

Homework 2 - EE 373/473

Assigned Monday, April 8th
Due Monday, April 15th at 11:59pm on Canvas

Deep Reinforcement Learning

April 8, 2024

Details

Please write up your solutions (individually) to the following problems. Textbook problems are referenced from the **second edition** of Barto and Sutton. Please submit the homework on Canvas under 'Homework 2' in assignments.

Barto and Sutton - Exercise 3.7

Barto and Sutton - Exercise 3.10

Barto and Sutton - Exercise 3.20

Barto and Sutton - Exercise 4.3

Risk Aversion and Loss Aversion

In reinforcement learning, we generally try to optimize the expected value of our reward. In psychology, we find that this isn't always the case with human behavior. For example, the average return of the stock market is around 7 percent, but someone might prefer to invest in a savings account with only 1 percent interest to avoid the volatility of the stock market. Please research on Wikipedia (or any trust-worthy resource of your choice) the following two terms: 'Risk Aversion' and 'Loss Aversion'. Write one paragraph describing each term, and how they may change the traditional objective of maximizing the expectation of the reward.