



Lab/BA/SA/Group:

Make Us Richer!

Motivation and Informal Description

In the recent past the algorithmic trading has seen enormous growth and a good place to make lots of money. It is now responsible for more than 70% the trades in the US. A very important subclass are the high frequency trading (HFT) algorithms. These algorithms usually hold stocks or certificates only for a brief time, sometimes only for a few seconds or even milliseconds and earn money by making thousands of trades a day. But since these algorithms increase the volatility of the market, they are becoming the target of a financial regulations which would destroy that business model.

Therefore, we want to return to systematic algorithmic trading to get rich. We already developed a simple framework and implemented some basic strategies with it. We want you to extend this framework. This includes, but is not limited to, making it more realistic by adding a budget constraint and transaction costs, and creating more powerful strategies, e.g., by being able to short sell stocks. But of course, your own ideas are also welcome.



Requirements

Good programming skills (preferably in Python) and a genuine interest in the financial markets. The student(s) should be able to work independently on this topic!

Interested? Please contact us for more details!

Contact

- Philipp Brandes: philipp.brandes@tik.ee.ethz.ch, ETZ G64.2