MLT-07 Reinforcement Learning in Trading

Overview

In this lecture, faculty will be covering basic ideas of deep reinforcement learning, challenges and problems with RL in trading and the implementation of RL in a simple strategy using "Gamification"

Key takeaways from the lecture:

- Basic ideas of deep reinforcement learning such as reward, explore/exploit, Bellman equation and memory replay
- Challenges and problems with RL in trading
- Implementation of RL in a simple strategy using "gamification"
- Basic understanding of the elements of RL
- Implementation of RL in Python
- Opportunities and limitations of RL

Pre-requisites:

- Solid Python skills
- Basic understanding of deep learning
- Good understanding of quant finance

Practical use of the topics learned in this session

- "Gamification" of trading
- How is the system trained?
- Reward-function engineering
- Features we use for the neural network
- How to test the system?
- What type of ANN should be used?

Downloadable Files:

Link: https://github.com/rodler/Quantinsti_RL

Recommended time for the session & related coursework: 7 hours