

Ben Michael Abbatematteo

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AIM	The aim of my research is to further develop the sensorimotor capabilities of autonomous systems.	
RESEARCH INTERESTS	Robotics, Reinforcement Learning, Computer Vision, Neuroscience	
EDUCATION	Brown University	September 2017 - Present
	Department of Computer Science	
	<ul style="list-style-type: none">• PhD Candidate• Master of Science in Computer Science	
	University of Rochester	September 2013 - May 2017
	Department of Biomedical Engineering	
	<ul style="list-style-type: none">• Bachelor of Science in Biomedical Engineering (with distinction)• GPA 3.88	
ACADEMIC POSITIONS	Brown University Department of Computer Science	
	PhD Candidate, Intelligent Robot Lab	July 2017 - present
	<ul style="list-style-type: none">• Advised by George Konidaris, PhD• Conducting research on robot learning for manipulation	
	National Research Council of Italy	
	Institute of Cognitive Sciences and Technologies	
	Visiting Researcher	May-June 2019
	<ul style="list-style-type: none">• Working on a collaboration with the Planning and Scheduling Laboratory	
	University of Rochester Medical Center	
	Research Assistant, Carney Lab	September 2015 - May 2017
	<ul style="list-style-type: none">• Advised by Laurel Carney, PhD and Shawn D. Newlands, MD, PhD, MBA• Computational modeling of the macaque vestibular system	
TEACHING POSITIONS	Brown University Department of Computer Science	
	Teaching Assistant, Topics in Collaborative Robotics	January - 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	September 2014 - May 2015
	<ul style="list-style-type: none">• Led collaborative workshops for students	
INDUSTRY POSITIONS	Mitsubishi Electric Research Laboratories	
	Intern, Computer Vision for Robotic Manipulation	June - September 2021
	<ul style="list-style-type: none">• Led a project involving task and motion planning and computer vision.	

PUBLICATIONS

1. H. Abdul-Rashid, M. Freeman, **B. Abbatematteo**, G. Konidaris, D. Ritchie. Learning to Infer Kinematic Hierarchies for Novel Object Instances. *In submission*. <https://arxiv.org/abs/2110.07911>.
2. S. Shaw, **B. Abbatematteo**, G. Konidaris. RMPs for Safe Impedance Control in Contact-Rich Manipulation. *In submission*. <https://arxiv.org/abs/2109.12103>.
3. **B. Abbatematteo***, E. Rosen*, S. Tellex, G. Konidaris. Bootstrapping Motor Skill Learning with Motion Planning. *In 2021 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*.
4. **B. Abbatematteo**, S. Tellex, G. Konidaris. Learning to Generalize Kinematic Models to Novel Objects. *Proceedings of The 3rd Conference on Robot Learning*, October 2019.
5. 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.

SERVICE

Brown University

- Outreach
 - *Robotics and Research* talks at local elementary schools
 - Robotics Lab Tours for school groups
- CS Department Ergonomics Merc
- Mentoring junior PhD student

University of Rochester

- Club Ice Hockey
 - Elected team captain by the players for 2016-2017 season
 - Executive Board Member (Finance Manager) for three seasons
 - Volunteering at community events

AWARDS

University of Rochester

- Outstanding Junior Award for highest cumulative GPA in BME
- Inducted into Phi Beta Kappa Honor Society in Junior Year