

WEEKLY RESEARCH PROGRESS REPORT: 38

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1 QUOTE OF LAST WEEK'S PLAN

- Train on more existing envs: Atari, openai gym, unity RL, street fighters, sonic, paopao kadingche and so on

2 PLANNED ACCOMPLISHMENTS

- Train on more existing envs: Atari, openai gym, unity RL, street fighters, sonic. I tried almost every available ones and it turns out not a useful experience since there is just some fine-tuning and implementation using pseudocode.

3 OTHER ACCOMPLISHMENTS

- paper: A survey on Semi-, Self-and Unsupervised Techniques in Image Classification
- paper: A Visual Communication Map for Multi-Agent Deep Reinforcement Learning
- paper: Deep Reinforcement Learning for Autonomous Driving: A Survey

4 ISSUES AND PROBLEM TO SOLVE

- Getting directly to the math of RL rather than pursuing the SOTA algorithms which requires me to be familiar with classic textbook. Also, the online class from Stanford CS234: Reinforcement Learning and CS 598 Statistical Reinforcement Learning taught by Nan Jiang will be helpful. However, it may be bad if I rush to push forward and it'd better for me to check out them when the course in school reaches the part of RL. For the first three weeks, I will focus on textbooks and references mentioned in the reference

5 NEXT WEEK'S PLAN

- Book "Monte Carlo Statistical Methods": Chapter 1, 3 and 5.
- Book "Markov Decision Processes: Discrete Stochastic Dynamic Programming": Chapter 1, section 2.1 and 2.2 and Chapter 3. Basically the most fundamental parts and essential parts of the above two textbooks.

REFERENCES