

Michael Posa

Curriculum Vitae

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November 30, 2023
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Education

- 2017 **Ph.D.**, *Massachusetts Institute of Technology*.
Electrical Engineering and Computer Science
Advisor: Russ Tedrake
Dissertation: Optimization for control and planning of multi-contact dynamic motion
Committee: Tomás Lozano-Perez (MIT), Sertac Karaman (MIT), Andy Ruina (Cornell)
- 2008 **M.S.**, *Stanford University*.
Master of Science in Mechanical Engineering
- 2007 **B.S.**, *Stanford University*.
Bachelor of Science in Mechanical Engineering

Academic Positions

- 2017–present **Assistant Professor**, *University of Pennsylvania*, Mechanical Engineering and Applied Mechanics, Electrical and Systems Engineering (secondary), Computer and Information Science (secondary), General Robotics, Automation, Sensing and Perception (GRASP) Laboratory, .

Industrial Positions

- 2008-2011 **Robotics Engineer**, *Vecna Robotics*, Cambridge, MA.

Awards and Honors

- 2023 RSS Early Career Spotlight Award
- 2023 NSF CAREER Award
- 2022 Honorable Mention for the IEEE Transactions on Robotics King-Sun Fu Memorial Best Paper Award
- 2022 Finalist for Outstanding Dynamics and Control Paper Award, IEEE International Conference on Robotics and Automation
- 2021 Finalist for Annual Best Paper Award, IEEE-RAS Technical Committee on Model-Based Optimization for Robotics
- 2016 Finalist for Best Oral Paper, IEEE-RAS International Conference on Humanoid Robotics

- 2013 Best Paper Award, Hybrid Systems: Computation and Control
- 2013 Rolf Locher Graduate Fellowship, Massachusetts Institute of Technology
- 2011 NSF Graduate Research Fellowship Honorable Mention
- 2007 Frederick E. Terman Award for Scholastic Achievement in Engineering, Stanford University

Journal Publications

- [1] Mathew Halm and **Michael Posa**. Set-Valued Rigid Body Dynamics for Simultaneous Frictional Impact. *Conditionally accepted in the International Journal of Robotics Research*, 2023.
- [2] Wanxin Jin and **Michael Posa**. Task-Driven Hybrid Model Reduction for Dexterous Manipulation. *Conditionally accepted in IEEE Transactions on Robotics*, 2023.
- [3] Patrick Wensing, **Michael Posa**, Yue Hu, Adrien Escande, Nicolas Mansard, and Andrea Del Prete. Optimization-Based Control for Dynamic Legged Robots. *IEEE Transactions on Robotics*, 2023.
- [4] Brian Acosta*, William Yang*, and **Michael Posa**. Validating Robotics Simulations Through Real World Impacts. *IEEE Robotics and Automation Letters*, 2022.
- [5] Alp Aydinoglu, Philip Sieg, Victor Preciado, and **Michael Posa**. Stabilization of Complementarity Systems via Contact-Aware Controllers. *IEEE Transactions on Robotics*, 2021.
[Honorable Mention for the IEEE Transactions on Robotics King-Sun Fu Memorial Best Paper Award]
[Finalist for Annual Best Paper Award, IEEE-RAS Technical Committee on Model-Based Optimization for Robotics]
- [6] **Michael Posa**, Mark Tobenkin, and Russ Tedrake. Stability analysis and control of rigid-body systems with impacts and friction. *IEEE Transactions on Automatic Control*, 61(6):1423-1437, 2016.
- [7] **Michael Posa**, Cecilia Cantu, and Russ Tedrake. A direct method for trajectory optimization of rigid bodies through contact. *International Journal of Robotics Research*, 33(1):69-81, 2014.
- [8] Maurice Fallon, Scott Kuindersma, Sisir Karumanchi, Matthew Antone, Toby Schneider, Hongkai Dai, Claudia Pérez D'Arpino, Robin Deits, Matt DiCicco, Dehann Fourie, Twan Koolen, Pat Marion, **Michael Posa**, Andrés Valenzuela, Kuan-Ting Yu, Julie Shah, Karl Iagnemma, Russ Tedrake, and Seth Teller. An architecture for online affordance-based perception and whole-body planning. *Journal of Field Robotics*, 32(2):229-254, 2014.

Peer-reviewed Conference Publications

- [9] Brian Acosta and **Michael Posa**. Bipedal Walking on Constrained Footholds with MPC Footstep Control. *To appear in IEEE-RAS International Conference on Humanoid Robotics*, 2023.

Underlined authors are or were members of Michael Posa's research group.

- [10] Bibit Bianchini, Mathew Halm, and **Michael Posa**. Simultaneous Learning of Contact and Continuous Dynamics. *To appear in the Conference on Robot Learning*, 2023.
- [11] Leon Kim, Yunshuang Li, **Michael Posa**, and Dinesh Jayaraman. Im2Contact: Vision-Based Contact Localization Without Touch or Force Sensing. *To appear in the Conference on Robot Learning*, 2023.
- [12] Yu-Ming Chen, Gabriel Nelson, Robert Griffin, **Michael Posa**, and Jerry Pratt. Integrable Whole-body Orientation Coordinates for Legged Robots. *IEEE/RSJ Conference on Intelligent Robotics and Systems*, 2023.
- [13] Wanxin Jin, Alp Aydinoglu, Mathew Halm, and **Michael Posa**. Learning Linear Complementarity Systems. *Learning for Dynamics and Control Conference*, 2022.
- [14] Bibit Bianchini, Mathew Halm, Nikolai Matni, and **Michael Posa**. Generalization Bounded Implicit Learning of Nearly Discontinuous Functions. *Learning for Dynamics and Control Conference*, 2022.
- [15] Alp Aydinoglu and **Michael Posa**. Real-Time Multi-Contact Model Predictive Control via ADMM. *IEEE International Conference on Robotics and Automation*, 2022. **[Finalist for Outstanding Dynamics and Control Paper Award]**
- [16] William Yang and **Michael Posa**. Impact Invariant Control with Applications to Bipedal Locomotion. *IEEE/RSJ Conference on Intelligent Robotics and Systems*, 2021.
- [17] Mihir Parmar*, Mathew Halm*, and **Michael Posa**. Fundamental Challenges in Deep Learning of Stiff Contact Dynamics. *IEEE/RSJ Conference on Intelligent Robotics and Systems*, 2021.
- [18] Alp Aydinoglu, Mahyar Fazlyab, Manfred Morari, and **Michael Posa**. Stability Analysis of Complementarity Systems with Neural Network Controllers. *Hybrid Systems: Computation and Control*, 2021.
- [19] Samuel Pfrommer*, Mathew Halm*, and **Michael Posa**. ContactNets: Learning of Discontinuous Contact Dynamics with Smooth, Implicit Representations. *Conference on Robot Learning*, 2020.
- [20] Alp Aydinoglu, Victor Preciado, and **Michael Posa**. Contact-Aware Controller Design for Complementarity Systems. *IEEE International Conference on Robotics and Automation*, 2020.
- [21] Yu-Ming Chen and **Michael Posa**. Optimal Reduced-order Modeling of Bipedal Locomotion *IEEE International Conference on Robotics and Automation*, 2020.
- [22] Mathew Halm and **Michael Posa**. Modeling and Analysis of Non-unique Behaviors in Multiple Frictional Impacts. *Robotics: Science and Systems*, 2019.
- [23] Mathew Halm and **Michael Posa**. A Quasi-static Model and Simulation Approach for Pushing, Grasping, and Jamming. *The Workshop on the Algorithmic Foundations of Robotics*, 2018.
- [24] **Michael Posa**, Twan Koolen, and Russ Tedrake. Balancing and Step Recovery Capturability via Sums-of-Squares Optimization. *Robotics: Science and Systems*, 2017.
- [25] Twan Koolen, **Michael Posa**, and Russ Tedrake. Balance control using center of mass height variation: limitations imposed by unilateral contact. *IEEE-RAS International Conference on Humanoid Robotics*, 2016. **[Finalist for Best Oral Paper Award]**

- [26] **Michael Posa**, Scott Kuindersma, and Russ Tedrake. Optimization and stabilization of trajectories for constrained dynamical systems. *IEEE International Conference on Robotics and Automation*, 2016.
- [27] **Michael Posa**, Mark Tobenkin, and Russ Tedrake. Lyapunov analysis of rigid body systems with impacts and friction via sums-of-squares. *International Conference on Hybrid Systems: Computation and Control*, 2013. **[Winner of the Best Paper Award]**
- [28] **Michael Posa** and Russ Tedrake. Direct trajectory optimization of rigid body dynamical systems through contact. *The Workshop on the Algorithmic Foundations of Robotics*, 2012.

Publications Under Review

- [29] Hien Bui and **Michael Posa**. Enhancing Task Performance of Learned Simplified Models via Reinforcement Learning. *Submitted to IEEE International Conference on Robotics and Automation*, 2024.
- [30] Yu-Ming Chen, Hien Bui, and **Michael Posa**. On-policy Learning for Reduced-order Models of Legged Robots. *Submitted to IEEE International Conference on Robotics and Automation*, 2024.
- [31] Wei-Cheng Huang*, Alp Aydinoglu*, Wanxin Jin, and **Michael Posa**. Adaptive Contact-Implicit Model Predictive Control with Online Residual Learning. *Submitted to IEEE International Conference on Robotics and Automation*, 2024.
- [32] Alp Aydinoglu, Adam Wei, and **Michael Posa**. Consensus Complementarity Control for Multi-contact MPC. *Submitted to IEEE Transactions on Robotics*, 2023.
- [33] William Yang and **Michael Posa**. Impact-Invariant Control: Maximizing Control Authority During Impacts. *Submitted to IEEE Transactions on Robotics*, 2023.
- [34] Yu-Ming Chen, Jianshu Hu, and **Michael Posa**. Beyond Inverted Pendulums: Task-optimal Simple Models of Legged Locomotion. *Submitted to IEEE Transactions on Robotics*, 2023.

Grants and Funding

- 8/23-8/26 **Boston Dynamics AI Institute**
 Title: Object-centric learning for control of dexterous manipulation.
 University of Pennsylvania, PI
 Total award: \$1,500,000 (100%)
- 4/23-3/28 **NSF CAREER-Foundational Research in Robotics (FRR)**
 Title: Manipulation of novel objects via non-smooth implicit learning
 University of Pennsylvania, PI
 Total award: \$600,000 (100%)
- 4/21-3/24 **Toyota Research Institute Young Faculty Researchers**
 Title: Optimization of simple models for locomotion and manipulation in Drake
 University of Pennsylvania, PI
 Total award: \$650,000 (100%)

- 3/20–3/21 **NSF CMMI-Dynamics, Control and System Diagnostics (DCSD)**
 Title: Travel Funds for 15th Dynamic Walking Conference
 University of Pennsylvania, PI
 Total award: \$10,000 (100%)
- 1/20–12/23 **NSF Emerging Frontiers in Research and Innovation (EFRI)**
Continuum, Compliant, and Configurable Soft Robotics Engineering (C3 SoRo)
 Title: 3-D surface control for object manipulation with stretchable material
 University of Pennsylvania, co-PI
 Collaborators: James Pikul (PI), Mark Yim (co-PI), Christian Santangelo (co-PI), Ryan Hayward (co-PI)
 Total award: \$2,000,000 (~20%)
- 3/19–3/20 **Google Faculty Research Award**
 Title: Structured learning of non-smooth contact dynamics
 University of Pennsylvania, PI (100%)
 Total award: \$68,291
- 9/18–9/22 **NSF National Robotics Initiative (NRI)**
 Title: Contact-aware Control of Dynamic Manipulation
 University of Pennsylvania, PI (100%)
 Total award: \$504,880 + \$8,000 REU Supplement

Invited Talks

- November 2023 Georgia Tech, Institute for Robotics and Intelligent Machines Seminar
 “Do We Really Need all that Data? Learning and Control for Contact-rich Manipulation”
- October 2023 IROS Workshop on Leveraging Models for Contact-rich Manipulation
- July 2023 Robotics: Science and Systems, Early Career Spotlight
 “The Structure of Touch: Low-Data Learning and Control”
- February 2023 Boston Dynamics AI Institute, Mobile Manipulation Workshop
 “Dexterity without big data: implicit learning and real-time control”
- February 2023 Stanford University
 “Dexterity without big data: implicit learning and real-time control”
- February 2023 University of California, Berkeley
 “Dexterity without big data: implicit learning and real-time control”
- January 2023 ETH Zurich, Autonomy Talks
 “Multi-contact learning and real-time control”
- October 2022 Rutgers University
 “Hybrid robotics and implicit learning”
- May 2022 Mitsubishi Electric Research Labs
 “Hybrid robotics and implicit learning”
- March 2022 University of Toronto
 “Hybrid robotics and implicit learning”

- March 2022 University of California, Santa Barbara
"Hybrid robotics and implicit learning"
- Sept 2021 Massachusetts Institute of Technology
"Contact-rich robotics: learning, impact-invariant control, and tactile feedback"
- Sept 2021 Princeton University
"Contact-rich robotics: learning, impact-invariant control, and tactile feedback"
- Sept 2021 IROS Workshop on Impact-Aware Robotics
"Perspectives on multi-contact robotics: deep learning, impact-invariant control, and modeling non-uniqueness"
- July 2021 RSS Workshop on Integrating Planning and Learning
"Optimal models and non-differentiable model learning"
- June 2021 Dynamic Walking Conference
"Perspectives on Multi-impact Robotics"
- May 2021 ACC Workshop on Fielding Legged Robotics off the Beaten Path
"Impact-invariant Control and Bipedal Jumping"
- April 2021 Nvidia Robotics Seminar
"Touch is discontinuous! Challenges in learning for contact-driven robotics"
- December 2020 Johns Hopkins University Applied Physics Laboratory
"Exploiting structure in non-smooth dynamics for multi-contact learning and control"
- October 2020 20th International Conference on Control, Automation, and Systems
"Beyond Inverted Pendulums: Optimizing Task-driven Simple Models"
- September 2020 University of Michigan
"Bilevel optimization for control, learning, and multi-contact robotics"
- October 2019 University of California, Santa Barbara
"Robot meet world: challenges in multi-contact locomotion and manipulation"
- July 2019 ACC Workshop on Challenges and Solutions for Legged Robotics.
"Exploring models of contact and legged locomotion: existence, uniqueness, and optimality."
- June 2019 Google Brain, New York.
"Robot meets world: the challenge of positive interaction in dynamic environments."
- April 2019 NASA Jet Propulsion Laboratory.
"Robot meets world: the challenge of positive interaction in dynamic environments."
- April 2019 Caltech University.
"Robot meets world: the challenge of positive interaction in dynamic environments."
- June 2016 University of Texas at Dallas, School/Workshop on Applicable Theory of Switched Systems
- May 2016 ICRA Workshop on Robust Optimization-Based Control and Planning for Legged Robots
- April 2016 Carnegie Mellon, Center for the Foundations of Robotics Seminar
- February 2014 BIRS Workshop on Computational Contact Mechanics: Advances and Frontiers in Modeling Contact

- June 2013 RSS Workshop on Formal Methods for Robotics and Automation
- April 2013 University of Pennsylvania, Kod*lab Lunch Seminar
- March 2013 Florida Institute of Human and Machine Cognition (IHMC), Learning Lunch

Campus Seminars

- November 2020 University of Pennsylvania, Mechanical Engineering and Applied Mechanics Seminar
- August 2017 University of Pennsylvania, Geometry Focus Group

Professional Memberships

- o IEEE Member (since 2015)
- o IEEE Robotics & Automation Society Member (since 2017)
- o IEEE Control Systems Society Member (since 2017)
- o Tau Beta Pi (Engineering Honors Society) since 2006)

Teaching Experience

- Spring 2020 University of Pennsylvania, MEAM 211, Engineering Mechanics: Dynamics
- Spring 2021
- Spring 2023
- Fall 2018 University of Pennsylvania, MEAM 517, Control and Optimization with Applications in Robotics
- Fall 2019
- Fall 2020
- Fall 2022
- Fall 2023
- Spring 2018 University of Pennsylvania, MEAM 535, Advanced Dynamics
- Fall 2017 University of Pennsylvania, MEAM 513, Feedback Control Systems

Postdoctoral Researchers Supervised

- 2023– Minghan Zhu, Ph.D. from the University of Michigan
Joint with Prof. Maani Ghaffari at the University of Michigan
- 2021–2023 Wanxin Jin, Ph.D. from Purdue University
Next position: Asst. Prof. at Arizona State University

Ph.D. Students Supervised

- 2021– Xuan Hien Bui, Mechanical Engineering and Applied Mechanics
- 2020– Elizabeth (Bibit) Bianchini, Mechanical Engineering and Applied Mechanics
NDSEG Fellow
Co-advised with Dan Koditschek

- 2020– Brian Acosta, Mechanical Engineering and Applied Mechanics
NSF GRFP Fellow
- 2020– Leon Kim, Electrical and Systems Engineering
NSF GRFP Fellow
Co-advised with Dinesh Jayaraman
- 2019– William Yang, Mechanical Engineering and Applied Mechanics
NSF GRFP Fellow
- 2019–2023 Alp Aydinoglu, Electrical and Systems Engineering
Dissertation: Control of Multi-Contact Systems via Local Hybrid Models
Next position: Research Engineer at Boston Dynamics
- 2018–2023 Yu-Ming Chen, Electrical and Systems Engineering
Dissertation: Toward High-performance Simple Models of Legged Locomotion
Next position: Applied Scientist at Boston Dynamics AI Institute
- 2018–2023 Mathew Halm, Mechanical Engineering and Applied Mechanics
NSF GRFP Fellow
Dissertation: Addressing stiffness-induced challenges in modeling and identification of for rigid-body systems with friction and impact
Next position: Applied Scientist at Amazon Robotics

Doctoral Dissertation Committees

- Jason Ma, Computer and Information Science, University of Pennsylvania
- Saumya Saxena, Robotics, Carnegie Mellon University
- Erica Waters, Mechanical Engineering and Applied Mechanics, University of Pennsylvania
- Jessica Yin, Mechanical Engineering and Applied Mechanics, University of Pennsylvania
- Timothy Greco, Mechanical Engineering and Applied Mechanics, University of Pennsylvania
- Shou Yang, Mechanical Engineering, Carnegie Mellon University
- J. Diego Caporale, Mechanical Engineering and Applied Mechanics, University of Pennsylvania
- Jessica (McWilliams) Weakly, Mechanical Engineering and Applied Mechanics, University of Pennsylvania
- Shane Rozen-Levy, Mechanical Engineering and Applied Mechanics, University of Pennsylvania
- Nathan Kong, Mechanical Engineering, Carnegie Mellon University
- Gregory Campbell, Mechanical Engineering and Applied Mechanics, University of Pennsylvania
- 2023 Laura Jarin-Lipschitz, Mechanical Engineering and Applied Mechanics, University of Pennsylvania
- 2023 David Levine, Mechanical Engineering and Applied Mechanics, University of Pennsylvania
- 2022 Andrew Specian, Mechanical Engineering and Applied Mechanics, University of Pennsylvania
- 2018 Mabel Zhang, Computer and Information Science, University of Pennsylvania

2018 Sarah Tang, Mechanical Engineering and Applied Mechanics, University of Pennsylvania

Masters Theses Supervised

- 2020 Nanda Vasudevan, M.S. Robotics
Next position: Tesla Motors
- 2019 Tianze Wang, M.S. Electrical Engineering
Next position: Ph.D. candidate at Florida State University
- 2019 Yuhan Zhao, M.S. Robotics
Next position: Ph.D. Candidate at New York University

Non-thesis Masters Research Supervised

- 2023– Wei-Cheng Huang, M.S. Robotics
- 2023– Sharanya Venkatesh, M.S. Robotics
- 2022–2023 Mengti Sun, M.S. Robotics
Next position: Amazon
- 2021–2022 Haoxiang You, M.S. Mechanical Engineering and Applied Mechanics
- 2021–2022 Kausik Sivakumar, M.S. Robotics
- 2021–2022 Jia Shen, M.S. Robotics
- 2020–2021 David DePauw, M.S. Robotics
Next position: Kitware
- 2020–2021 Jianshu Hu, M.S. Robotics
Next position: Ph.D. Candidate at University of Michigan–Shanghai Jiao Tong University Joint Institute
- 2020–2021 Mihir Parmar, M.S. Robotics
Next position: Lucid Motors
- 2020 Yike Li, M.S. Robotics
Next position: Oracle
- 2017–2019 Shrenik Muralidhar, M.S. Robotics
Next position: Brain Corp

Undergraduate Projects Supervised

- 2022-2023 SMOKE-E, senior design project
- 2022 Adam Wei, visiting researcher from the University of Toronto
- 2022 Zachary Francis, visiting researcher from MIT
- 2021-2022 RogerBot, senior design project
- 2020–2023 Joah Kim, NSF NRI
- 2020–2021 Philip Sieg, NSF NRI

2020 Katherine Hann, Google Explore
2020 Maria Ferreira, Google Explore
2020 Belinda Liu, Google Explore
2020 Mirayda Martinez, Google Explore
2020 Natalie Aziz, NSF NRI
2020 Andrés Eskanazi, NSF NRI
2020 Joan Shaho, NSF NRI
2019–2020 Samuel Pfrommer, PURM and NSF REU
2018–2020 Makarios Chung, Rachleff
2019 Zhifei Shen, PURM
2018–2019 AutoBar, senior design project
2017–2018 Belay-On, senior design project

Academic Service

Leadership Local Arrangements Chair, ICRA 2022

Co-Organizer for Full-Day Workshop *The Science of Bumping Into Things: Towards Robots That Aren't Afraid of Contact* at RSS, 2022
(with Aaron Johnson and Hannah Stuart)

Co-Organizer for Full-Day Workshop *Differentiable Simulation For Robotics* at RSS, 2022
(with Kelsey Allen, Kevin Smith, and Andrew Spielberg)

Co-organizer for Dynamic Walking Conference, 15th annual multi-day meeting, 2020
Due to COVID-19, conference was changed to a one-day, 500 person virtual event
(with Aaron Johnson)

Co-organizer for Northeast Robotics Colloquium, 7th annual one-day meeting, 2019
(with Cynthia Sung and Pratik Chaudhari)

Co-organizer for Full-Day Workshop *Challenges in Dynamic Legged Locomotion: Design, Modeling, Estimation, and Control* at Robotics: Science and Systems Conference, 2017
(with Diego Pardo and Scott Kuindersma)

Co-organizer for Full-Day Workshop *Frontiers in Contact-rich Robotic Interaction: Modeling, Optimization and Control Synthesis* at IROS, 2017
(with Jiaji Zhou and Matt Mason)

Editorial Associate Editor, IEEE Transactions on Robotics (TRO), 2022–2023

Guest Editor, IEEE Transactions on Robotics Special Issue on Impact-Aware Robotics, 2022–2023

Associate Editor, IEEE Robotics and Automation Letters (RA-L), 2020–2022

Associate Editor, ICRA, 2020, 2021

Associate Editor, IROS, 2020

Associate Editor of workshop proposals, ICRA, 2018, 2019

Area Chair, Robotics: Science and Systems (RSS), 2022, 2023

Awards Committee, Robotics: Science and Systems (RSS), 2021

Program Committee, Workshop on the Algorithmic Foundations of Robotics (WAFR) 2020

Program Committee, Hybrid Systems: Computation and Control (HSCC), 2019

Journal Reviews International Journal of Robotics Research

IEEE Transactions on Robotics

Science Robotics

IEEE Transactions on Automatic Control

IEEE Transactions on Aerospace and Electronic Systems

Nonlinear Analysis: Hybrid Systems

Autonomous Robots

IEEE Robotics and Automation Letters

Automatica

The Journal of Optimization Theory and Applications

IEEE Transactions on Biomedical Engineering

Conference Reviews IEEE/RSJ International Conference on Intelligent Robots and Systems

IEEE International Conference on Robotics and Automation

Robotics: Science and Systems

IEEE Conference on Decision and Control

Conference on Robot Learning

Hybrid Systems: Computation and Control

American Control Conference

The Workshop on the Algorithmic Foundations of Robotics

IEEE-RAS International Conference on Humanoid Robots

Pacific Conference on Computer Graphics and Applications

Grant Proposal National Science Foundation (NRI, CISE-RI, FRR)
Reviews

Other RSS Pioneers Meta Review, 2022, 2023

Departmental Service

2022–2023 University of Pennsylvania, MEAM Data Science and Machine Learning Search Committee

2022 University of Pennsylvania, MEAM Lecturer Search Committee
2020 University of Pennsylvania, MEAM Mechanical Systems & Design Subcommittee Chair
2018–2021 University of Pennsylvania, MEAM PhD Admissions Committee
2021 University of Pennsylvania, MEAM PhD Math Subcommittee
2018, 2020 University of Pennsylvania, MEAM MSE Merit Scholarship Committee
2015-2016 MIT, Faculty Search Student Committee
2014-2015 MIT, Faculty Search Student Committee