

CS394R/ECE381V
Reinforcement Learning:
Theory and Practice

Amy Zhang and Peter Stone

Departments of ECE and CS
The University of Texas at Austin

Good Morning Colleagues

- Are there any (logistics) questions?

Logistics

- Final projects due Monday

Logistics

- Final projects due Monday
- All late work due Saturday

Logistics

- Final projects due Monday
- All late work due Saturday
- writeup length; video objectives

Multiagent RL (MARL)

- Rock/paper/scissors

Multiagent RL (MARL)

- Rock/paper/scissors
- Play 20 rounds vs. me

Multiagent RL (MARL)

- Rock/paper/scissors
- Play 20 rounds vs. me
 - 1 point per win; 0 points per tie; -1 points per loss
 - keep track yourself

Multiagent RL (MARL)

- Rock/paper/scissors
- Play 20 rounds vs. me
 - 1 point per win; 0 points per tie; -1 points per loss
 - keep track yourself
- Now play 20 rounds vs. your partner

Multiagent RL (MARL)

- Rock/paper/scissors
- Play 20 rounds vs. me
 - 1 point per win; 0 points per tie; -1 points per loss
 - keep track yourself
- Now play 20 rounds vs. your partner
- What was the difference?

How You've Learned about RL Theory and Practice

- You read
- You learned actively in class
- You answered EdX questions
- You did programming assignments
- You studied for the midterm
- You're doing a final research project

How You've Learned about RL Theory and Practice

- You read
- You learned actively in class
- You answered EdX questions
- You did programming assignments
- You studied for the midterm
- You're doing a final research project
- Syllabus recap

Discussion Points

- Does RL matter?

Discussion Points

- Does RL matter?
- What were your biggest misconceptions about RL?

Discussion Points

- Does RL matter?
- What were your biggest misconceptions about RL?
- Are there any important ethical concerns related to RL?

Discussion Points

- Does RL matter?
- What were your biggest misconceptions about RL?
- Are there any important ethical concerns related to RL?
- What was most difficult about this course?

Discussion Points

- Does RL matter?
- What were your biggest misconceptions about RL?
- Are there any important ethical concerns related to RL?
- What was most difficult about this course?
- What did you like most about it?

Discussion Points

- Does RL matter?
- What were your biggest misconceptions about RL?
- Are there any important ethical concerns related to RL?
- What was most difficult about this course?
- What did you like most about it?
- What would you change?