

Project 3 Reinforcement Learning

3.1 Value Iteration (24 pts)

1. Code Implementation – Autograder returns 6/6

3.2 Bridge Crossing Analysis (4 pts)

1. Code Implementation – Autograder returns 1/1

3.3 Policies (20 pts)

1. Code Implementation – Autograder returns 5/5

3.4 Q-Learning (20 pts)

1. Code Implementation – Autograder returns 5/5

3.5 Epsilon Greedy (12 pts)

1. Code Implementation – Autograder returns 3/3

3.6 Bridge Crossing Revisited (4 pts)

1. Code Implementation – Autograder returns 1/1

3.7 Q-Learning and Pacman (4 pts)

1. Code Implementation – Autograder returns 1/1

3.8 Approximate Q-Learning (12 pts)

1. Code Implementation – Autograder returns 3/3

4 Self Analysis (5 pts)

1. The hardest part of the assignment was coding the Q-Learning portion of the assignment. We'd never done this before and getting the proper I/O in each function.
2. The easiest part of the assignment was answering the analysis questions. They were straight forward and easy to understand with the information presented in class.
3. We think all of these problems really helped us understand exactly how each algorithm worked, especially by creating visual representations in the form of Pacman game. The analysis questions were helpful to affirm the understanding of what each algorithm did before having to code them in detail.
4. We didn't feel that any problem was tedious and the autograder was very helpful in this part of the Pacman project by showing why certain algorithms were failing and including test result documentation.
5. We don't have much feedback, we appreciate the setup and information given to get the project done. It was actually pretty fun to work on.