

Reinforcement Learning

Final exam : Friday May 15th

- 7:15 PM - 10:15 PM

- Online

- Multiple choice

- Calculator needed

- Practice Gradiance Quiz
will be posted

= One more Gradiance Quiz left
(RL)

A - set of all actions

$$\underline{A_t \in \underline{A(s_t)}} \subset A$$

$$R_t \in \mathbb{R}$$

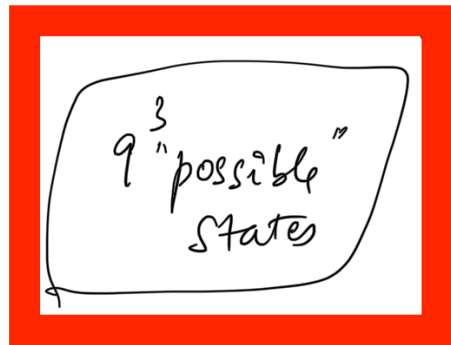
Policy π

$$\left[\begin{array}{l} s_1 \rightarrow A_{s_1} \\ s_2 \rightarrow A_{s_2} \end{array} \right]$$

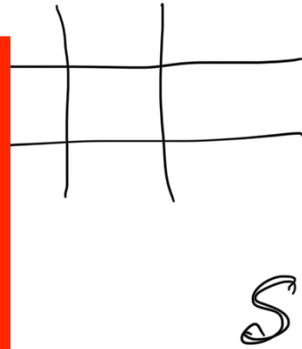


Tic Tac Toe

Playing against an imperfect opponent.



This should be 3^9 possible states

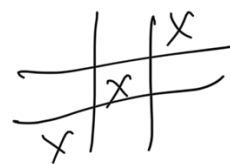


Value Prob of winning from that State.

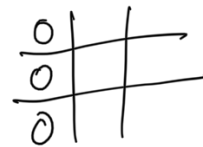
S is small packia.



0.5



1



0



$A(S_0)$

S_1

$$x | \cancel{x} \cdot 10$$

-1

$$0.5 \neq \alpha(0 - 0.5)$$

$$0.5 - 0.5\alpha$$
