



Reinforcement Learning for
Trading Strategies
New York Institute of Finance,
Google Cloud

Overview

Week 1

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Week 3

Grades

Notes

Discussion Forums

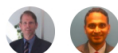
Week 2

Reinforcement Learning for Trading Strategies

Week 2

Discuss this week's modules here.

54 threads · Last post 2 months ago

[Go to forum](#)**Neural Network Based Reinforcement Learning**

In the previous module, reinforcement learning was discussed before neural networks were introduced. In this module, we look at how reinforcement learning has been integrated with neural networks. We also look at LSTMs and how they can be applied to time series data.

[^](#) [Less](#)**Learning Objectives**

- Understand how neural networks are used in reinforcement learning.
- Understand the loss function used in Deep Q Learning.
- See how Deep Q Networks are implemented in code.
- Understand the Actor-Critic model.
- Differentiate between the Actor-Critic model and Deep Q Networks.
- Describe LSTMs and how they apply to time series.
- Apply LSTMs to time series data.

[^](#) [Less](#)**Q-Networks** **Video:** TD-Gammon 3 min[Resume](#) **Video:** Deep Q Networks - Loss 2 min **Video:** Deep Q Networks Memory 2 min **Video:** Deep Q Networks - Code 3 min **Graded External Tool:** Reinforcement Learning DQN 2h Due Mar 1, 1:59 AM CST**Policy Gradients** **Video:** Policy Gradients 4 min **Video:** Actor-Critic 3 min **Graded External Tool:** Policy Gradients and Actor-to-Critic 2h 30m Due Mar 1, 1:59 AM CST

What is LSTM and How to Apply It

- ▶ **Video:** What is LSTM? 7 min
- ▶ **Video:** More on LSTM 4 min
- ▶ **Video:** Applying LSTM to Time Series Data 7 min