

# Bahram Behzadian

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<b>Research Interests</b>	Reinforcement learning, robotics.	
<b>Education</b>	UNIVERSITY OF NEW HAMPSHIRE Advisor: <i>Marek Petrik</i>	<b>Ph.D. candidate in Computer Science</b> , 2019-Present
	UNIVERSITY OF NEW HAMPSHIRE Master's thesis: <i>Feature Selection by Singular Value Decomposition for Reinforcement Learning</i> Thesis advisor: <i>Marek Petrik</i>	<b>MSc. in Computer Science</b> , 2015-2019
	TAMPERE UNIVERSITY OF TECHNOLOGY, FINLAND Master's thesis: <i>Robot Localization with Weak Maps</i> Thesis advisor: <i>Wolfram Burgard</i>	<b>MSc. in Machine Automation</b> , 2010-2013
	AZAD UNIVERSITY OF MASHHAD, IRAN Final project: <i>HVAC design for 16,000 sq. ft cold storage warehouse</i>	<b>BSc. in Mechanical Engineering</b> , 2002-2007
<b>Research Experience</b>	REINFORCEMENT LEARNING AND ROBUSTNESS LAB <i>Research Assistant</i> University of New Hampshire, Durham, NH, USA Projects: Optimizing the ambiguity sets for robust Markov decision processes, efficient algorithms for S-rectangular robust MDPs, and feature construction from high-dimensional raw-input observation for linear value function approximation for reinforcement learning.	2015–Present
	AUTONOMOUS INTELLIGENT SYSTEMS LAB <i>Research Assistant</i> University of Freiburg, Freiburg, Germany Project: Mobile robot localization and navigation on hand-drawn maps.	2012–2014
<b>Conference Publications</b>	Behzadian, B., Petrik, M., Ho, C. P. Ho. “Fast Algorithms for $L_\infty$ constrained S-rectangular Robust MDPs” In <i>Neural Information Processing Systems (NeurIPS)</i> , 2021. Behzadian, B., Russel, R. H., Petrik, M., Ho, C. P. “Optimizing Percentile Criterion using Robust MDPs” In <i>International Conference on Artificial Intelligence and Statistics (AISTATS)</i> , 2021. Behzadian, B., Gharatappeh, S., Petrik, M. “Fast Feature Selection for Linear Value Function Approximation” In <i>International Conference on Automated Planning and Scheduling, (ICAPS)</i> , 2019. Behzadian, B., Agarwal, P., Burgard, W., Tipaldi, G. D. “Monte Carlo localization in hand-drawn maps” In <i>International Conference on Intelligent Robots and Systems (IROS)</i> , 2015. Boniardi, F., Behzadian, B., Burgard, W., Tipaldi, G. D. “Robot navigation in hand-drawn sketched maps.” In <i>European Conference on Mobile Robotics, (ECMR)</i> , 2015.	

<b>Symposiums &amp; Workshops</b>	Russel, R. H., Behzadian, B., Petrik, M. “Optimizing Norm-bounded Weighted Ambiguity Sets for Robust MDPs” In <i>Neural Information Processing Systems (NeurIPS) Safety and Robustness in Decision-making Workshop</i> , 2019.	
	Behzadian, B., Petrik, M., “Feature Selection by Singular Value Decomposition for Reinforcement Learning” In <i>International Conference on Machine Learning (ICML) Prediction and Generative Modeling Workshop</i> , 2018.	
	Behzadian, B., Petrik, M. “Low-rank Feature Selection for Reinforcement Learning” In <i>International Symposium on Artificial Intelligence and Mathematics, (ISAIM)</i> , 2018.	
<b>Additional Employment</b>	ENVIO, INC. <i>AI Engineer Intern</i> Dover, NH, USA Worked on solving a vehicle routing problem designed for intermodal trucking	Summer 2018
	PERGAS POLYMER CO. <i>PLC Programmer / Automation Engineer</i> Tehran, Iran Provided technical support in the troubleshooting of electrical and PLC control systems and machinery	2008–2009
	TADBIR SANAT CONSULTING ENGINEERS <i>HVAC System Designer</i> Tehran, Iran Performed calculations in mechanical systems design, selection, sizing of equipment, and interconnected HVAC, hydronic, steam, and plumbing systems	2007–2008
<b>Teaching Experience</b>	UNIVERSITY OF NEW HAMPSHIRE <i>Teaching Assistant</i>	
	Reinforcement Learning	Fall 2021
	Assembly Language Programming and Machine Organization	Fall 2021
	Intro to Computer Science I	Fall 2016, Spring 2018
	Intro to Computer Science II	Spring 2018
	From Problems to Algorithms to Programs	Fall 2017
	From Programs to Computer Science	Spring and Fall 2017
<b>Scholarships /Awards</b>	CEPS Graduate Fellowship College of Engineering and Physical Sciences, University of New Hampshire A prestigious award that is based on the strength of academic record and the potential for success in graduate school.	2015
	Thesis and Dissertation Fellowship Office of International Affairs, Tampere University of Technology	2012
<b>Technical Skills</b>	Programming Languages: Python; C/C++; R; Matlab. Tools: Git; L <sup>A</sup> T <sub>E</sub> X; Linux; TLA+ .	