Kahoot!

Lecture 03: Monte Carlo Methods

83 plays · 132 players

🌐 A public kahoot

Questions (7)

1 - Quiz

For Monte-Carlo Policy Evaluation, we have to...   60 sec

▲	update only the first time-step that a state is visited.	✗
◆	update every time-step that a state is visited.	✗
●	store all returns, we ever observed.	✗
■	use the empirical mean return instead of expected return.	✓

2 - Quiz

Compared to Policy Evaluation, Monte Carlo evaluation...   60 sec

▲	returns a more accurate value-function.	✗
◆	converges faster.	✗
●	does not require a model.	✓
■	needs less exploration in the real world.	✗

3 - True or false

When MC eval. sees each state infinitely often, it converges to the true value-function ind. from the learning rate.   60 sec

| ▲ | True | ✗ |
| ◆ | False | ✓ |

4 - Quiz

If we base our improvement on Q(s, a), we...

60 sec

△ ... don't need transition and reward probabilities. ✓

◇ ... can ignore exploration. ✗

5 - True or false

MC methods can only be used in on-policy settings.

30 sec

△ True ✗

◇ False ✓

6 - True or false

The IS ratio for MC control only needs to take the current time step of the updated state into account.

30 sec

△ True ✗

◇ False ✓

7 - True or false

By adding the IS ratio, bias and variance are reduced to make learning off-policy possible.

30 sec

△ True ✗

◇ False ✓