Andrew P. Sabelhaus

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EDUCATION

PH.D. MECHANICAL ENGINEERING — University of California, Berkeley
Dissertation title: *Tensegrity Spines for Quadruped Robots* — August 2019
Dissertation Committee: *Alice M. Agogino (Chair), Andrew Packard, Claire Tomlin, Murat Arcak*

M.S. MECHANICAL ENGINEERING — University of California, Berkeley
Thesis: *Mechanism and Sensor Design for SUPERball, a Cable-Driven Tensegrity Robot* — Dec. 2014
Thesis Committee: *Alice M. Agogino, Dennis Lieu*

B.S. MECHANICAL ENGINEERING — University of Maryland, College Park
Minor in Computer Science — May 2012

APPOINTMENTS

Boston University	Assistant Professor
Department of Mechanical Engineering	2022 - Present
Division of Systems Engineering	2022 - Present
Center for Information Systems and Engineering	2022 - Present
Carnegie Mellon University	Postdoctoral Research Fellow
Deptartment of Mechanical Engineering	2019 - 2021
NASA Ames Research Center	Visiting Technologist
Intelligent Systems Division	2015 - 2019
University of California, Berkeley	Graduate Research Fellow
Department of Mechanical Engineering	2012-2019

AWARDS AND HONORS

5. **NSF Faculty Early Career Development Program (CAREER) Award.** National Science Foundation. Title: *Safe Autonomy for Soft Robots.* 2024-2029.
4. **Outstanding Associate Editor.** IEEE International Conference on Robotics and Automation, 2023.
3. **Intelligence Community Postdoctoral Research Fellowship.** Office of the Director of National Intelligence. Title: *Rapid Deployment of Hard-to-Control Robots with Optimality Tradeoffs.* 2020-2022.
2. **NASA Space Technology Research Fellowship.** National Aeronautics and Space Administration. Title: *Trajectory Tracking in Nonlinear, High-Order, Underactuated Robotic Systems.* 2015-2019.
1. **NSF Graduate Research Fellowship.** National Science Foundation. 2012-2015.

RESEARCH OUTPUT SNAPSHOT

Peer-Reviewed Publication Count:				Total Citations:	h-index:
	Conference:	Journal:	Total:		
1st-Author or PI:	11	7	18	1611* (836†)	18* (12†)
All:	17	14	31		

**Via Google Scholar, https://scholar.google.com/citations?user=ze69yEMAAAAJ&hl=en.*
†Via Web of Science, https://www.webofscience.com/wos/author/record/1791313.

JOURNAL PUBLICATIONS

14. A. Dickson, J.C. Pacheco Garcia, M.L. Anderson, R. Jing, S. Alizadeh-Shabdiz, A.X. Wang, C. DeLorey, Z. Patterson, A.P. Sabelhaus, ``Safe Autonomous Environmental Contact for Soft Robots using Control Barrier Functions,'' *IEEE Robotics and Automation Letters (RA-L)*, Vol. 10, Issue 11, Nov. 2025. doi:10.1109/LRA.2025.3609669

13. L. Zamora Yanez, J. Rogatinsky, D. Recco, S.-Y. Lee, G. Matthews, A.P. Sabelhaus, D. Hoganson, T. Ranzani, ``Soft Robotic Delivery of Coiled Anchors for Cardiac Interventions,'' *IEEE Robotics and Automation Letters*, (Early Access), Oct 2025. doi:10.1109/LRA.2025.3617249

12. R. Jing, C. Van Hook, I. Yang, A.P. Sabelhaus, ``Fault Detection and Response for Safe Control of Artificial Muscles in Soft Robots,'' *IEEE Control Systems Letters (L-CSS)*, Vol. 9, Sept. 2025. doi:10.1109/LCSYS.2025.3610637

11. A.P. Sabelhaus, Z. Patterson, A. Wertz, C. Majidi, ``Safe Supervisory Control of Soft Robot Actuators,'' *Soft Robotics*, Aug. 2024. doi:10.1089/soro.2022.0131

10. A. Choi, R. Jing, A.P. Sabelhaus, M.K. Jawed, ``DisMech: A Discrete Differential Geometry-Based Physical Simulator for Soft Robots and Structures,'' *IEEE Robotics and Automation Letters*, Feb 2024. doi:10.1109/LRA.2024.3365292

9. X. Huang, Z.J. Patterson, A.P. Sabelhaus, W. Huang, K. Chin, Z. Ren, M.K. Jawed, C. Majidi, ``Design and Closed Loop Motion Planning of an Untethered Swimming Soft Robot using 2D Discrete Elastic Rods Simulations,'' *Advanced Intelligent Systems*, 2200163, 2022. doi:10.1002/aisy.202200163

8. A.P. Sabelhaus, R.K. Mehta, A. Wertz, C. Majidi, ``In-Situ Sensing and Dynamics Predictions for Electrothermally-Actuated Soft Robot Limbs,'' *Frontiers in Robotics and AI*, Vol. 9, May 2022. doi:10.3389/frobt.2022.888261

7. M. Zadan, D.K. Patel, A.P. Sabelhaus, J.Liao, A. Wertz, L. Yao, C. Majidi, ``Liquid Crystal Elastomer with Integrated Soft Thermoelectrics for Shape Memory Actuation and Energy Harvesting,'' *Advanced Materials*, April 2022. doi:10.1002/adma.202200857

6. Z.J. Patterson, A.P. Sabelhaus, C. Majidi, ``Robust Control of a Multi-Axis Shape Memory Alloy-Driven Soft Manipulator,'' *IEEE Robotics and Automatics Letters*, April 2022. doi:10.1109/LRA.2022.3143256

5. A.P. Sabelhaus, K. Zampaglione, E. Tang, L.H. Chen, A.K. Agogino, A.M. Agogino, ``Double-Helix Linear Actuators.'' *Journal of Mechanical Design (ASME)*, Vol. 143, Issue 10, Oct. 2021. doi:10.1115/1.4050739

4. Z. Ren, X. Huang, M. Zarepoor, A.P. Sabelhaus, C. Majidi, ``Shape Memory Alloy (SMA) Actuator with Embedded Liquid Metal Curvature Sensor for Closed-Loop Control.'' *Frontiers in Robotics and AI*, Vol. 8, Mar. 2021. doi:10.3389/frobt.2021.599650

3. A.P. Sabelhaus, H. Zhao, E. Zhu, A.K. Agogino, A.M. Agogino, ``Model-Predictive Control with Inverse Statics Optimization for Tensegrity Spine Robots.'' *IEEE Transactions on Control System Technology*, Vol. 29, Issue 1, Jan. 2021. doi:10.1109/TCST.2020.2975138

2. A.P. Sabelhaus, A.H. Li, K.A. Sover, J. Madden, A. Barkan, A.K. Agogino, A.M. Agogino, ``Inverse Statics Optimization for Compound Tensegrity Robots.'' *IEEE Robotics and Automation Letters*, July 2020. doi:10.1109/LRA.2020.2983699

1. K. Caluwaerts, J. Despraz, A. Iscen, A.P. Sabelhaus, J. Bruce, B. Schrauwen, V. SunSpiral, ``Design and Control of Compliant Tensegrity Robots through Simulation and Hardware Validation.'' *Journal of the Royal Society Interface*, Sept. 2014. doi:10.1098/rsif.2014.0520

CONFERENCE PUBLICATIONS

17. T. Ondogan, R. Jing, A.P. Sabelhaus, R. Tron, ``Koopman Control Factorization: Data-Driven Convex Controller Design for a Class of Nonlinear Systems,'' *American Control Conference*, May 2026. arXiv:2510.05359

16. A. Dickson, J.C. Pacheco Garcia, A.P. Sabelhaus, ``Force-Safe Environment Maps and Real-Time Detection for Soft Robot Manipulators,'' *IEEE International Conference on Soft Robotics (RoboSoft)*, April 2026. arXiv:2511.05307

15. A. Dickson, J.C. Pacheco Garcia, R. Jing, M.L. Anderson, A.P. Sabelhaus, ``Real-Time Trajectory Generation for Soft Robot Manipulators Using Differrential Flatness,'' *IEEE International Conference on Soft Robotics (RoboSoft)*, April 2025. doi:10.1109/RoboSoft63089.2025.11020810

14. M.L. Anderson, R. Jing, J.C. Pacheco Garcia, I. Yang, S. Alizadeh-Shabdiz, C. DeLorey, A.P. Sabelhaus, ``Maximizing Consistent High-Force Output for Shape Memory Alloy Artificial Muscles in Soft Robots,'' *IEEE International Conference on Soft Robotics (RoboSoft)*, April 2024. doi:10.1109/RoboSoft60065.2024.10521983

13. J.C. Pacheco Garcia, R. Jing, M.L. Anderson, M. Ianus-Valdivia, A.P. Sabelhaus, ``A Comparison of Mechanics Simplifications in Pose Estinmation for Thermally-Actuated Soft Robot Limbs.'' *ASME 2023 Conference on Smart Materials, Adaptive Structures, and Intelligent Systems (SMASIS)*, Sept. 2023. doi:10.1115/SMASIS2023-110774

12. A. Wertz*, A.P. Sabelhaus*, C. Majidi, ``Trajectory Optimization for Thermally-Actuated Soft Planar Robot Limbs,'' *IEEE International Conference on Soft Robotics (RoboSoft)*, April 2022. *Equal Contribution. doi:10.1109/RoboSoft54090.2022.9762226

11. A.P. Sabelhaus, C.Majidi, ``Gaussian Process Dynamics Models for Soft Robots with Shape Memory Actuators.'' *IEEE International Conference on Soft Robotics (RoboSoft)*, April 2021. doi:10.1109/RoboSoft51838.2021.9479294

10. Z. Patterson, A.P. Sabelhaus, K. Chin, T. Hellebrekers, C. Majidi, ``An Untethered Brittle Star Robot for Closed-Loop Underwater Locomotion.'' *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, Oct. 2020. doi:10.1109/IROS45743.2020.9341008

9. L.H. Chen, M.C. Daly, A.P. Sabelhaus, L.A. Janse van Vuuren, H.J. Garnier, M.I. Verdugo, E. Tang, C.U. Spangenberg, F. Ghahani, A.K. Agogino, A.M. Agogino, ``Modular Elastic Lattice Platform for Rapid Prototyping of Tensegrity Robots.'' *ASME International Design Engineering Technical Conferences (IDETC) / 41st Mechanisms and Robotics Conference*, Aug 2017. doi:10.1115/DETC2017-68264

8. A.P. Sabelhaus, A.K. Akella, Z.A. Ahmad, V. SunSpiral, ``Model-Predictive Control of a Flexible Spine Robot.'' *American Control Conference (ACC)*, IEEE, May 2017. doi:10.23919/ACC.2017.7963738

7. K. Zampaglione, A.P. Sabelhaus, L.H. Chen, A.M. Agogino, A.K. Agogino, ``DNA-Structured Linear Actuators.'' *ASME International Design Engineering Technical Conferences (IDETC) / 40th Mechanisms and Robotics Conference*, Aug 2016. doi:10.1115/DETC2016-60291

6. A.P. Sabelhaus, H. Ji, P. Hylton, Y. Madaan, C. Yang, J. Friesen, V. SunSpiral, A.M. Agogino, ``Mechanism Design and Simulation of the ULTRA Spine, a Tensegrity Robot.'' *ASME International Design Engineering Technical Conferences (IDETC) / 39th Mechanisms and Robotics Conference*, Aug 2015. doi:10.1115/DETC2015-47583

5. A.P. Sabelhaus, J. Bruce, K. Caluwaerts, P. Manovi, R.F. Firoozi, S. Dobi, A.M. Agogino, V. SunSpiral, ``System Design and Locomotion of SUPERball, an Untethered Tensegrity Robot.'' *IEEE International Conference on Robotics and Automation (ICRA)*, May 2015. doi:10.1109/ICRA.2015.7139590

4. A.P. Sabelhaus; J. Bruce, K. Caluwaerts, Y. Chen, D. Lu, Y. Liu, A.K. Agogino, V. SunSpiral, A.M. Agogino, ``Hardware Design and Testing of SUPERball, a Modular Tensegrity Robot.'' *The 6th World Conference on Structural Control and Monitoring (6WCSCM)*, July 2014.

3. J. Bruce, A.P. Sabelhaus, Y. Chen, D.Lu, K. Morse, S. Milam, K. Caluwaerts, A.M. Agogino, V. SunSpiral, ``SUPERball: Exploring Tensegrities for Planetary Probes.'' *12th International Symposium on Artificial Intelligence, Robotics, and Automation in Space (i-SAIRAS)*, June 2014.

2. J. Bruce, K. Caluwaerts, A. Iscen, A.P. Sabelhaus, V. SunSpiral, ``Design and Evolution of a Modular Tensegrity Robot Platform.'' *IEEE International Conference on Robotics and Automation (ICRA)*, May 2014. doi:10.1109/ICRA.2014.6907361

1. A.P. Sabelhaus, D. Mirsky, L.M. Hill, S. Bergbreiter, ``TinyTeRP: A Tiny Terrestrial Robotic Platform with Modular Sensing.'' *IEEE International Conference on Robotics and Automation (ICRA)*, May 2013. doi: 10.1109/ICRA.2013.6630933

EDITORIALS

1. X. Huang, A.P. Sabelhaus, M.K. Jawed, L. Jin, J. Zou, Y. Chen. ``Editorial: Materials, design, modeling and control of soft robotic artificial muscles.'' *Frontiers in Robotics and AI*, Nov. 2021. doi:10.3389/frobt.2022.1074549

UNDER REVIEW + PRE-PRINTS

3. R. Jing, M.L. Anderson, J.C. Pacheco Garcia, A.P. Sabelhaus, ``Self-Sensing for Proprioception and Contact Detection in Soft Robots Using Shape Memory Alloy Artificial Muscles,'' *Preprint Only.* arXiv:2409.17111

2. R. Jing, M. Anderson, M. Ianus-Valdivia, A. Akber, C. Majidi, A.P. Sabelhaus, ``Safe Balancing Control of a Soft Legged Robot.'' *Preprint Only.* arXiv:2209.13715

1. A.P. Sabelhaus, L.A. Janse van Vuuren, A. Joshi, E. Zhu, H.J. Garnier, K.A. Sover, J. Navarro, A.K. Agogino, V. SunSpiral, A.M. Agogino, ``Design, Simulation, and Testing of a Flexible Actuated Spine for Quadruped Robots.'' *Preprint Only.* arXiv:1804.06527

IN-PREPARATION

3. B. Liu, R. Jing, A. Dickson, A.P. Sabelhaus, ``Trajectory Generation for Underactuated Soft Robot Manipulators Using Discrete Elastic Rod Dynamics.''
2. A.P. Sabelhaus, L.A. Janse van Vuuren, D. Macri, A. Joshi, K.A. Sover, Z. Rodriquez, J. Navarro, A. Bronars, A.H. Li, A. Barkan, A. Zhang, A.K. Agogino, A.M. Agogino, ``Tensegrity Spines for Quadruped Robots.''
1. A.P. Sabelhaus, ``Stability and Control Design for Lagrangian Systems with Statically-Conservative Forces.''

PATENTS

2. A. Agogino, K. Zampaglione, L.-H. Chen, A.P. Sabelhaus, ``DNA Structured Linear Actuator.'' *US Patent No. 10,630,208,* issued April 21, 2020.
1. L.-H. Chen, A. Agogino, M. Daly, A.P. Sabelhaus, A.K. Agogino, ``Elastic Lattices for Design of Tensegrity Structures and Robots.'' *Under review, US Patent Application No. US20190382995A1.*

TALKS + PRESENTATIONS + POSTERS

33. A.P. Sabelhaus, ``Safe Autonomy for Soft Robots,'' *Georgia Tech, OMSCS Human-Robot Interaction Seminar*, 2026.
32. A.P. Sabelhaus, ``Safe Autonomy for Soft Robots,'' *Worcester Polytechnic Institute, Dept. of Mechanical Engineering Seminar*, 2025.
31. A.P. Sabelhaus, ``Safe Autonomy for Soft Robots,'' *NSF Foundational Research in Robotics PI Meeting, Science of Autonomy Workshop*, 2025.
30. A.P. Sabelhaus, ``Safe Autonomy for Soft Robots in Space Environments,'' *IEEE International Conference on Soft Robotics: Workshop on Humanitarian Assistance and Relief from Disasters and Exploration in Robotics*, 2025.
29. A.P. Sabelhaus, ``Controlling Soft Robots: Safety, Autonomy, and Human Interaction.'' *Draper Labs*, 2024.
28. A.P. Sabelhaus, ``Challenges in Control and Autonomy for Soft Robots: Safety, Robustness, and Scalability.'' *University of Utah, Robotics Seminar*, 2023.
27. A.P. Sabelhaus, ``Challenges in Control Across Stiffness Scales: from Tensegrity to Softness.'' *IEEE Intelligent Robots and Systems (IROS) Tensegrity Robotics Workshop*, 2023.
26. R. Jing, M.L. Anderson, M. Ianus-Valdivia, A. Akber Ali, C. Majidi, A.P. Sabelhaus, ``Safe Balancing Control of a Soft Legged Robot.'' *Late Breaking Results, IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2023
25. M.L. Anderson, R. Jing, J.C. Pacheco Garcia, I. Yang, S. Alizadeh-Shabdiz, A.P. Sabelhaus, ``Networks of Shape Memory Alloy Artificial Muscles Increase Force Output in Soft Robot Limbs.'' *Late Breaking Results, IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2023
24. A.P. Sabelhaus, ``Challenges in Control and Autonomy for Soft Robots: Safety, Robustness, and Scalability.'' *ASME International Design Engineering Technical Conferences (IDETC) Mechanisms and Robotics Special Early Career Session (SEC-sess)*, 2023.
23. A.P. Sabelhaus, ``Challenges in Control and Autonomy for Soft Robots: Robustness, Scalability, and Safety.'' *Embodied Intelligence Conference*, 2023
22. A.P. Sabelhaus, ``Controlling Soft Robots: Not as Hard as You'd Think.'' *University of Massachusetts Amherst, Department of Mechanical Engineering Seminar*, 2022
21. R. Jing, M.L. Anderson, M. Ianus-Valdivia, A.P. Sabelhaus, ``Safe Balancing Control of a Soft Legged Robot.'' *Northeast Regional Robotics Colloquium*, 2022
20. A.P. Sabelhaus, ``Safe Supervisory Control of Soft Robot Actuators.'' *Northeast Regional Robotics Colloquium*, 2022
19. A.P. Sabelhaus, ``Controlling Soft Robots: Not as Hard as You'd Think.'' *Applied Materials, Inc. Research Seminar Series*, 2022

18. A.P. Sabelhaus, ``Safe Supervisory Control of Soft Robot Actuators.'' *Robotics: Science and Systems, Workshop: The Science of Bumping Into Things, Towards Robots that Aren't Afraid of Contact*, 2022
17. A.P. Sabelhaus, ``Close Enough is Good Enough: Approximations in Soft Robot Control.'' *Embodied Intelligence Conference*, 2022
16. A.P. Sabelhaus, ``Double-Helix Linear Actuators.'' *4th ASME Journal of Mechanical Design Webinar*, American Society of Mechanical Engineers, Dec. 2021
15. A.P. Sabelhaus, ``Soft Robot Locomotion: Not as Hard as You Might Think.'' *Intelligence Community Academic Research Syposium*, United States Office of the Director of National Intelligence, Sept. 2021.
14. A.P. Sabelhaus, ``Controlling Soft Robots: Not as Hard as You Might Think.'' *NGA IC Postdoc Speaker Series*, National Geospatial Intelligence Agency (Online), June 2021.
13. A.P. Sabelhaus, ``Towards Rich Locomotion Gaits for Soft Robots.'' *CMU Locomotion Seminar*, Carnegie Mellon University, Nov. 2020.
12. A.P. Sabelhaus, C. Majidi, ``Gaussian Process Models for Soft Robot Locomotion.'' *Workshop on Application-Oriented Modeling and Control of Soft Robots, IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, Oct. 2020.
11. A.P. Sabelhaus, ``Tensegrity Spines for Quadruped Robots.'' *Workshop on Tensegrity Robotics, IEEE International Conference on Robotics and Automation (ICRA)*, May 2019.
10. A.P. Sabelhaus, ``Tensegrity Spines for Quadruped Robots.'' *CMU Locomotion Seminar*, Carnegie Mellon University, Feb. 2019.
9. A.P. Sabelhaus, ``Laika and Belka: Walking Robots with Flexible Spines.'' *Workshop on Autonomy for Future NASA Science Missions*, National Aeronautics and Space Administration, Oct. 2018.
8. A.P. Sabelhaus, A.K. Agogino, ``Inverse Kinematics for Tensegrity Soft Robot Control: Existence and Optimality.'' *Soft Robotics Modeling and Control Workshop, IEEE/RSJ International Conference on Intelligent Robots and Systems*, Oct. 2018.
7. A.P. Sabelhaus, ``Laika, The Four-Legged Robot with a Flexible Spine.'' *NASA Space Technology Day-On-The-Hill*, United States Congress / House of Representatives, Nov. 2017.
6. A.P. Sabelhaus, ``Laika, The Quadruped Robot with a Flexible Spine.'' *Bay Area Robotics Symposium (BARS)*, Oct. 2017.
5. A.P. Sabelhaus, ``Trajectory Tracking Control of a Flexible Spine Robot.'' *Workshop on Structurally Adaptive Tensegrity Robotics, 13th NASA/ESA Conference on Adaptive Hardware and Systems*, July 2017.
4. A.P. Sabelhaus, ``UC Berkeley Robotics for Disaster Relief.'' *Field Innovation Team Bootcamp 5.0*, Mar. 2017.
3. A.P. Sabelhaus, ``DNA-Structured Linear Actuators.'' *SKTA Innopartners IP Redux*, Apr. 2016.
2. A.P. Sabelhaus, ``The ULTRA Spine Project.'' *Bay Area Robotics Symposium (BARS)*, Oct. 2015.
1. A.P. Sabelhaus, ``Robotics, Mechatronics, and Intelligent Systems.'' *Osher Lifelong Learning Institute*, Feb. 2014.

PROFESSIONAL ACTIVITIES

- Editorial Work: Associate Editor
  - *IEEE Robotics and Automation Letters (RA-L)*, 2025-ongoing
  - *IEEE International Conference on Soft Robotics*, 2024, 2025, 2026
  - *IEEE/RSJ Intelligent Robots and Systems Conference*, 2025
  - *IEEE International Conference on Robotics and Automation (ICRA))*, 2023
  - Outstanding Associate Editor Award, *IEEE ICRA 2023*
- Editorial Work: Guest Editor
  - *Frontiers in Robotics and AI*: Special Topic on Materials, Design, Modeling and Control of Soft Robotic Artificial Muscles. 2022
- Peer Review: Grants and Funding
  - National Science Foundation (NSF), *Panel Reviewer, 2023, 2024*
- Peer Review: Journals and Conferences

- Journals: *Soft Robotics*, *IEEE Robotics and Automation Letters (RA-L)*, *International Journal of Robotics Research (IJRR)*, *Science Robotics*, *Mechanism and Machine Theory*, *Acta Astronautica*, *IEEE Transactions on Control System Technology (T-CST)*, *IEEE Transactions on Robotics (T-RO)*, *Journal of Open-Source Software (JOSS)*, *Frontiers in Robotics and AI*, *IEEE Robotics and Automation Magazine*, *International Journal of Space Structures (IJSS)*.
- Conferences: *IEEE International Conference on Robotics and Automation (ICRA)*, *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, *American Control Conference (ACC)*, *IEEE Conference on Decision and Control (CDC)*, *IEEE International Conference on Soft Robotics (RoboSoft)*, *IEEE RAS/EMBS International Conference on Biomedical Robotics & Biomechatronics (BioRob)*, *ASME International Design Engineering Technical Conference (IDETC)*, *IEEE Conference on Control Technology and Applications (CCTA)*, *IEEE/ASME Advanced Intelligent Mechatronics (AIM)*.

TEACHING + MENTORING

- **Mentorship of PhD students.** 5 students. Diversity: 4/5 identify as minority or under-represented, 80%.
- **Mentorship of master's student researchers.** 20 students. Diversity: 11/20 identify as minority or under-represented, 55%.
- **Mentorship of undergraduate student researchers.** 28 students. Diversity: 18/28 identify as minority or under-represented, 64%.
- **Instructor / Assistant Professor.** Boston University.

  - Fall 2025 | Mech. Eng. 500, Dynamics Modeling of Complex Mechanical Systems | Overall rating: 4.86/5
  - Spring 2025 | Eng. 103, Computational Linear Algebra | Overall rating: 4.41/5
  - Fall 2024 | Mech. Eng. 500, Dynamics Modeling of Complex Mechanical Systems | Overall rating: 4.42/5
  - Spring 2024 | Eng. 103, Computational Linear Algebra | Overall rating: 4.17/5
  - Fall 2023 | Eng. 121, Introduction to Programming | Overall rating: 3.26/5
  - Spring 2023 | Eng. 103, Computational Linear Algebra | Overall rating: 4.63/5
  - Spring 2022 | Eng. 103, Computational Linear Algebra | Overall rating: 4.54/5
- **Teaching Excellence in the Core Curriculum Award.** Boston University, 2025
- **Graduate Student Instructor (GSI).** University of California, Berkeley.

  - Spring 2018 | Mech. Eng. 135/235, Design of Microprocessor-Based Mechanical Systems
- **Outstanding Graduate Student Instructor (GSI) Award.** University of California, Berkeley, 2019

SERVICE + OUTREACH

- **Service to the Mechanical Engineering Department at Boston University:**
  - Masters' Curriculum Committee, 2024-2026
  - Faculty Hiring Commitee, 2024-2025
  - Policies Task Force for Fostering Inclusive Environments, 2023
  - PhD Fellowships Writing Group (Organizer), 2022-2023
- **Service to the Systems Engineering Division at Boston University:**
  - Graduate Admissions Committee, 2022-2026
- **Faculty Advisor.** Out in Science, Technology, Engineering, and Mathematics (oSTEM)† at Boston University, 2022 - present
- **Faculty/Staff Advisor.** Out in Science, Technology, Engineering, and Mathematics (oSTEM)† at Carnegie Mellon University, 2020 - 2022.
- **ASME Diversity and Inclusion Strategic Commitee (DISC), Advisor.** American Society of Mechanical Engineers (ASME). Revised ASME policy P-15.11, PS16-02, and Statement on Diversity and Inclusion to include protections for transgender ASME members. June 2016 - 2018.
- **ASEE LGBTQ Virtual Community of Practice, Member.** American Society for Engineering Education. 2018 - 2020.
- **Service to the Mechanical Engineering Department at UC Berkeley:**
  - Graduate Student Committee for Faculty Searches, 2017 - 2018.

  - Graduate Peer Advisor for Equity, Diversity, and Inclusion Initiative, 2014 - 2015.
- Coordinator, Chapter Leadership Programs. Out in Science, Technology, Engineering, and Mathematics† Incoporated. 2012 - 2013.
- Single Outreach Events (Selected):
  - NASA Downlink Day with The Calculus Project, Boston University, 2022 and 2023: Demo and Lab Tour
  - LGBTQ Professionals in STEM Panel, Boston University, 2022: Panelist
  - NASA High School Camp at Carnegie Mellon University, 2021: Guest lecture
  - Carnegie Science Center Day, 2020: Organized table presentation
  - Cal Day, UC Berkeley, 2015-2019: Organized lab tours
  - Robot Block Party, Silicon Valley Robotics, 2015, 2017: Organized table presentation

†Out in Science, Technology, Engineering, and Mathematics (oSTEM) is a national organization for LGBTQ science and engineering students, www.ostem.org