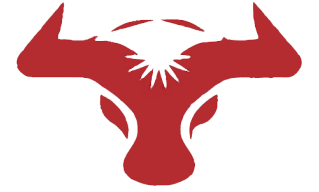# BullTrader

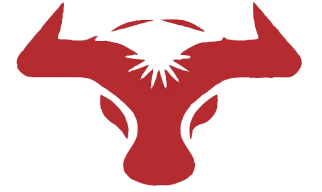## A python framework for quantitative trader

Yang Wang

Motivation

- We want to define data
- We want to use python
- We want to use deep learning system
- We want to visualize the performance better

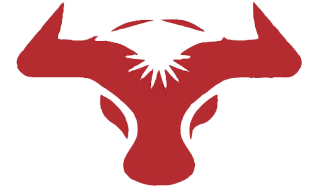We need to develop a toolkit to meet the customized needs.

Architecture
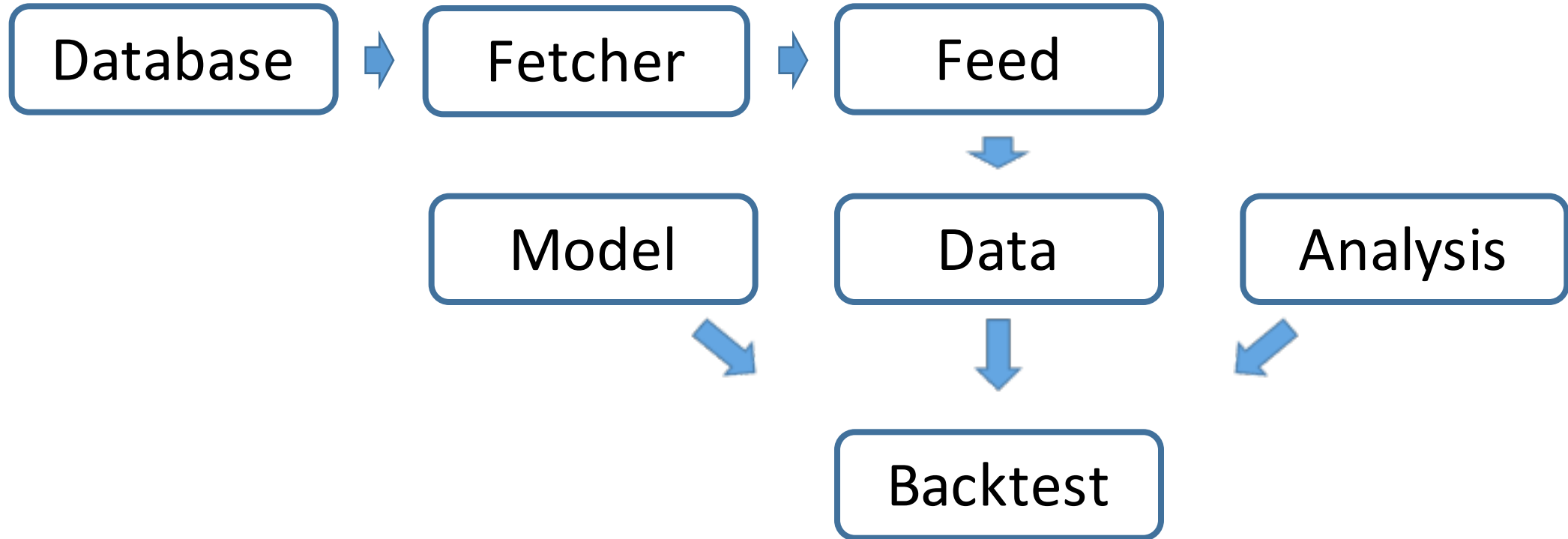
Mechanism

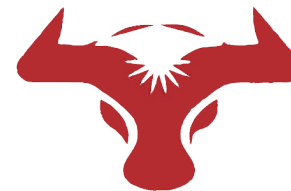Database → Fetcher → Feed

Feed → Data

Model → Backtest ← Data ← Analysis

Usage

```
# git clone gitlab@192.168.0.15:wy/bulltrader.git
# cd bulltrader
# sudo pip install .
# python main.py --conf buy_and_hold.conf
```

Conf

```
[db]

host = str: 192.168.0.10
port = int: 3306
user = str: usemysql
passwd = str: 123456
sec_code_db = str: stock_set
dprice_db = str: 4_28_ASHAREODPRICES
factor_db = str: 4_33_AShareEODDerivativeIndicator
index_db = str: 4_98_AINDEXEODPRICES
index_name = list: 000001_SH

indus_set = list: Capital_Goods, Materials, Compute
              Consumer_Durables_Apparel, Medical_Bio
              Food__Beverage_Tobacco, Computer_Appli
              Automobiles_Components, Retailing

sec_factor = list: TRADE_DT, S_DQ_HIGH, S_DQ_OPEN,
          S_DQ_ADJHIGH, S_DQ_ADJOPEN, S_DQ_ADJCLOSE
```
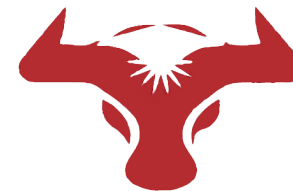
```
[feed]

tra_sta_date = str: 2005-1-1
tra_end_date = str: 2015-1-1
tes_end_date = str: 2017-1-1

[model]
model = str: buy_and_hold
ws = int:64
num_test = int:10

[experiment]

load_model = bool: True
delete_old_model = bool: False
delete_old_log = bool: True
pardir = str: /work0/cslt/exps/viewexp/rlexp/
figparDir = str: /work0/cslt/exps/viewimg/
expdir = str: wy_buy_and_hold/
```

Output

```
loading config file: config/buy_and_hold.conf ..


[db]


host = 192.168.0.10
port = 3306
user = usemysql
```

```
fetching data ................

Capital_Goods          ['000009_SZ', '000008_SZ',
Materials              ['000012_SZ', '600608_SH',
Computer_Electronic_   ['600602_SH', '600601_SH',
Consumer_Durables_Ap   ['600602_SH', '600651_SH',
Medical_Biology        ['000004_SZ', '600624_SH',
```
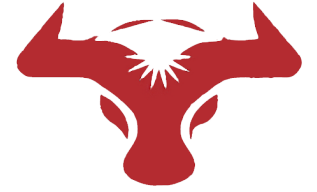
```
start backtesting .................


Stock Set : 000009_SZ 600618_SH 600621_SH


Profit : 79.8051%
Sharpe Ratio: 0.9921
Max Drawdown: 40.5273%
Num Rise Day: 284
Num Fall Day: 202


Stock Set : 600605_SH 600614_SH 600624_SH


Profit : 61.9326%
Sharpe Ratio: 0.8024
Max Drawdown: 52.7455%
Num Rise Day: 284
Num Fall Day: 202
```
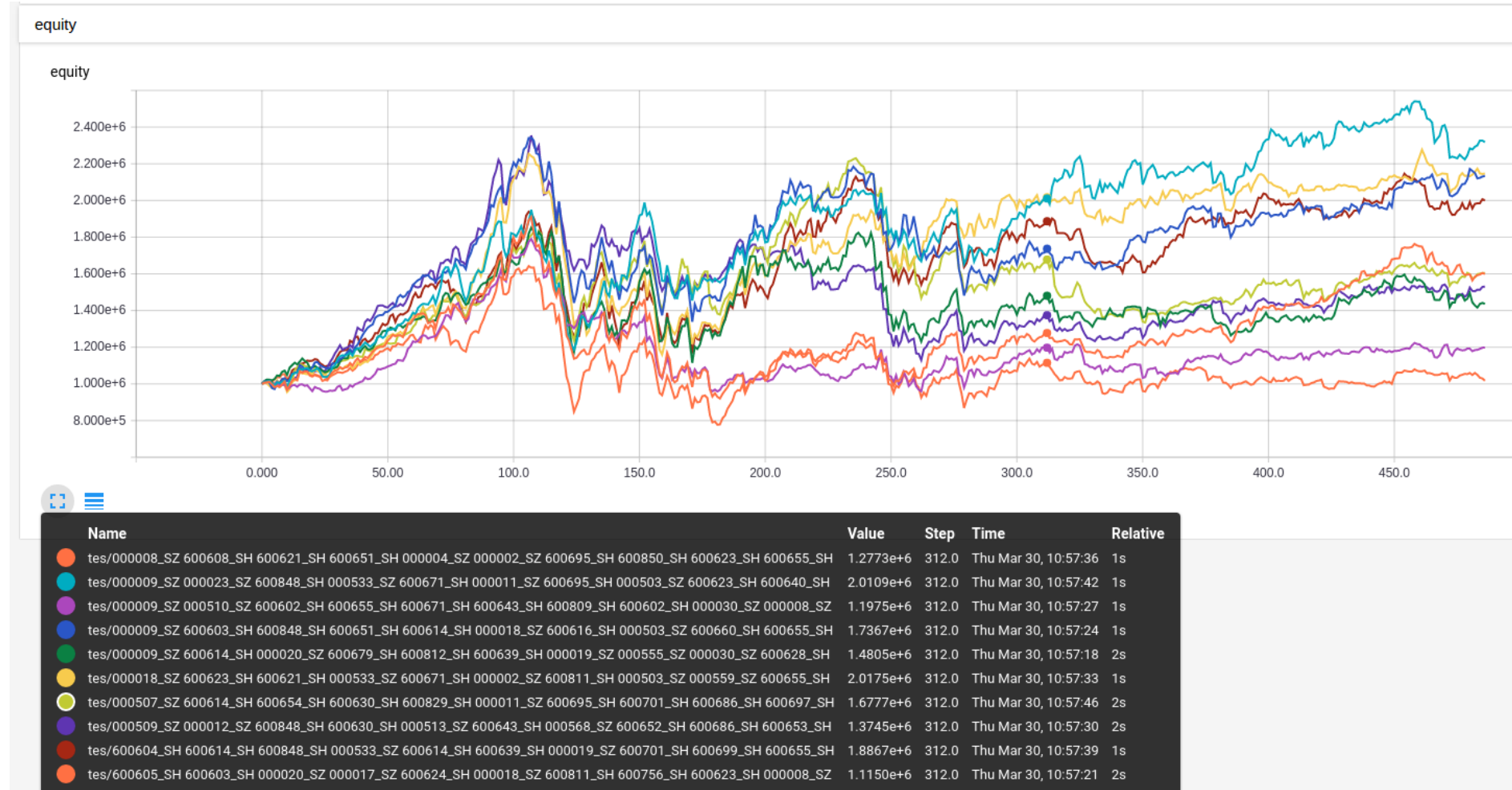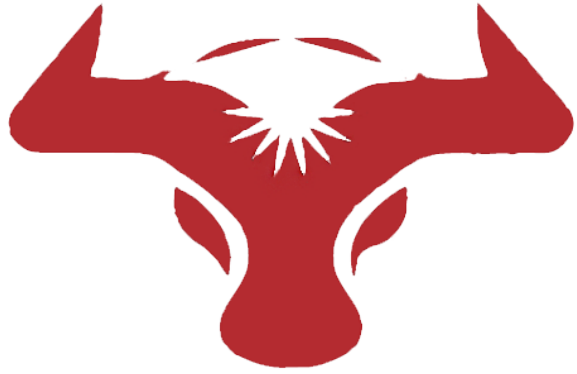
Visualization

BullTrader

Help you focus on strategies !