Quantopian

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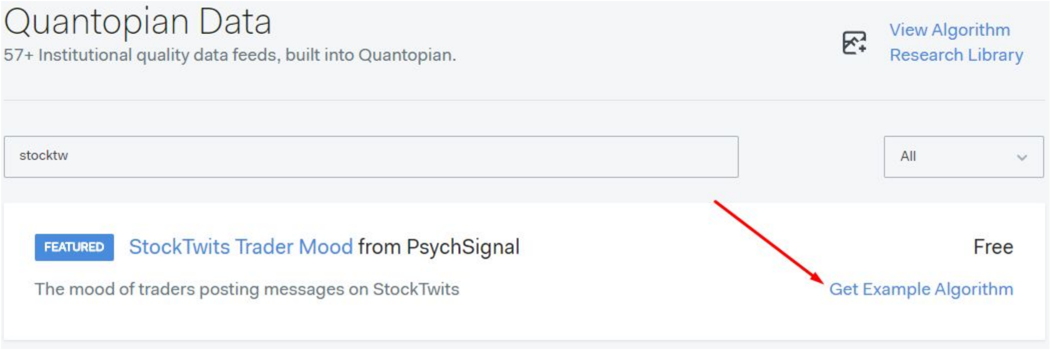
algo 1: Cross-Sectional Example

- Standard Template for a working Quantopian Contest Algorithm
- Use Stocktwits Feeling

algo 2: PsychSignal Sample Algorithm (Stocktwits)



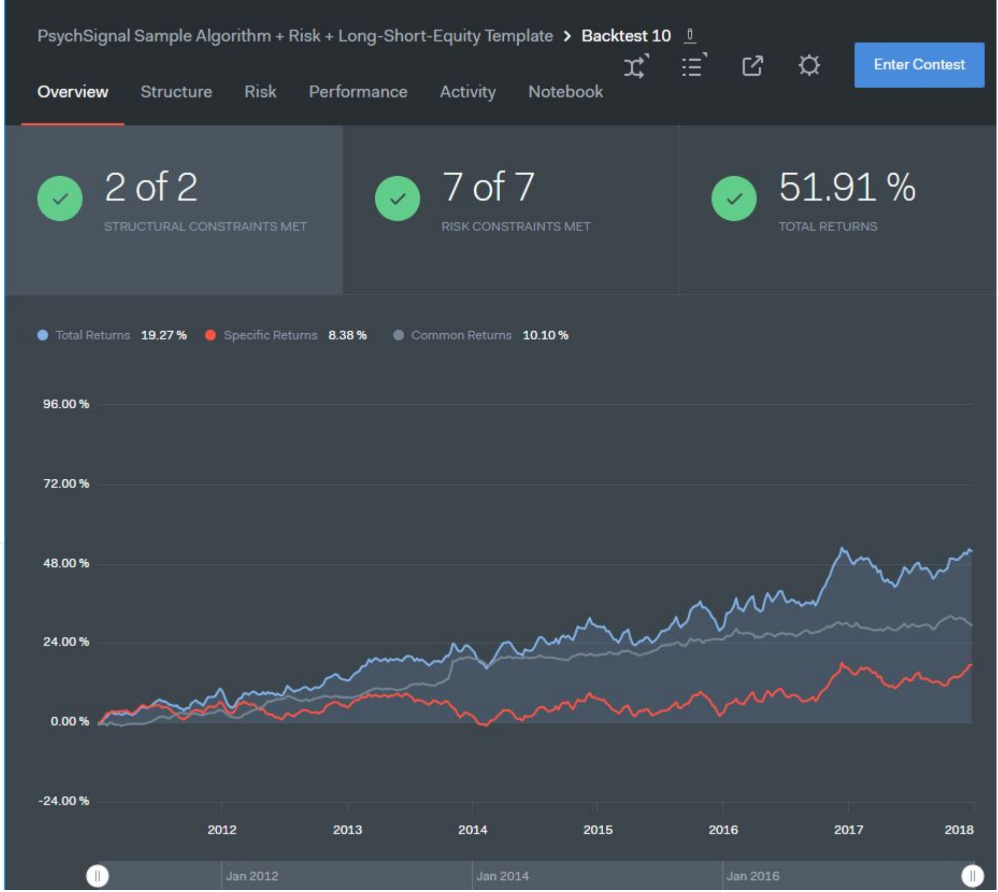

```python
class Value(CustomFactor):

    inputs = [morningstar.valuation_ratios.book_value_yield,
              morningstar.valuation_ratios.sales_yield,
              morningstar.valuation_ratios.fcf_yield]

    window_length = 1

    def compute(self, today, assets, out, book_value, sales, fcf):
        value_table = pd.DataFrame(index=assets)
        value_table["book_value"] = book_value[-1]
        value_table["sales"] = sales[-1]
        value_table["fcf"] = fcf[-1]
        out[:] = value_table.rank().mean(axis=1)

class Momentum(CustomFactor):

    inputs = [USEquityPricing.close]
    window_length = 252

    def compute(self, today, assets, out, close):
        out[:] = close[-20] / close[0]

class MessageVolume(CustomFactor):
    inputs = [stocktwits.total_scanned_messages]
    window_length = 21
    def compute(self, today, assets, out, msgs):
        out[:] = -np.nansum(msgs, axis=0)
```

Problems:

- Market Exposure
- Risk Constraints
- General Software
- Obsolete Databases

Resultados


MsgVol+Psych+Momentum+Morningstar Value+Beta Thing 0.292 (+0.043)
0.292
SCORE
Created at 2018-05-02 5:33:27 pm
0.4
0.3
0.2
0.1
0
May 01
May 03
May 07
May 09
May 13
May 15
May 17
May 21
May 23
May 29
May 31
May 07
May 14
May 21
May 28


PsychSignal Sample Algorithm + Risk + Long-Short-Equity Template > Backtest 10
Enter Contest
Overview
Structure
Risk
Performance
Activity
Notebook
2 of 2
STRUCTURAL CONSTRAINTS MET
7 of 7
RISK CONSTRAINTS MET
51.91 %
TOTAL RETURNS
Total Returns 19.27 %
Specific Returns 8.38 %
Common Returns 10.10 %
96.00 %
72.00 %
48.00 %
24.00 %
0.00 %
-24.00 %
2012
2013
2014
2015
2016
2017
2018
Jan 2012
Jan 2014
Jan 2016