

Ben Michael Abbatematteo

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EDUCATION	Doctor of Philosophy , Computer Science Department of Computer Science, Brown University Dissertation: <i>Exploiting Structure for Efficient Robotic Manipulation</i> . Advisor: George Konidaris Sep. 2017–Aug. 2023
	Master of Science , Computer Science Department of Computer Science, Brown University Sep. 2017–May 2019
	Bachelor of Science Biomedical Engineering (with distinction) University of Rochester Sep. 2013–May 2017
ACADEMIC POSITIONS	The University of Texas at Austin Department of Computer Science Assistant Professor of Practice Jan. 2024–Jun. 2025 <ul style="list-style-type: none">Developing and teaching the Robot Learning stream of the Freshman Research Initiative
	The University of Texas at Austin Department of Computer Science Postdoctoral Fellow Sep. 2023–Jun. 2025 <ul style="list-style-type: none">Postdoctoral research with Professor Roberto Martín-Martín.
INDUSTRY POSITIONS	Meta Reality Labs Research Research Scientist Jul. 2025–Present <ul style="list-style-type: none">Conducting research in robotic manipulation.
	NVIDIA Research Intern, Seattle Robotics Lab Jun.–Sep. 2022 <ul style="list-style-type: none">Led a project involving offline reinforcement learning and task and motion planning.
	Mitsubishi Electric Research Laboratories Intern, Computer Vision for Robotic Manipulation Jun.–Sep. 2021 <ul style="list-style-type: none">Led a project involving task and motion planning with unknown objects and estimated affordances.
TEACHING POSITIONS	Brown University Department of Computer Science Teaching Assistant, Topics in Collaborative Robotics Jan.–May 2019 <ul style="list-style-type: none">Advised students working on projects involving RL, NLP, computer vision, etc.
	University of Rochester Department of Chemistry Teaching Assistant, Introductory Chemistry I&II Sep. 2014–May 2015 <ul style="list-style-type: none">Led collaborative workshops for students
PUBLICATIONS	1. C. Tang*, B. Abbatematteo* , J. Hu*, R. Chandra, R. Martín-Martín, and P. Stone. Deep reinforcement learning for robotics: A survey of real-world

successes. To appear in *Annual Review of Control, Robotics, and Autonomous Systems*, 8, 2025.

2. S. Dass, J. Hu, **B. Abbatematteo**, P. Stone, and R. Martín-Martín. Learning to Look: Seeking Information for Decision Making via Policy Factorization. In *Proceedings of the 8th Annual Conference on Robot Learning*, 2024.
3. C.-C. Hsu, **B. Abbatematteo**, Z. Jiang, Y. Zhu, R. Martín-Martín, and J. Biswas. KinScene: Model-Based Mobile Manipulation of Articulated Scenes. In *ICRA Workshops: Mobile Manipulation and Embodied Intelligence; A Future Roadmap for Sensorimotor Skill Learning*, 2024.
4. A. Bahety, P. Mandikal, **B. Abbatematteo**, and R. Martín-Martín. ScrewMimic: Bimanual Imitation from Human Videos with Screw Space Projection. In *Robotics: Science and Systems (RSS)*, 2024.
5. S. Dass, W. Ai, Y. Jiang, S. Singh, J. Hu, R. Zhang, P. Stone, **B. Abbatematteo**, and R. Martín-Martín. TeleMoMa: A Modular and Versatile Teleoperation System for Mobile Manipulation. In *2024 ICRA Workshop on Mobile Manipulation and Embodied Intelligence*, 2024.
6. **B. Abbatematteo**^{*}, E. Rosen^{*}, S. Thompson, M.T. Akbulut, S. Rammohan, and G.D. Konidaris. Composable Interaction Primitives: A Structured Policy Class for Efficiently Learning Sustained-Contact Manipulation Skills. In *Proceedings of the 2024 IEEE Conference on Robotics and Automation (ICRA)*, May 2024.
7. A. Bagaria^{*}, **B. Abbatematteo**^{*}, O. Gottesman, M. Corsaro, S. Rammohan, G. Konidaris. Effectively Learning Initiation Sets in Hierarchical Reinforcement Learning. In *Proceedings of the Thirty-seventh Conference on Neural Information Processing Systems (NeurIPS)*, November 2023.
8. R. Ma, L. Lam, B.A. Spiegel, A. Ganeshan, R. Patel, **B. Abbatematteo**, D.P. Paulius, S. Tellex, and G.D. Konidaris. Skill Generalization With Verbs. In *Proceedings of the 2023 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, October 2023.
9. **B. Abbatematteo**, C. Robbins, K. Sherry, J. Mookamakkul, E. Rosen, S. Thompson, M. Stein, and G.D. Konidaris. Sensorized Manipulation Challenge Kit for Benchmarking Robotic Manipulation. In *RSS 2023 Workshop on Experiment-oriented Locomotion and Manipulation Research*, July 2023.
10. E. Rosen^{*}, **B. Abbatematteo**^{*}, S. Thompson, M.T. Akbulut, G. Konidaris. On the Role of Structure in Manipulation Skill Learning. In *CoRL 2022 Workshop on Learning, Perception, and Abstraction for Long-Horizon Planning*, December 2022.
11. H. Abdul-Rashid, M. Freeman, **B. Abbatematteo**, G. Konidaris, D. Ritchie. Learning to Infer Kinematic Hierarchies for Novel Object Instances. In *Proceedings of the 2022 International Conference on Robotics and Automation (ICRA)*, May 2022.
12. S. Shaw, **B. Abbatematteo**, G. Konidaris. RMPs for Safe Impedance Control in Contact-Rich Manipulation. In *Proceedings of the 2022 International Conference on Robotics and Automation (ICRA)*, May 2022.
13. **B. Abbatematteo**^{*}, E. Rosen^{*}, S. Tellex, G. Konidaris. Bootstrapping Motor Skill Learning with Motion Planning. In *Proceedings of the 2021 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, September 2021.

14. **B. Abbatematteo**, S. Tellex, G. Konidaris. Learning to Generalize Kinematic Models to Novel Objects. In *Proceedings of The 3rd Conference on Robot Learning (CoRL)*, October 2019.
15. S. Newlands, **B. Abbatematteo**, M. Wei, L. Carney, H. Luan. Convergence of Linear Acceleration and Yaw Rotation Signals on Non-eye Movement Neurons in the Vestibular Nucleus of Macaques. *Journal of Neurophysiology* 119.1, pages 73-83, January 2018.

* indicates equal contribution.

INVITED TALKS

Universities & Research Labs

- Meta Reality Labs. *Toward Real World Manipulation Skill Learning*. April 9th 2025.
- Carnegie Mellon University. *Toward Safe, Autonomous Real-World Learning*. January 28th 2025.
- Center for Nonlinear Dynamics, UT Austin. *Learning to Control Contact-Rich Interactions*. February 26th 2024.
- Carnegie Mellon University. *Exploiting Structure for Efficient Robotic Manipulation*. IAM Lab, November 15th 2022.
- University of Texas. *Exploiting Structure for Efficient Robotic Manipulation*. Computer Science Department, April 27th 2023.

SERVICE

Academic Service

- Lead organizer (with Roberto Martín-Martín, Beomjoon Kim, Harshit Khurana, Aude Billard, Jun Yamada, Ingmar Posner, Oliver Kroemer, Gentiane Venture), ICRA 2025 Workshop: Beyond Pick-and-Place, May 2025.
- Reviewing
 - Conference on Robot Learning (CoRL) (2020–2024)
 - Robotics: Science and Systems (RSS) (2023–2025)
 - Reinforcement Learning Conference (2025)
 - International Conference on Robotics and Automation (ICRA) (2020–2024)
 - International Conference on Intelligent Robots and Systems (IROS) (2020–2024)
 - Robotics and Automation Letters (RA-L) (2021–2024)
 - Learning for Dynamics and Control (L4DC) (2023–2024)
 - AAAI Program Committee (2025)

Outreach

- UT Austin Girl Day 2024
- Rhode Island Robot Block Party (2018, 2019)
- CS4RI Summit (2018)

AWARDS

- RSS 2024 Outstanding Student Paper Finalist Award for *ScrewMimic: Bimanual Imitation from Human Videos with Screw Space Projection*. A. Bahety, P. Mandikal, B. Abbatematteo, and R. Martín-Martín, July 2024.
- UR BME Outstanding Junior Award for highest cumulative GPA
- Member, Phi Beta Kappa Honor Society
- UR Club Ice Hockey Team Captain 2016-2017