

Assignment10 – Learning

Given: June 29 Due: July 9

Problem 10.1 (Passive Reinforcement Learning)

40 pt

Consider Ex. 31.2.2 from the slides.

1. Give the transition model to the extent that it can be learned from these trials.
2. How could we learn the entire model?
3. How would we proceed to learn the utilities of the states?

Problem 10.2 (Active Reinforcement Learning)

30 pt

Consider reinforcement learning in an unknown non-deterministic environment.

1. Explain the difference between a passive and an active agent.
2. What is the critical trade-off in designing an actively learning agent?