

Final Project – Paper List

For each student, please select one paper from the following list, and make a presentation about that paper. The slides should be written in English.

Notice: Each paper can only be selected by one student. Please contact Yuanyang Zhu (email: yuanyang@smail.nju.edu.cn) for selecting your paper. First come first serve.

1. Human-level control through deep reinforcement learning, *Nature* 2015.
2. Mastering the game of Go with deep neural networks and tree search, *Nature* 2016.
3. Mastering the game of Go without human knowledge, *Nature* 2017.
4. AlphaStar: Mastering the Real-Time Strategy Game StarCraft II, *Nature* 2019.
5. Soft Actor-Critic: Off-Policy Maximum Entropy Deep Reinforcement Learning with a Stochastic Actor, *ICML* 2018.
6. Learning agile and dynamic motor skills for legged robots, *Science Robotics*, 2018.
7. Hierarchical Deep Reinforcement Learning: Integrating Temporal Abstraction and Intrinsic Motivation, *NeurIPS* 2016.
8. Actor-Mimic: Deep Multitask and Transfer Reinforcement Learning, *ICLR* 2016.
9. Unifying Count-Based Exploration and Intrinsic Motivation, *NeurIPS* 2016.
10. Benchmarking Deep Reinforcement Learning for Continuous Control, *ICML* 2016.
11. Batch Reinforcement Learning with Hyperparameter Gradients, *ICML* 2020
12. Between MDPs and semi-MDPs: A framework for temporal abstraction in reinforcement learning, *AI* 1999
13. Off-Policy Actor-Critic with Shared Experience Replay, *ICML* 2020
14. Universal value function approximators, *ICML* 2015
15. Data-efficient hierarchical reinforcement learning, *NeurIPS* 2018
16. Growing Action Spaces, *ICML* 2020

17. Multi agent reinforcement learning: An overview, *Innovations in Multi-Agent Systems and Applications*, 2010
18. Model-ensemble trust-region policy optimization, ICLR 2018
19. Learning to reinforcement learning, arXiv, 2016
20. Deep reinforcement learning from human preference, NIPS 2017
21. Measuring the Reliability of Reinforcement Learning Algorithms, ICLR 2020
22. Transfer in reinforcement learning via shared features, JMLR 2012
23. A Brief Survey of Deep Reinforcement Learning, 2017
24. Deep reinforcement learning in parameterized action space, ICLR 2016
25. Sample efficient actor-critic with experience replay, ICLR 2017
26. RL2: fast reinforcement learning via slow reinforcement learning, ICLR 2017
28. Neural Network Dynamics for Model-Based Deep Reinforcement Learning with Model-Free Fine-Tuning, ICRA 2018
29. Policy Gradient Methods for Reinforcement Learning with Function Approximation, NeurIPS 2000
30. The Option-Critic Architecture, AAAI 2017
31. Prioritized experience replay, ICLR 2016
32. Real-Time Reinforcement Learning, NIPS 2019
33. A Geometric Perspective on Optimal Representations for Reinforcement Learning, NIPS 2019
34. Interval timing in deep reinforcement learning agents, NIPS 2019
35. The Option Keyboard: Combining Skills in Reinforcement Learning, NIPS 2019
36. Explicit Planning for Efficient Exploration in Reinforcement Learning, NIPS 2019
37. A Meta-MDP Approach to Exploration for Lifelong Reinforcement Learning, NIPS 2019

38. Hierarchical Reinforcement Learning with Advantage-Based Auxiliary Rewards, NIPS 2019
39. Language as an Abstraction for Hierarchical Deep Reinforcement Learning, NIPS 2019
40. Multi-Agent Common Knowledge Reinforcement Learning, NIPS 2019
41. Learning Reward Machines for Partially Observable Reinforcement Learning, NIPS 2019
42. Model-Free Episodic Control, arxiv 2016
43. Continuous Deep Q-Learning with Model-based Acceleration, ICML 2016
44. Rainbow: Combining Improvements in Deep Reinforcement Learning, AAAI 2018
45. Combining Policy Gradient And Q-Learning, ICLR 2017
46. Sample Efficient Actor-Critic With Experience Replay, ICLR 2017
47. Connecting Generative Adversarial Networks and Actor-Critic Methods, arxiv 2017
48. Deep Exploration via Bootstrapped DQN, NIPS 2016
49. Transfer Learning For Reinforcement Learning: A Survey, JMLR 2009
50. Dueling Network Architectures for Deep Reinforcement Learning, NIPS 2016