

QUANTOPIAN AND MACHINE LEARNING



QUANTOPIAN

Quantopian provides free education, data, and tools so anyone can pursue quantitative finance. Aims to create a crowd-sourced hedge fund by letting freelance quantitative analysts develop, test, and use trading algorithms to buy and sell securities.

WHAT IS TRADING ABOUT?

Trading is a profession that consists in the study of the markets through technical analysis and the fundamental analysis to invest in different financial instruments with the objective of obtaining a profit.

MACHINE LEARNING (ML)

Is the scientific study of algorithms and statistical models that computer systems use in order to perform a specific task effectively without using explicit instructions, relying on patterns and inference instead..

ML APPLIED TO QUANTOPIAN

Machine learning algorithms build a mathematical model based on sample data, known as "training data", in order to make predictions or decisions without being explicitly programmed to perform the task. Those predictions improve the global data analysis to get a better profit in every algorithm used in Quantopian.



RESULTS



WITHOUT ML

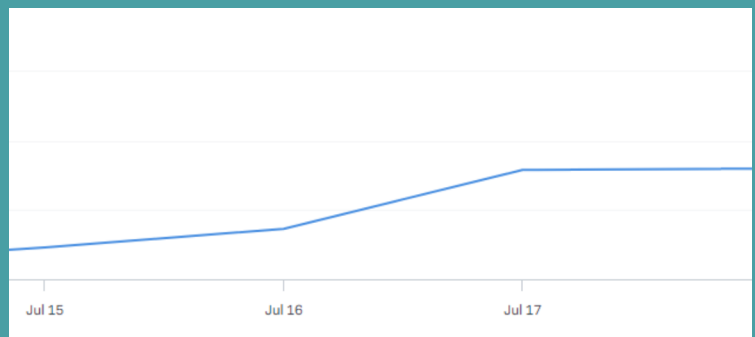


USING ML

LOGISTIC REGRESSION



ACTIVE ENTRY



CONCLUSIONS

- Without the use of Machine Learning, algorithms are limited by the world's developer perception and the basic stock fluctuations, wasting important information that is hard to see without ML help.
- Machine Learning provides a wider range of possibilities to complement the trade by taking advantage of the "hidden" information that the developer would not take into account when developing the algorithm..

