**GITHUB :**

1. Github general+trading RL : <https://github.com/stefan-jansen/machine-learning-for-trading/tree/master/20_reinforcement_learning>
2. Github denny britz : general concept of RL+code : <https://github.com/dennybritz/reinforcement-learning>
3. Github trading robot on bitcoin: <https://github.com/notadamking/RLTrader>
4. Collab Thibault Neveux (Deep Q Learning algo) : <https://colab.research.google.com/drive/1UE2fv-FZ-HkzUJtIk4TKNWphlE33c3oP#scrollTo=wG5mbNpj9E2Q>
5. Github thaibault Neveux: (DQL): <https://github.com/thibo73800/aihub/blob/master/rl/dqn.py>
6. Github List algo de ML-trading: <https://github.com/cbailes/awesome-deep-trading>

**DESCRIPTION GITHUB:**

1. **github\_liangzp:** test de 3 algo RL differents: DDPG, PPO, PG augmented avec adversarial sur un portfeuille de m asset. Associé au papier “Adversarial Deep Reinforcement learning in portfolio management”
2. **github\_hust512**: DDPG uniquement sur un portfeuille de 30 aset (downjones). Associé au papier « Practical deep reinforcement learning approach for stock trading »
3. **github\_Zhengyao\_PGP:** Policy Gradient PG simple. Associé aux deux papier “Cryptocurency PFM with Deep reinforcement learning” et “deep reinforcement learning framework for financial PFM problem”
4. **github\_selim\_Deep-**portfolio: Policy Graident (PG) simple. Adaptation github\_Zhengyao\_PGPfondé sur le meme papier “deep reinforcement learning framework for financial PFM problem”

**COURSES :**

Berkeley : <http://rail.eecs.berkeley.edu/deeprlcourse/>

**ARTICLES:**

1. Adam Kings: <https://towardsdatascience.com/creating-bitcoin-trading-bots-that-dont-lose-money-2e7165fb0b29> (only trading strat on bit\_coin)
2. Adam Kings : <https://towardsdatascience.com/creating-a-custom-openai-gym-environment-for-stock-trading-be532be3910e> (how to custom a gym env for trading)
3. Abhinav Sagar: <https://towardsdatascience.com/deep-reinforcement-learning-tutorial-with-open-ai-gym-c0de4471f368> (deep Q learning)
4. Daniel Zakrisson : [https://hackernoon.com/the-self-learning-quant-d3329fcc9915 //](https://hackernoon.com/the-self-learning-quant-d3329fcc9915%20%20//) Medium Article: <https://medium.com/hackernoon/the-self-learning-quant-d3329fcc9915#.3b4ghaoa7> (basic Q learing algo)
5. Yash Pastel: <https://towardsdatascience.com/reinforcement-learning-w-keras-openai-dqns-1eed3a5338c> (DQN on keras)
6. Keon tutorial: <https://keon.io/deep-q-learning/> (implement a DQN with Keras)
7. Trading plotting : <https://towardsdatascience.com/visualizing-stock-trading-agents-using-matplotlib-and-gym-584c992bc6d4>
8. Pair Trading algo using RL: <https://towardsdatascience.com/a-gentle-implementation-of-reinforcement-learning-in-pairs-trading-6cdf8533bced>
9. PPO implementation guide : <https://towardsdatascience.com/proximal-policy-optimization-tutorial-part-1-actor-critic-method-d53f9afffbf6>
10. DDPG on tensorflow blog : <https://pemami4911.github.io/blog/2016/08/21/ddpg-rl.html>
11. Trading on bitcoin with RL: <https://launchpad.ai/blog/trading-bitcoin> code: <https://github.com/ThirstyScholar/trading-bitcoin-with-reinforcement-learning> (pytorch)
12. DQL for asset management: <https://medium.com/swlh/ai-for-portfolio-management-from-markowitz-to-reinforcement-learning-cffedcbba566>
13. Lien code github Edmond / saeed: <https://www.linkedin.com/pulse/deep-reinforcement-learning-trading-saeed-rahman/>
14. MVA slide RL : <http://researchers.lille.inria.fr/~lazaric/Webpage/MVA-RL_Course14.html>
15. RL/ non stationarity: <https://www.youtube.com/watch?v=OiVUONmhBxQ>

**ALGO :**

1. PPO : Video: <https://www.youtube.com/watch?v=5P7I-xPq8u8> , Open AI design: <https://openai.com/blog/openai-baselines-ppo/>

Chaine youtube: Deep rl bootcamp

Stanford course RL: <https://www.youtube.com/watch?v=lvoHnicueoE>

Stanford course adversarial training : <https://www.youtube.com/watch?v=CIfsB_EYsVI>

**GAN**

GITHUB:

-github: borisbunashev article goldman stock prediction: <https://github.com/borisbanushev/stockpredictionai>