estimize_signal_strategy

August 24, 2018

1 Estimize Signal Strategy

The Estimize Signal is a cross sectional score which captures several predictive factors based on Estimize's proprietary database of crowdsourced earnings estimates. These factors include pre-earnings measures such as the difference between Estimize and Wall Street earnings forecasts, as well as post-earnings factors such as recent earnings surprises as benchmarked against Estimize forecasts. In constructing the Estimize Signal, we leveraged the research from our white paper, "Generating Abnormal Returns Using Crowdsourced Earnings Forecasts from Estimize," first written in 2014. The signal construction process included rigorous in-and out-of-sample testing, and represents a fairly parsimonious use of the Estimize data set.

1.1 Backtest Results

In the following part of the notebook, we have codified an example of how the Estimize Signal could be traded in a single factor model, and show yearly as well as multiyear performance. The data used are pricing data (to calculate daily returns) provided by Zipline, and the Estimize Signal data. To run this notebook you will need to download the Estimize Signal time series CSV and place it into your the data directory.

There are seven parameters that can be changed to control how the algo operates. With the default parameter settings, we have a universe consisting of U.S. equities with market caps >= $100mm, average daily trading volumes of > $1mm, and prices (split unadjusted) of > $4. On each trade we create a long portfolio which is equally weighted among all stocks in the top 10% of stocks in this universe according to the Signal. Similarly the short portfolio is equally weighted among the stocks in the bottom 10%. Our dollar neutral return is the difference between the long portfolio's return and the short portfolio's return. In addition we are using a 2-to-1 leverage ratio.

1.2 Caveates

These notebooks depend on the Zipline pricing data. As of April 2018, the Zipline team has been unable to update the public pricing data past Q1 2018 due to an issue with aqcuiring 3rd-party data. We will update the notebooks when this situation changes.

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585083
573805
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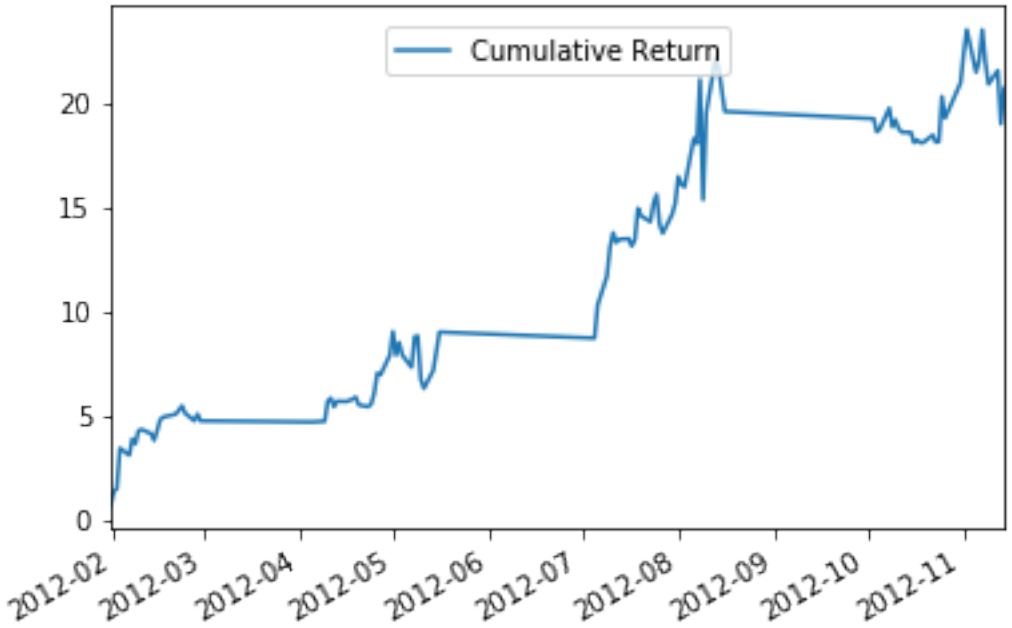
2018-08-14 16:34:57,043 [INFO] estimize.services.impl.estimize_signal_service_default_impl: ge
```

```
   Year  Cumulative Return  Avg Daily Return  Num Trading Days  \
0  2012           0.206904           0.00176             110.0

   Return (Annualized)  Sharpe Ratio  Volatility
0             0.443509      2.829882    0.156724
```

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   Year  Cumulative Return  Avg Daily Return  Num Trading Days  \
0  2013           0.122869          0.000798             152.0

   Return (Annualized)  Sharpe Ratio  Volatility
0             0.201023       1.51247    0.132911
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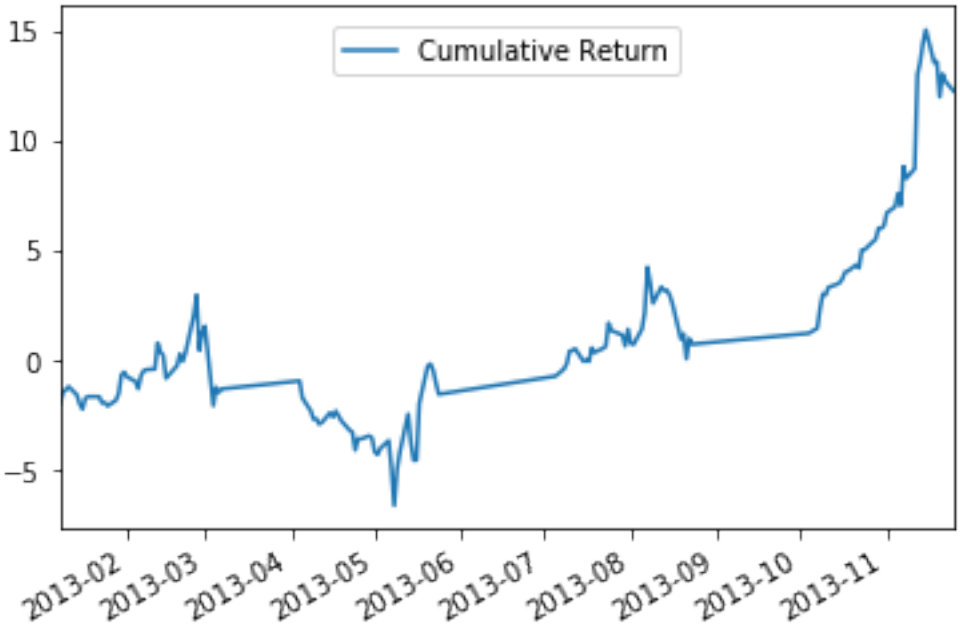


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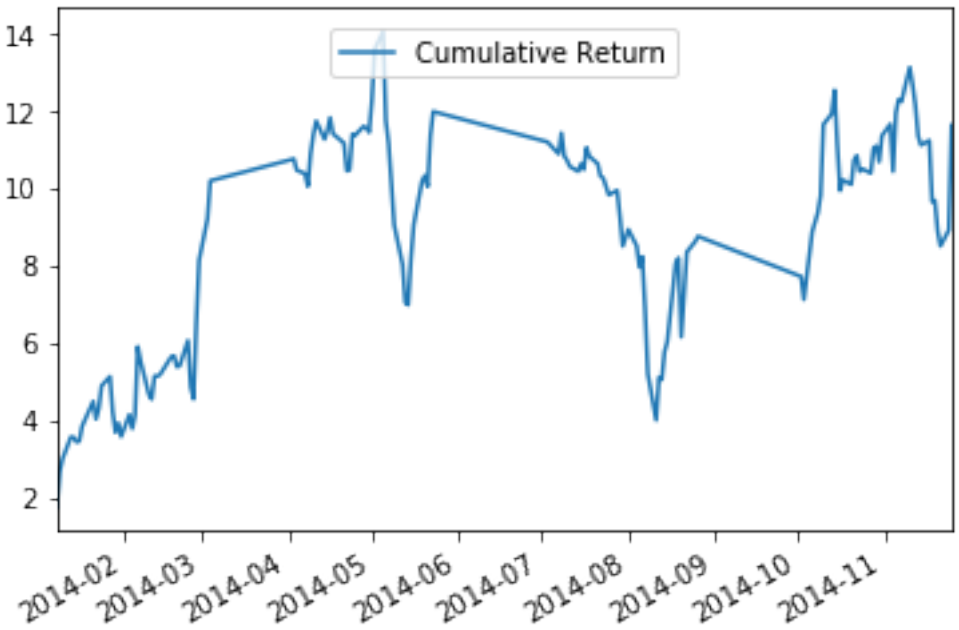
	Year	Cumulative Return	Avg Daily Return	Num Trading Days	Return (Annualized)	Sharpe Ratio	Volatility
0	2014	0.116492	0.000757	151.0	0.190852	1.62459	0.117477

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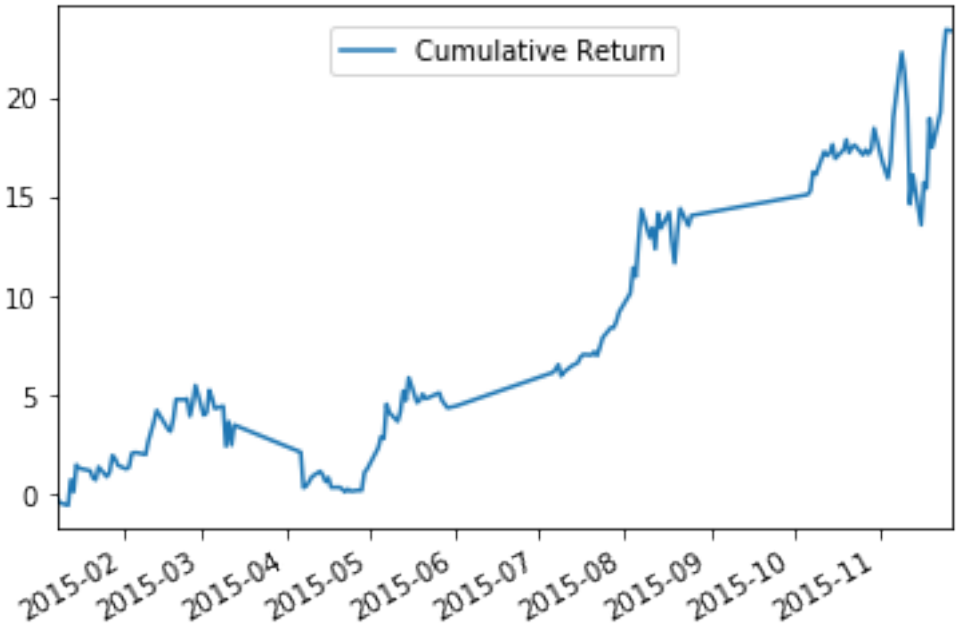
	Year	Cumulative Return	Avg Daily Return	Num Trading Days	Return (Annualized)	Sharpe Ratio	Volatility
0	2015	0.233979	0.001354	160.0	0.341265	2.424804	0.140739

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```
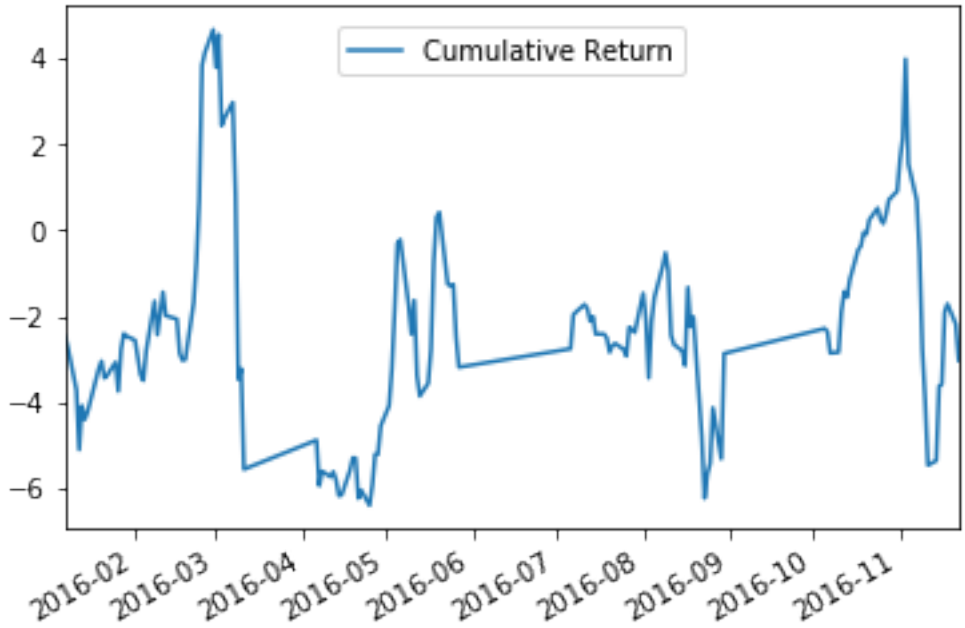

	Year	Cumulative Return	Avg Daily Return	Num Trading Days	Return (Annualized)	Sharpe Ratio	Volatility
0	2016	-0.030217	-0.000142	158.0	-0.035907	-0.222949	0.161054

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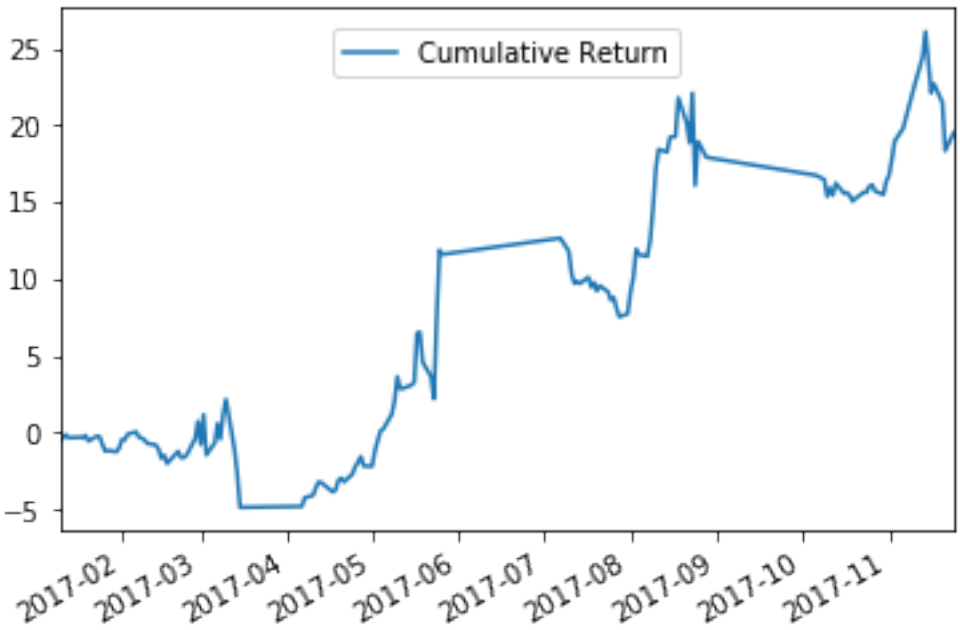
```

	Year	Cumulative Return	Avg Daily Return	Num Trading Days	Return (Annualized)	Sharpe Ratio	Volatility
0	2017	0.19509	0.001285	147.0	0.323862	1.698495	0.190676

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```
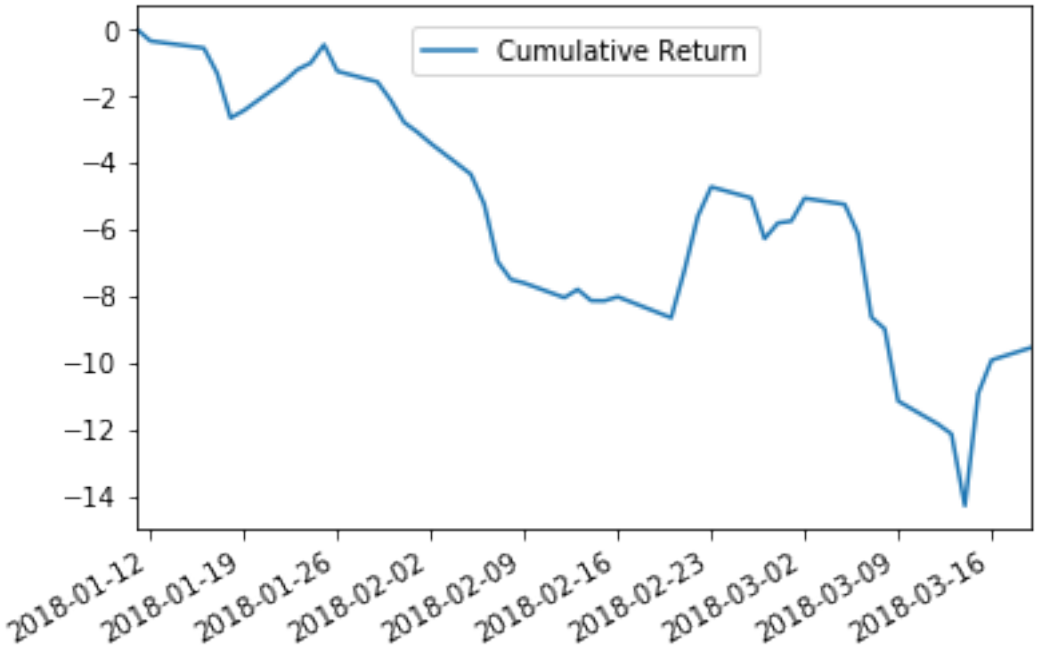
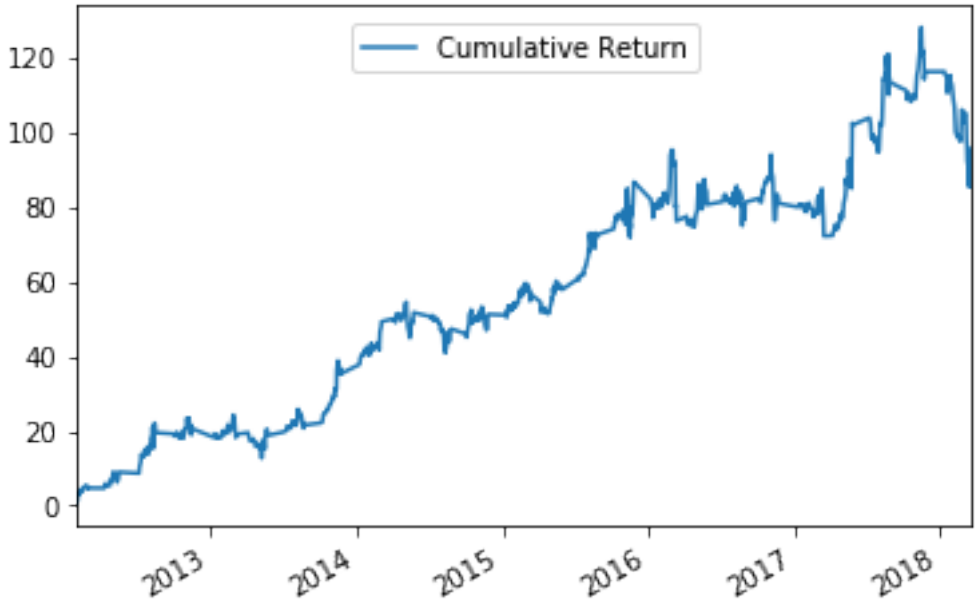

	Year	Cumulative Return	Avg Daily Return	Num Trading Days	\
0	2018	-0.09543	-0.002117	46.0	

	Return (Annualized)	Sharpe Ratio	Volatility
0	-0.533474	-3.037563	0.175626





	Cumulative Return	Avg Daily Return	Num Trading Days	Return (Annualized)	\
0	0.107098	0.000528	132.0	0.133019	

```
   Sharpe Ratio  Volatility
0      0.975676    0.153601
```