Bahram Behzadian

Department of Computer Science
University of New Hampshire
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Research Interest	Reinforcement learning, robust Markov decision processes, robotics.

Education

UNIVERSITY OF NEW HAMPSHIRE — **Ph.D. candidate in Computer Science**, 2015–Present
Advisor: Marek Petrik.

UNIVERSITY OF NEW HAMPSHIRE — **MSc. in Computer Science**, 2019
Master's thesis: *Feature Selection by Singular Value Decomposition for Reinforcement Learning.*
Advisor: Marek Petrik.

TAMPERE UNIVERSITY OF TECHNOLOGY, FINLAND — **MSc. in Machine Automation**, 2013
Master's thesis: *Robot Localization with Weak Maps.*
Advisor: Wolfram Burgard.

ISLAMIC AZAD UNIVERSITY OF MASHHAD, IRAN — **BSc. in Mechanical Engineering,** 2007
Final project: *HVAC design for 16,000 sq. ft cold storage warehouse*

Professional Experience

REINFORCEMENT LEARNING AND ROBUSTNESS LAB
Research Assistant — August 2015–Present
University of New Hampshire, Durham, NH, USA
I worked on robust Markov decision processes, and feature construction from high-dimensional raw-input observation for linear value function approximation in the context of reinforcement learning.

ENVIO, INC.
AI Engineer Intern — May 2018–August 2018
Dover, NH, USA
Worked on solving a vehicle routing problem designed for intermodal trucking.

AUTONOMOUS INTELLIGENT SYSTEMS LAB
Research Assistant — March 2012–October 2014
University of Freiburg, Freiburg, Germany
Worked on mobile robot localization and navigation problems on hand-drawn maps.

PERGAS POLYMER CO.
PLC Programmer / Automation Engineer — December 2008–December 2009
Tehran, Iran
Provided technical support in the troubleshooting of electrical and PLC control systems and machinery

TADBIR SANAT CONSULTING ENGINEERS
HVAC System Designer — September 2007–November 2008
Tehran, Iran
Performed calculations in mechanical systems design, selection, sizing of equipment, and interconnected HVAC, Hydronic, Steam, and Plumbing Systems.

Conference Publications	B. Behzadian, R.H. Russel, M. Petrik, C. P. Ho. "Optimizing Percentile Criterion using Robust MDPs" In *The International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2021.
	B. Behzadian, S. Gharatappeh, M. Petrik. "Fast Feature Selection for Linear Value Function Approximation" In *International Conference on Automated Planning and Scheduling, (ICAPS)*, 2019.
	B. Behzadian, P. Agarwal, W. Burgard, and G. D. Tipaldi. "Monte Carlo localization in hand-drawn maps" In *Proc. of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2015.
	F. Boniardi, B. Behzadian, W. Burgard, and G. D. Tipaldi. "Robot navigation in hand-drawn sketched maps." In *Proc. of the IEEE European Conference on Mobile Robotics (ECMR)*, 2015.

Symposium and Workshop Publications	R. H. Russel, B. Behzadian, M. Petrik. "Optimizing Norm-bounded Weighted Ambiguity Sets for Robust MDPs" In *33rd Conference on Neural Information Processing Systems (NeurIPS) Safety and Robustness in Decision-making Workshop*, 2019.
	B. Behzadian, M. Petrik. "Feature Selection by Singular Value Decomposition for Reinforcement Learning" In *International Conference on Machine Learning (ICML) Prediction and Generative Modeling Workshop*, 2018.
	B. Behzadian, M. Petrik. "Low-rank Feature Selection for Reinforcement Learning" In *International Symposium on Artificial Intelligence and Mathematics, (ISAIM)*, 2018.

Theses	B. Behzadian, *Feature Selection by Singular Value Decomposition for Reinforcement Learning.* Master's thesis, University of New Hampshire, May, 2019.
	B. Behzadian, *Robot Localization with Weak Maps.* Master's thesis, Tampere University of Technology, August, 2013.

Awards	CEPS Graduate Fellowship 2015
	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. Total financial package valued at $60,008$.
	Thesis and Dissertation Fellowship 2012
	Office of International Affairs, Tampere University of Technology
	Total financial package valued at $2,300$.

Teaching Experience	UNIVERSITY OF NEW HAMPSHIRE
	Teaching Assistant

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

University Activities	*University of New Hampshire*
	College of Engineering and Physical Sciences
	Member of grad student advisory board 2020–present

Technical Skills

Programming Languages: Python; R; C/C++; Matlab/Octave.
Working knowledge: Java.
Tools: Git; SVN; LaTeX; Linux; Windows; TLA+ .

Language Skills

English: Fluent, Persian: Native speaker, German: Elementary proficiency
Academic IELTS   Overall Band 7.0
GRE Revised General Test   QR: 164, VR: 151, AW: 3