## Stanford CME 241 (Winter 2022) - Assignment 14

## **Assignments:**

Do 1 of  $\{1,2\}$  and the corresponding of  $\{3,4\}$ 

- 1. Implement in Python the LSTD Algorithm, as covered in class.
- 2. Implement in Python the LSPI Algorithm, as covered in class.
- 3. Implement in Python LSPI customized for American Options Pricing, as covered in class. Test by comparing the pricing of American Calls and Puts against the Binomial Tree implementation in rl/chapter8/optimal\_exercise\_bin\_tree.py.
- 4. Implement in Python Deep Q-Learning customized for American Options Pricing, as covered in class. Test by comparing the pricing of American Calls and Puts against the Binomial Tree implementation in rl/chapter8/optimal\_exercise\_bin\_tree.py.