CAP 6629: Reinforcement Learning

Spring 2022

Course project 2

Due: 03/04/2022 (Friday), 11:59PM

Submission: A single PDF with your code (use any programming language), results and analysis.

Your report should follow the template I showed in class.

In this class, we have learned several learning algorithms (e.g., Q-learning, Monte Carlo, dynamic programming, double Q-learning, TD, SARSA and others). You are free to pick up **three algorithms** and implement on a grid world goal searching problem.

1. Choose three algorithms you are going to implement and provide their pseudo code

2. Design your own grid world example (should be bigger than 3*2)

3. Show your goal searching process with step-to-go curve, sum of squared error and/or theoretical value table

4. Please follow the project report guidelines and submit the report/code

Note: if you choose this project as your presentation project, you may think about to add obstacles or wall (or even change your goal location) to make it more interesting.