 02/19/2019−01/31/2025, $500,404, PI

Dassault Foundation, "Introducing modern simulation and modeling software alongside the Engineering Mechanics classroom," 07/01/2020−06/30/2021, $26,568, PI

Internal Funding Awarded

Total: $59,270
Dorsey share: $34,270

Tier 1 Grant, Northeastern University, 07/01/2023−10/01/2024, $50,000, PI (K. Quigley Co-PI)

Jean Picker Faculty Fellowship, Smith College, 07/01/2020−06/30/2021, $8,045, PI

Jean Picker Faculty Fellowship, Smith College, 07/01/2019−06/30/2019

Design Thinking Curriculum Grant, Smith College, 07/01/2017−06/30/2018, $1,225, PI

Honors, Awards, and Fellowships

Selected for the Japan-America Frontiers of Engineering (JAFOE) Symposium, sponsored jointly with the National Academy of Engineering and the Engineering Academy of Japan, Tokyo, Japan, 2023

Journal of Micromechanics and Microengineering Emerging Leader Award, 2022

Emerging Leader in Honor of Denice Denton ABIE Award, AnitaB.org, 2022

Dr. Martin Luther King, Jr. Fellowship, Massachusetts Institute Technology, 2021

Presidential Award for Mentoring, Smith College, 2021

Center for Nanoscale Systems (CNS) Scholar, Harvard University, 2018

Angel G. Jordan Award for Academic Excellence and Service to the ECE Department, Carnegie Mellon University, 2014

University of California President's Postdoctoral Fellowship, UC San Diego, 2014

University of California Chancellor's Postdoctoral Fellowship, UC Berkeley, 2013

Neil and Jo Bushnell Fellowship in Engineering, Carnegie Mellon University, 2012

GEM PhD Engineering Fellowship, 2008

Courses Taught as Instructor of Record

Course and Institution	Sem	Enrolled
EECE 5554: Robotic Sensing and Navigation, Northeastern University	S24	54
	S23	36
	F22	48
PT 7030: Graduate Seminar, Northeastern University	S24	9
EECE 2210/2211: Electrical Engineering, Northeastern University	F23	48
EGR 390: Introduction to Mechatronics, Smith College	I21	12
EGR 324: Fundamentals of Microelectronics, Smith College	F20	18
	F17	12
EGR 323: Introduction to MEMS, Smith College	F19	12
	F16	12
	S16	12
EGR 220/220L: Electric Circuit Theory and Lab, Smith College	S21	24
	S20	28
	S19	20
	S18	24
	S17	20
	F15	14
EGR 100: Engineering for Everyone: Bits, 'Bots, and Thoughts, Smith College	F19	18
	F17	18
	S16	18

Supervisor for Northeastern University PhD Students

Nathaniel Hanson, PhD CE, conferred December 2023
Damla Leblebicioglu, PhD CE candidate, 2022–Present
Lilly Rizvi, PhD EE candidate, 2022–Present
Immanuel Ampomah Mensah, PhD CE student, 2024–Present
Ibrahim Abubakar, PhD CE candidate, 2022–Present
Muhammad Saad Khan, PhD HMRS student, 2022–Present

PhD Thesis Committee Service

[§]PhD advisee

Nathaniel Hanson[§] (joint with Taskin Padir), Computer Engineering	2023
Chase Kelly, Mechanical Engineering (committee member)	2023

PhD Qualifying Exam Committee Service

Ibrahim Abubakar[§], Damla Leblebicioglu[§], Lilly Rizvi[§]	2023

Undergraduate Advising Activity

Northeastern University (9 students): Joseph Allen, Natalie Daly, Donelle Furline, Henry Gao, Ritika Gurjar, Jessica Healey, Hamza Iqbal, Aidan Kenny, Musheera Khandaker, Andrea Lacunza, Magan Lee, Mealaktey Sok, Ash Wu

Smith College (23 students): Nana Ansah, Kirsten Appell, Eli Boahen, Halle Brown, Meng Cao, Alysha de Silva, Linnea Finkle, Jody Huang, Xi Jiang, Mariel Jones, Sara Kacmoli, Malaika Kironde, Dan Lin, Molly Loughney, Jiaao Lu, Piper MacDonald, Hayley Markos, Rachael Shannon, Becky Shen, Mealaktey Sok, Theo Tefera, Yuhan Wen, Wasila Yussif

Department Service

Faculty Advisor, Northeastern ECE PhD Student Association (NEPSA), Electrical and Computer Engineering, Northeastern University	2023–Present
ECE Hiring Committee, Electrical and Computer Engineering, Northeastern University	2023–2024
Robotics Faculty Representative, EXP Open Office Layout Group	2022
Assessments and Standards Sub-committee Member, Picker Engineering Program, Smith College	2019–2021
Equity, Diversity, and Inclusion Sub-committee Member, Picker Engineering Program, Smith College	2019–2021
Faculty Coordinator for the Fundamentals of Engineering Exam, Picker Engineering Program, Smith College	2017–2020
Honors and Awards Sub-committee Member, Picker Engineering Program, Smith College	2017–2019
Program Assistant Search Committee Member, Picker Engineering Program, Smith College	2017
Organizer, “Applying for an engineering summer undergraduate research fellowship” Workshop, Picker Engineering Program, Smith College	2017
Brodsky Fund for Engineering Entrepreneurship Committee Member, Picker Engineering Program, Smith College	2016–2017
Diversity and Inclusion Charrette Co-organizer, Picker Engineering Program, Smith College	2016

College and School Service

PhD Experience Committee, College of Engineering, Northeastern University	2023–Present
Faculty Search Committee Member, School of Clinical and Rehabilitation Sciences, Bouvé College, Northeastern University	2023–2024
Robotics Faculty Search Committee, College of Engineering, Northeastern	2021–2023

University

Chair, McKinley Fellowship Selection Committee, Smith College	2020–2021
Committee Member, McKinley Fellowship Selection Committee, Smith College	2019–2021
Organizer, “Applying to grad school” Workshop, Smith College	2016

University Service

ADVANCE Future Faculty Workshop Presenter	2023
Table Presentation, SOURCE (Undergraduate Research) Event	2022, 2023
RISE Awards Selection Committee, MIT	2021–2022

Professional Leadership Positions

Associate Editor, Mary Ann Liebert *Robotics Reports*	2022−Present
Associate Editor, IEEE IROS Conference	2024
Co-Director, Boston Chapter, Black in Robotics	2021−Present
Community Engagement and Sunday Workshop Co-Chair, Hilton Head Solid-State Sensors, Actuators, and Microsystems Workshop	2022−2024
Guest Editor (w/ Debbie Senesky), *MDPI Sensors* special issue MEMS and NEMS Sensors for Engineered Applications	2023−2024
Editorial Board Member, *IOP Multifunctional Materials*	2022
Early Career Researcher Board Member, *IOP Multifunctional Materials*	2021−2022
Symposium Co-organizer, “From Actuators and Energy Harvesting Storage Systems to Living Machines,” Materials Research Society Spring Meeting	2021−2022
Workshop Organizer, Undergrad Soft Robotics Research Workshop, *IEEE Robosoft*	2021

Technical Program and Program Committee Service

Executive Technical Program Committee Member Conference on Solid-State Sensors, Actuators, and Microsystems (“TRANSDUCERS”)	2023
Technical Program Sub-Committee Leader Hilton Head Solid-State Sensors, Actuators, and Microsystems Workshop	2022
Technical Program Committee Member Conference on Solid-State Sensors, Actuators, and Microsystems (“TRANSDUCERS”)	2021
Technical Program Committee Member Hilton Head Solid-State Sensors, Actuators, and Microsystems Workshop	2020

Other Journal, Conference, and Workshop Service

Ad-hoc Reviewer, *Science Robotics*	2021−Present

Ad-hoc Reviewer, *IEEE Robotics and Automation Letters*	2021−Present
Ad-hoc Reviewer, *IEEE RoboSoft Conference*	2022−Present
Ad-hoc Reviewer, *IEEE Transactions on Robotics*	2023
Ad-hoc Reviewer, *IEEE IROS Conference*	2023
Ad-hoc Reviewer, *IEEE Sensors Journal*	2020−2022
Ad-hoc Reviewer, *Science Advances*	2022
Presenter, Early Career Faculty Awards Workshop, Hilton Head Workshop	2022
Reviewer, *IEEE Sensors Conference*	2019

Grant Proposal Review Service

Panel Reviewer, National Science Foundation	2023, 2022, 2021, 2018, 2016
Study Section Reviewer, Ad-hoc Member, National Institute of Health	2023, 2022
Ad-hoc Reviewer, National Science Foundation	2019

Professional Memberships

Senior Member, Institute of Electrical and Electronics Engineers (IEEE)

Member, Black in Robotics

Member, Black in Engineering

Member, National Society of Black Engineers

Member, Materials Research Society

Member, Association of Computing Machinery

Media Coverage and Appearances

BBC World Service Newshour, https://www.bbc.co.uk/sounds/play/w172zb8xxwx5mgr, June 2024

Robot Talk, https://youtu.be/XdycxHe4jHM, Jan 2024

"What's Next for Robotics?" Museum of Science, https://www.tiktok.com/@museumofscience/video/7264635882148416814, 2023 (**7M+ views** across Tiktok and YouTube)

"Humans are Soft. Robots Can Be, Too," Northeastern University Research, https://research.northeastern.edu/humans-are-soft-robots-can-be-too/, 2023

"The Quest for a Robot with a Sense of Touch," *Wall Street Journal*, https://www.wsj.com/articles/robots-sense-of-touch-11666899973, 2022

"50 Women You Need to Know About in Robotics in 2021," *Robohub*, https://robohub.org/50-women-in-robotics-you-need-to-know-about-2021/, 2021

"Soft, Squishy Robots Could Save Lives," *Axios*, https://www.axios.com/soft-robotics-

engineering-save-lives-cecad1c2-860a-466b-be9d-573020831641.html, 2021

"Soft Robotics with Kristen Dorsey," *IEEE Robotics and Automation Society (RAS) Soft Robotics Podcast*, https://soundcloud.com/ieeeras-softrobotics/kris-episode, 2020

"Tiny Sensor Problems," *Embedded.FM Podcast*, https://embedded.fm/episodes/214, 2015