DrYangFinTech2018 Documentation

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Contents

Financial Technology Project Directed by Dr. Yang, 2018

CHAPTER 1

Research Log

1.1 Tue 5 June 2018

- MSVAR: Markov Switching Vector Auto-Regression model, a generalizaion of VAR model
- VAR: Vector Auto-Regression model, a generalization of AR model wiki
- AR: Auto-Regression model, a basic model for handling time series

CHAPTER 2

Change Log

2.1 Tue 29 May 2018

I joined this project in the spring of 2018. There are roughly 8 members taking part in this project. All of them are undergraduate but from different disciplines, including math, finance, management, physics, etc. Our director, Dr. Yang, is a professional in the quantitative trading field, who had been working in Wall Street and Hong Kong for over 2 decades.

Our main purpose here is to learn the basic technology of quantitative trading.

The automated trading system used in this project is protected by copy rights and licensed by Dr. Yang. So we are not going to publish the entire project to the public. Instead, we will only record experiments and some of the scripts. Moreover, it is mainly used as a host for my personal codings and loggings, and not for others'. So you will not see many of other members' works in the GitHub repository (at least directly).

Currently we have use the index ETF 510050 in China fund market as a test bed for learning how to trade with simple double SMA strategy.

CHAPTER 3

Who Will Read This Doc

I will assume there are 2 kinds of readers:

1. Those who have access to Dr. Yang's license, and can run the automated trading system on their own machine (may be my current teammates or project members in the future).
2. Those who do not have access to Dr. Yang's license.

I will consistently take these 2 types of readers into consideration throughout the entire writing process. For readers of type 2, you can skip any operational detail in the docs. On the other hand, readers of type 1 may need to read those contents carefully.

CHAPTER 4

Getting Started

The following materials are for readers of type 1. Readers who do not have access to the system can skip this part.

1. Install *Tortoise SVN* from here. Checkout the project from the following link `https://hkfdtniujing.oicp.net:8443/svn/ResearchBasic` on your computer. SVN account and password will be distributed by Dr. Yang. **Note**: the downloading process could take several hours, you can start checking out before you sleep.

2. Download and install *Visual Studio 2012* from this link.

CHAPTER 5

Indices and tables

- genindex
- modindex
- search