Assignment 4

Due on 2020-02-26, 23:59 IST.

1. Which of the following is a benefit of using an RL algorithm to solving MDP?

- They don't require the state of the agent for solving MDP
- They don't require the target state to be known for solving MDP
- They don't require the state transition probability for solving MDP

2. For the correct option, fill in the blanks:

- The Bellman equation for an MDP is given by:
  \[ V^*(s) = \max_{a} \sum_{s'} P(s'|s,a) [R(s,a,s') + \gamma V^*(s')] \]

3. Which of the following is true for a gridworld environment?

- The Bellman equation for an MDP is given by:
  \[ V^*(s) = \max_{a} \sum_{s'} P(s'|s,a) [R(s,a,s') + \gamma V^*(s')] \]

4. Which of the following statements is true about an MDP?

- An MDP with deterministic actions may have a deterministic optimal policy
- A Markov Decision Process that is not deterministic cannot have a deterministic optimal policy

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