



Kavosh Asadi

Education

- 2015-2020 Doctor of Philosophy in Computer Science, Brown University, advisor: Michael L. Littman
- 2013-2015 Masters in Computer Science, University of Alberta, advisor: Richard S. Sutton
- 2008-2013 Bachelors of Engineering, University of Tehran

Industrial Experience

- 2020-Present Applied Scientist at Amazon: Working on imitation learning for deep learning in sequential decision making, and reinforcement learning from human feedback
- 2016 & 2017 Microsoft Research (MSR) Summer Intern, mentor: Jason D. Williams: Worked on learning conversational agents using supervised and reinforcement learning

Technical Interests

- Sequential decision making (more specifically, the reinforcement-learning problem)
- Optimization algorithms for deep reinforcement learning
- Applications of reinforcement learning to large-scale problems, in particular conversational agents, and learning from human feedback

Published Conference Papers

- 2023 **Kavosh Asadi**, Shoham Sabach, Yao Liu, Omer Gottesman, Rasool Fakoor, "TD Convergence: An Optimization Perspective", Conference on Neural Information Processing Systems (NeurIPS)
- 2023 **Kavosh Asadi**, Rasool Fakoor, Shoham Sabach, "Resetting the Optimizer in Deep RL: An Empirical Study", Conference on Neural Information Processing Systems (NeurIPS)
- 2023 Omer Gottesman, **Kavosh Asadi**, Cameron Allen, Samuel Lobel, George Konidaris, Michael L. Littman, "Coarse-Grained Smoothness for Reinforcement Learning in Metric Spaces", Conference on Artificial Intelligence and Statistics (AISTATS)
- 2022 **Kavosh Asadi**, Rasool Fakoor, Omer Gottesman, Taesup Kim, Michael L. Littman, Alexander J. Smola, "Faster Deep Reinforcement Learning with Slower Online Network", Conference on Neural Information Processing Systems (NeurIPS)
- 2022 Martin Klissarov, Rasool Fakoor, Jonas Mueller, **Kavosh Asadi**, Taesup Kim, Alexander J. Smola, "Adaptive Interest for Emphatic Reinforcement Learning", Conference on Neural Information Processing Systems (NeurIPS)

- 2021 Rasool Fakoor, Jonas Mueller, **Kavosh Asadi**, Pratik Chaudhari, Alexander J. Smola, "Continuous Doubly Constrained Batch Reinforcement Learning", Conference on Neural Information Processing Systems (NeurIPS)
- 2021 **Kavosh Asadi**, Neev Parikh, Ronald E. Parr, George D. Konidaris, Michael L. Littman, "Deep Radial-basis Value Functions for Continuous Control", Conference on Artificial Intelligence (AAAI)
- 2021 Erwan Lecarpentier, David Abel, **Kavosh Asadi**, Yu Jinnai, Emmanuel Rachelson, Michael L. Littman, "Lipschitz Lifelong Reinforcement Learning", Conference on Artificial Intelligence (AAAI)
- 2019 Seungchan Kim, **Kavosh Asadi**, Michael L. Littman, George D. Konidaris, "Deepmellow: Removing the Need for a Target Network in Deep Q-learning", International Joint Conference on Artificial Intelligence (IJCAI)
- 2019 David Abel, Dilip Arumugam, **Kavosh Asadi**, Yu Jinnai, Michael L. Littman, Lawson LS. Wong, "State Abstraction as Compression in Apprenticeship Learning", Conference on Artificial Intelligence (AAAI)
- 2018 **Kavosh Asadi**, Dipendra Misra, Michael L. Littman, "Lipschitz Continuity in Model-based Reinforcement Learning", International Conference on Machine Learning (ICML)
- 2017 Jason D. Williams, **Kavosh Asadi**, Geoffrey Zweig, "Hybrid Code Networks: Practical and Efficient end-to-end Dialog Control with Supervised and Reinforcement Learning", Annual Meeting of the Association for Computational Linguistics (ACL)
- 2017 **Kavosh Asadi**, Michael L. Littman, "An Alternative Softmax Operator for Reinforcement Learning", International Conference on Machine Learning (ICML)

Book Chapter

Dive into Deep Learning. Main Authors: Aston Zhang, Zack C. Lipton, Mu Li, Alexander J. Smola. I served as a co-author for the chapter on reinforcement learning.

Notable Programming Experience

Solid experience in deep-learning libraries, especially in PyTorch. Advanced experience in Tensorflow and Keras.

Advanced experience in Cloud Computing, especially Amazon EC2

Solid experience in various programming languages, especially Python. Advanced experience in C, C++, and Java.

Hobbies

Playing classical music on the violin

Watching the English Premier League soccer

Physical activities, in particular snorkeling, hiking, jogging, and rock climbing