

Dylan P. Losey

Contact	213D Goodwin Hall 635 Prices Fork Road Blacksburg, VA 24061 losey@vt.edu https://dylanlosey.com/	
Research Interests	Human-robot interaction, machine learning, and control theory, with applications in personal and assistive robots.	
Current Position	Virginia Tech Department of Mechanical Engineering Associate Professor Assistant Professor <i>Director of the Collaborative Robotics Laboratory (Collab)</i>	2025 – Present 2020 – 2025
Education	Stanford University Postdoctoral Scholar in Computer Science Advisor: Dorsa Sadigh Rice University Ph.D. in Mechanical Engineering M.S. in Mechanical Engineering Dissertation: <i>Responding to Physical Human-Robot Interaction</i> Advisor: Marcia K. O'Malley Vanderbilt University B.E. in Mechanical Engineering	2019 – 2020 2018 2016 2014
Honors & Awards	National Science Foundation CAREER Award IEEE Transactions on Haptics Best Application Paper Award Virginia Tech Outstanding New Assistant Professor IEEE/RSJ International Conference on Intelligent Robots and Systems Finalist, Best RoboCup Paper Award Conference on Robot Learning Best Paper Award Robotics: Science and Systems Finalist, Best Student Paper Award	2024 2024 2023 2021 2020 2020

ACM/IEEE International Conference on Human-Robot Interaction Honorable Mention, Best Paper Award	2020
Rice University Outstanding Ph.D. Thesis	2019
IEEE/ASME Transactions on Mechatronics Best Paper Award	2017
IEEE Conference on Biomedical Robotics and Biomechatronics Finalist, Best Student Paper Award	2016
National Science Foundation Graduate Research Fellowship	2014
Vanderbilt University Dynamics & Controls Award	2014
Vanderbilt University Cornelius Vanderbilt Scholarship	2010

Teaching

ME 3534: Controls Engineering I Instructor, Virginia Tech	<i>Last Lectured:</i> Spring 2025
ME 4524: Robotics & Automation ME 4584: Robotics Laboratory Instructor, Virginia Tech	<i>Last Lectured:</i> Fall 2025
ME 5704 / ECE 5704: Robotics & Automation Instructor, Virginia Tech	<i>Last Lectured:</i> Fall 2025
ME 4824: Introduction to Human-Robot Interaction Course Developer and Instructor, Virginia Tech	<i>Last Lectured:</i> Spring 2023
ME 5824 / CS 5844: Algorithmic Human-Robot Interaction Course Developer and Instructor, Virginia Tech	<i>Last Lectured:</i> Spring 2023
Interdisciplinary Capstone Advisor, Virginia Tech	<i>Most Recent:</i> 2024 – 2025
ME 4015 / ME 4016: Engineering Design and Project Advisor, Virginia Tech	<i>Most Recent:</i> 2023 - 2024

Advising & Mentoring

Current Ph.D. Students Shaunak Mehta, Sagar Parekh, Shahabedin Sagheb, Benjamin Christie, Robert Ramirez Sanchez, Yinlong Dai
Current M.S. Students Iain Mischel
Past Postdoctoral Scholars Heramb Nemlekar (Assistant Professor at CSUN)

Past Ph.D. Students

Soheil Habibian (Apple), Ananth Jonnavittula (Foundation)

Past M.S. Students

Maya Keely, Joshua Hoegerman (Boeing), Ritish Shailly (Amazon)

Outreach

Welcome to Mechanical Engineering at VT (WeMET)

2022 – Present

I founded and sponsor this program at Virginia Tech. WeMET provides an opportunity for Virginia Tech graduate students across different research groups to get to know each other, socialize, discuss the highs and lows of graduate school, and foster a welcoming environment. WeMET aims to support all members of the Virginia Tech ME community, and is committed to fostering an environment where all feel safe and comfortable discussing their graduate journey.

Women's Preview Weekend

2021 – Present

I give talks and host lab visits for this yearly event. During Women's Preview Weekend prospective students who have been offered admission to Virginia Tech visit the campus and learn about ongoing research.

Engineering Open House

2022 – Present

I give talks and host lab visits for this yearly event. Engineering Open House enables admitted high school students to learn more about engineering at Virginia Tech.

RoboGrinder

2023 – Present

I am the faculty advisor for this Virginia Tech student team. The group of around 50 undergraduates from multiple departments designs, builds, and programs robots for national and international competitions (e.g., RoboMaster North America).

Professional Activities

Journal Associate Editor

ACM Transactions on Human-Robot Interaction (THRI)

2021 – Present

IEEE Robotics and Automation Letters (RA-L)

2020 – 2023

Conference Associate Editor

IEEE International Conference on Intelligent Robots and Systems (IROS)

2021, 2022

IEEE International Symposium on Multi-Robot and Multi-Agent Systems (MRS)

2021

Workshop Organizer

IROS: *Shared Autonomy and the Sense of Agency*

2025

ICRA: *Towards Collaborative Partners: Design, Shared Control, and Robot Learning*

2024

ICRA: *Communicating Robot Learning across Human-Robot Interaction*

2023

RSS: *Emergent Behaviors in Human-Robot Systems*

2020

Center for Human-Computer Interaction

Member, Virginia Tech CHCI

2021 – Present

External Reviewer

NSF Panels, Journals including The International Journal of Robotics Research, IEEE Transactions on Robotics, IEEE Robotics and Automation Letters, ACM Transactions on Human-Robot Interaction, Autonomous Robots, and IEEE/ASME Transactions on Mechatronics, Conferences including ICRA, RSS, CoRL, IROS, and HRI

Invited Talks	Imperial College London Robotics Seminar <i>What does it take to learn from humans?</i>	2025
	University of Utah Robotics Seminar	2025
	Cornell University MAE Colloquium Seminar Series	2024
	The University of Texas at Austin Oden Institute Seminar <i>Robots that Learn to Influence Humans</i>	2024
	Rice University Mechanical Engineering Seminar	2024
	University of Tennessee, Knoxville MABE Distinguished Seminar	2024
	The Boeing Company Boeing Distinguished Researcher and Scholar Seminar	2023
	University of Waterloo Mechanical Engineering Seminar	2023
	Vanderbilt University Mechanical Engineering Seminar	2022
	Worcester Polytechnic Institute Robotics Engineering Colloquium	2022
	Commonwealth Cyber Initiative Integrated Security Seminar	2022
	University of California, Berkeley CITRIS People and Robots Seminar	2022
	Purdue University Robotics Seminar <i>Interactive, Inclusive, and Revealing Robot Learners</i>	2021
	University of Illinois Urbana-Champaign Human-Centered Autonomy Lab	2021
	University of Virginia ESE Colloquium	2021
	University of California, Berkeley InterACT Lab <i>Towards Inclusive and Revealing Robot Learners</i>	2021
	University of California, Berkeley Model Predictive Control Lab	2020

Latent Roles and Strategies in Multi-Agent Interaction

IEEE International Conference on Robotics and Automation

Workshop on Interactive Robot Learning

2020

Personalizing Robots through Learned Latent Actions

University of North Carolina

Computer Science Seminar

2020

Personalizing Robots with Mechanics and Learning

University of Washington

Mechanical Engineering Seminar

2020

Boston University

Mechanical Engineering Seminar

2020

Notre Dame

Aerospace and Mechanical Engineering Seminar

2020

Virginia Tech

Mechanical Engineering Seminar

2020

Colorado School of Mines

Mechanical Engineering Seminar

2020

Stanford University

Robotics Seminar

2020

Amazon Research Awards

2019

Controlling Assistive Robots with Learned Latent Actions

Massachusetts Institute of Technology

Computer Science & Artificial Intelligence Lab

2019

Personalizing Robots with Physics and Intelligence

Harvard University

Harvard Biodesign Lab

2019

Boston University

Center for Information & Systems Engineering Seminar

2019

University of Illinois Urbana-Champaign

Mechanical Engineering & Computer Science Seminars

2019

Responding to Physical Human-Robot Interaction

Stanford University

Robotics Seminar

2019

Journal Papers

38. Sagar Parekh, Heramb Nemlekar, and Dylan P. Losey, "Towards balanced behavior cloning from imbalanced datasets," *Autonomous Robots*, 2025 (in review).
37. Sagar Parekh, Casey Grothoff, Ryan Wright, Robin White, and Dylan P. Losey, "Safe and transparent robots for human-in-the-loop meat processing," *Scientific Reports*, 2025 (in review).

36. Ryan Wright, Sagar Parekh, Dylan P. Losey, and Robin White, "Surveying Processor Perceptions of Automation in Meat Processing," *Applied Food Research*, 2025 (in review).
35. Antonio Alvarez Valdivia, Benjamin A. Christie, Dylan P. Losey, and Laura H. Blumenschein, "A modular haptic display with reconfigurable signals for personalized information transfer," *IEEE Transactions on Haptics*, 2025 (in review).
34. Shaunak A. Mehta, Heramb Nemlekar, Hari Sumant, and Dylan P. Losey, "L2D2: Robot learning from 2D drawings," *Autonomous Robots*, 2025 (in review).
33. Shahabedin Sagheb and Dylan P. Losey, "Counterfactual behavior cloning: Offline imitation learning from imperfect human demonstrations," *ACM Transactions on Human-Robot Interaction*, 2025 (in review).
32. Yinlong Dai, Robert Ramirez Sanchez, Ryan Jeronimus, Shahabedin Sagheb, Cara M. Nunez, Heramb Nemlekar, and Dylan P. Losey, "CIVIL: Causal and intuitive visual imitation learning," *IEEE Transactions on Robotics*, 2025 (in review).
31. Benjamin A. Christie and Dylan P. Losey, "Safe interaction via Monte Carlo linear-quadratic games," *IEEE Robotics and Automation Letters*, 2025 (in review).
30. Shahabedin Sagheb, Sagar Parekh, Ravi Pandya, Ye-Ji Mun, Katherine Driggs-Campbell, Andrea Bajcsy, and Dylan P. Losey, "A unified framework for robots that influence humans over long-term interaction," *The International Journal of Robotics Research*, 2025 (in review).
29. Maya Keely, Brandon Franco, Casey Grothoff, Rajat Kumar Jenamani, Tapomayukh Bhattacharjee, Dylan P. Losey, and Heramb Nemlekar, "Kiri-Spoon: A kirigami utensil for robot-assisted feeding," *The International Journal of Robotics Research*, 2025 (in review).
28. Heramb Nemlekar, Robert Ramirez Sanchez, and Dylan P. Losey, "PECAN: Personalizing robot behaviors through a learned canonical space," *ACM Transactions on Human-Robot Interaction*, 2025 (in press).
27. Maya Keely, Yeunhee Kim, Shaunak A. Mehta, Joshua Hoegerman, Robert R. Sanchez, Emily Paul, Camryn Mills, Dylan P. Losey, and Michael D. Bartlett, "Combining and decoupling rigid and soft grippers to enhance robotic manipulation," *Soft Robotics*, 2025 (in press).
26. Shahabedin Sagheb, Soham Gandhi, and Dylan P. Losey, "Should collaborative robots be transparent?," *International Journal of Social Robotics*, vol. 17, 2025.
25. Shaunak A. Mehta, Yusuf Ciftci, Balamurugan Ramachandran, Somil Bansal, and Dylan P. Losey, "Stable-BC: Controlling covariate shift with stable behavior cloning," *IEEE Robotics and Automation Letters*, vol. 10, no. 2, pp. 1952-1959, 2025.
24. Ananth Jonnavittula, Sagar Parekh, and Dylan P. Losey, "VIEW: Visual imitation learning with waypoints," *Autonomous Robots*, vol. 49, no. 5, 2025.
23. Soheil Habibian, Antonio Valdivia, Laura Blumenschein, and Dylan P. Losey, "A survey of communicating robot learning during human-robot interaction," *The International Journal of Robotics Research*, 2024. **(Featured on Journal Cover)**
22. Benjamin A. Christie and Dylan P. Losey, "LIMIT: Learning interfaces to maximize information transfer," *ACM Transactions on Human-Robot Interaction*, vol. 13, no. 4, pp. 1-26, 2024.
21. Shaunak A. Mehta and Dylan P. Losey, "Unified learning from demonstrations, corrections, and preferences during physical human-robot interaction," *ACM Transactions on Human-Robot Interaction*, vol. 13, no. 3, pp. 1-25, 2024.

20. Ananth Jonnavittula, Shaunak A. Mehta, and Dylan P. Losey, "SARI: Shared autonomy across repeated interaction," *ACM Transactions on Human-Robot Interaction*, vol. 13, no. 2, pp. 1-36, 2024.
19. Ryan Wright, Sagar Parekh, Robin White, and Dylan P. Losey, "Safely and autonomously cutting meat with a collaborative robot arm," *Scientific Reports*, vol. 14, pp. 299, 2024.
18. Shaunak A. Mehta, Forrest Meng, Andrea Bajcsy, and Dylan P. Losey, "StROL: Stabilized and robust online learning from humans," *IEEE Robotics and Automation Letters*, vol. 9, no. 3, pp. 2303-2310, 2023.
17. Michael Hagenow, Emmanuel Senft, Nitzan Orr, Robert Radwin, Michael Gleicher, Bilge Mutlu, Dylan P. Losey, and Michael Zinn, "Coordinated multi-robot shared autonomy based on scheduling and demonstrations," *IEEE Robotics and Automation Letters*, vol. 8, no. 12, pp. 8335-8342, 2023.
16. Joshua Hoegerman and Dylan P. Losey, "Reward learning with intractable normalizing functions," *IEEE Robotics and Automation Letters*, vol. 8, no. 11, pp. 7511-7518, 2023.
15. Sagar Parekh, and Dylan P. Losey, "Learning latent representations to co-adapt to humans," *Autonomous Robots*, vol. 47, pp. 771-796, 2023.
14. Antonio Valdivia, Soheil Habibian, Carly Mendenhall, Francesco Fuentes, Ritish Shailly, Dylan P. Losey, and Laura Blumenschein, "Wrapping haptic displays around robot arms to communicate learning," *IEEE Transactions on Haptics*, vol. 16, no. 1, pp. 57-72, 2023. **(Best Application Paper Award)**
13. Soheil Habibian, Ananth Jonnavittula, and Dylan P. Losey, "Here's what I've learned: Asking questions that reveal reward learning," *ACM Transactions on Human-Robot Interaction*, vol. 11, no. 4, pp. 1-28, 2022.
12. Soheil Habibian and Dylan P. Losey, "Encouraging human interaction with robot teams: Legible and fair subtask allocations," *IEEE Robotics and Automation Letters*, vol. 7, no. 3, pp. 6685-6692, 2022.
11. Dylan P. Losey, Andrea Bajcsy, Marcia K. O'Malley, and Anca D. Dragan, "Physical interaction as communication: Learning robot objectives online from human corrections," *The International Journal of Robotics Research*, vol. 41, no. 1, pp. 20-44, 2022.
10. Erdem Biyik, Dylan P. Losey, Malayandi Palan, Nicholas C. Landolfi, and Dorsa Sadigh, "Learning reward functions from diverse sources of human feedback: Optimally integrating demonstrations and preferences," *The International Journal of Robotics Research*, vol. 41, no. 1, pp. 45-67, 2022.
9. Dylan P. Losey, Hong Jun Jeon, Mengxi Li, Krishnan Srinivasan, Ajay Mandlekar, Animesh Garg, Jeannette Bohg, and Dorsa Sadigh, "Learning latent actions to control assistive robots," *Autonomous Robots*, vol. 46, pp. 115-147, 2022.
8. James F. Mullen Jr, Josh Mosier, Sounak Chakrabarti, Anqi Chen, Tyler White, and Dylan P. Losey, "Communicating inferred goals with passive augmented reality and active haptic feedback," *IEEE Robotics and Automation Letters*, vol. 6, no. 4, pp. 8522-8529, 2021.
7. Dylan P. Losey and Marcia K. O'Malley, "Learning the correct robot trajectory in real-time from physical human interactions," *ACM Transactions on Human-Robot Interaction*, vol. 9, no. 1, pp. 1-19, 2019.
6. Dylan P. Losey, Laura Blumenschein, Janelle Clark, and Marcia K. O'Malley, "Improving short-term retention after robotic training by leveraging fixed-gain

controllers,” *Journal of Rehabilitation and Assistive Technologies Engineering*, vol. 6, pp. 1-13, 2019.

5. Dylan P. Losey and Marcia K. O’Malley, “Enabling robots to infer how end-users teach and learn through human-robot interaction,” *IEEE Robotics and Automation Letters*, vol. 4, no. 2, pp. 1956-1963, 2019.
4. Dylan P. Losey and Marcia K. O’Malley, “Trajectory deformations from physical human-robot interaction,” *IEEE Transactions on Robotics*, vol. 34, no. 1, pp. 126-138, 2018.
3. Dylan P. Losey, Craig G. McDonald, Edoardo Battaglia, and Marcia K. O’Malley, “A review of intent detection, arbitration, and communication aspects of shared control for physical human-robot interaction,” *Applied Mechanics Reviews*, vol. 70, no. 1, 2018.
2. Dylan P. Losey, Andrew Erwin, Craig G. McDonald, Fabrizio Sergi, and Marcia K. O’Malley, “A time domain approach to control of series elastic actuators: Adaptive torque and passivity-based impedance control,” *IEEE/ASME Transactions on Mechatronics*, vol. 21, no. 4, pp. 2085-2096, 2016. **(Best Paper Award)**.
1. Ali Utku Pehlivan, Dylan P. Losey, and Marcia K. O’Malley, “Minimal assist-as-needed controller for upper limb robotic rehabilitation,” *IEEE Transactions on Robotics*, vol. 32, no. 1, pp. 113-124, 2016.

Refereed Conference Proceedings

34. Sagar Parekh, Lauren Bramblett, Nicola Bezzo, and Dylan P. Losey, “Using high-level patterns to estimate how humans predict a robot will behave,” *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2025.
33. Robert Ramirez Sanchez, Heramb Nemlekar, Shahabedin Sagheb, and Dylan P. Losey, “RECON: Reducing causal confusion with human-placed markers,” *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2025.
32. Benjamin A. Christie, Heramb Nemlekar, and Dylan P. Losey, “Personalizing interfaces to humans with user-friendly priors,” *IEEE International Conference on Robotics and Automation (ICRA)*, 2025.
31. Joshua Hoegerman, Shahabedin Sagheb, Benjamin A. Christie, and Dylan P. Losey, “Aligning learning with communication in shared autonomy,” *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2024.
30. Shaunak A. Mehta, Soheil Habibian, and Dylan P. Losey, “Waypoint-based reinforcement learning for robot manipulation tasks,” *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2024.
29. Maya N. Keely, Heramb Nemlekar, and Dylan P. Losey, “Kiri-Spoon: A soft shape-changing utensil for robot-assisted feeding,” *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2024.
28. Shaunak A. Mehta, Yeunhee Kim, Joshua Hoegerman, Michael D. Bartlett, and Dylan P. Losey, “RISO: Combining rigid grippers with soft switchable adhesives,” *IEEE International Conference on Soft Robotics (RoboSoft)*, 2023.
27. Shahabedin Sagheb, Ye-Ji Mun, Neema Ahmadian, Benjamin A. Christie, Andree Bajcsy, Katherine Driggs-Campbell, and Dylan P. Losey, “Towards robots that influence humans over long-term interaction,” *IEEE International Conference on Robotics and Automation (ICRA)*, 2023.
26. Sagar Parekh, Soheil Habibian, and Dylan P. Losey, “RILI: Robustly influencing latent intent,” *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2022.

25. Antonio Alvarez Valdivia, Ritish Shailly, Naman Seth, Francesco Fuentes, Dylan P. Losey, and Laura H. Blumenschein, "Wrapped haptic display for communicating physical robot learning," *IEEE/RAS International Conference on Soft Robotics (RoboSoft)*, 2022.
24. Ehsan Yousefi, Dylan P. Losey, and Inna Sharf, "Assisting operators of articulated machinery with optimal planning and goal inference," *IEEE International Conference on Robotics and Automation (ICRA)*, 2022.
23. Shaunak A. Mehta, Sagar Parekh, and Dylan P. Losey, "Learning latent actions without human demonstrations," *IEEE International Conference on Robotics and Automation (ICRA)*, 2022.
22. Ananth Jonnavittula and Dylan P. Losey, "Communicating robot conventions through shared autonomy," *IEEE International Conference on Robotics and Automation (ICRA)*, 2022.
21. Ananth Jonnavittula and Dylan P. Losey, "Learning to share autonomy across repeated interaction," *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2021. **(Finalist, Best RoboCup Paper)**
20. Siddharth Karamcheti, Albert J. Zhai, Dylan P. Losey, and Dorsa Sadigh, "Learning visually guided latent actions for assistive teleoperation," *Learning for Dynamics & Control (LADC)*, 2021.
19. Ananth Jonnavittula and Dylan P. Losey, "I know what you meant: Learning human objectives by (under)estimating their choice set," *IEEE International Conference on Robotics and Automation (ICRA)*, 2021.
18. Mengxi Li, Alper Canberk, Dylan P. Losey, and Dorsa Sadigh, "Learning human objectives from sequences of physical corrections," *IEEE International Conference on Robotics and Automation (ICRA)*, 2021.
17. Annie Xie, Dylan P. Losey, Ryan Tolsma, Chelsea Finn, and Dorsa Sadigh, "Learning Latent Representations to Influence Multi-Agent Interaction," *Conference on Robot Learning (CoRL)*, 2020. **(Best Paper Award)**
16. Mengxi Li, Dylan P. Losey, Jeannette Bohg, and Dorsa Sadigh, "Learning user-preferred mappings for intuitive robot control," *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2020.
15. Hong Jun Jeon, Dylan P. Losey, and Dorsa Sadigh, "Shared autonomy with learned latent actions," *Robotics: Science and Systems (RSS)*, 2020. **(Finalist, Best Student Paper)**
14. Dylan P. Losey, Krishnan Srinivasan, Ajay Mandlekar, Animesh Garg, and Dorsa Sadigh, "Controlling assistive robots with learned latent actions," *IEEE International Conference on Robotics and Automation (ICRA)*, 2020.
13. Minae Kwon, Erdem Biyik, Aditi Talati, Karan Bhasin, Dylan P. Losey, and Dorsa Sadigh, "When humans aren't optimal: Robots that collaborate with risk-aware humans," *ACM/IEEE International Conference on Human-Robot Interaction (HRI)*, 2020. **(Honorable Mention, Best Paper)**
12. Dylan P. Losey, Mengxi Li, Jeannette Bohg, and Dorsa Sadigh, "Learning from my partner's actions: Roles in decentralized robot teams," *Conference on Robot Learning (CoRL)*, 2019.
11. Erdem Biyik, Malayandi Palan, Nicholas C. Landolfi, Dylan P. Losey, and Dorsa Sadigh, "Asking easy questions: A user-friendly approach to active reward learning," *Conference on Robot Learning (CoRL)*, 2019.
10. Dylan P. Losey and Dorsa Sadigh, "Robots that take advantage of human trust," *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2019.

9. Dylan P. Losey and Marcia K. O'Malley, "Including uncertainty when learning from human corrections," *Conference on Robot Learning (CoRL)*, 2018.
8. Andrea Bajcsy, Dylan P. Losey, Marcia K. O'Malley, and Anca D. Dragan, "Learning from physical human corrections, one feature at a time," *ACM/IEEE International Conference on Human-Robot Interaction (HRI)*, 2018.
7. Andrea Bajcsy, Dylan P. Losey, Marcia K. O'Malley, and Anca D. Dragan, "Learning robot objectives from physical human interaction," *Conference on Robot Learning (CoRL)*, 2017.
6. Dylan P. Losey and Marcia K. O'Malley, "Effects of discretization on the K-width of series elastic actuators," *IEEE International Conference on Robotics and Automation (ICRA)*, 2017.
5. Ali Utku Pehlivan, Dylan P. Losey, Chad G. Rose, and Marcia K. O'Malley, "Maintaining subject engagement during robotic rehabilitation with a minimal assist-as-needed (mAAN) controller," *IEEE International Conference on Rehabilitation Robotics (ICORR)*, 2017.
4. Dylan P. Losey, Laura H. Blumenschein, and Marcia K. O'Malley, "Improving the retention of motor skills after reward-based reinforcement by incorporating haptic guidance and error augmentation," *IEEE RAS/EMBS International Conference on Biomedical Robotics and Biomechatronics (BioRob)*, 2016.
3. Dylan P. Losey, Craig G. McDonald, and Marcia K. O'Malley, "A bio-inspired algorithm for identifying unknown kinematics from a discrete set of candidate models by using collision detection," *IEEE RAS/EMBS International Conference on Biomedical Robotics and Biomechatronics (BioRob)*, 2016. **(Finalist, Best Student Paper Award)**
2. Ben D. Kramer, Dylan P. Losey, and Marcia K. O'Malley, "SOM and LVQ classification of endovascular surgeons using motion-based metrics," *Workshop on Self-Organizing Maps (WSOM)*, 2016.
1. Dylan P. Losey, Peter A. York, Philip J. Swaney, Jessica Burgner, and Robert J. Webster III, "A flexure-based wrist for needle-sized surgical robots," *SPIE Medical Imaging*, 2013.