Untitled

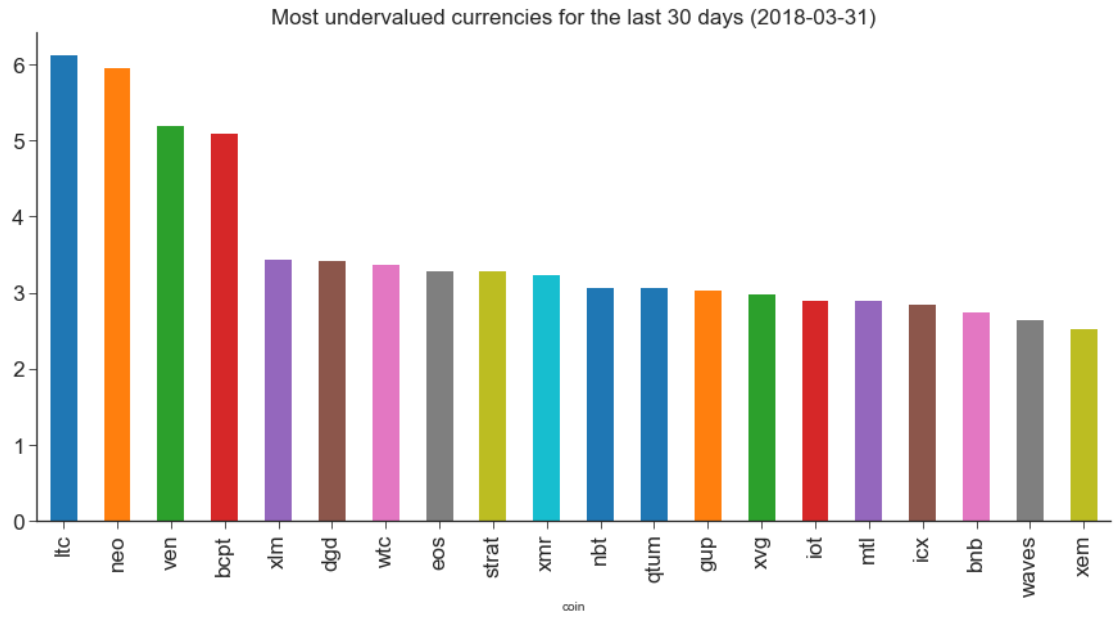
March 31, 2018

```
In [44]: import analysis
         import warnings
         import matplotlib.pyplot as plt
         import seaborn as sns
         import numpy as np
         import pandas as pd
         import datetime as dt
         sns.set_style('ticks')
         warnings.filterwarnings('ignore')
         font = {'weight': 'normal', 'size': 17}
```

1 Demo Report

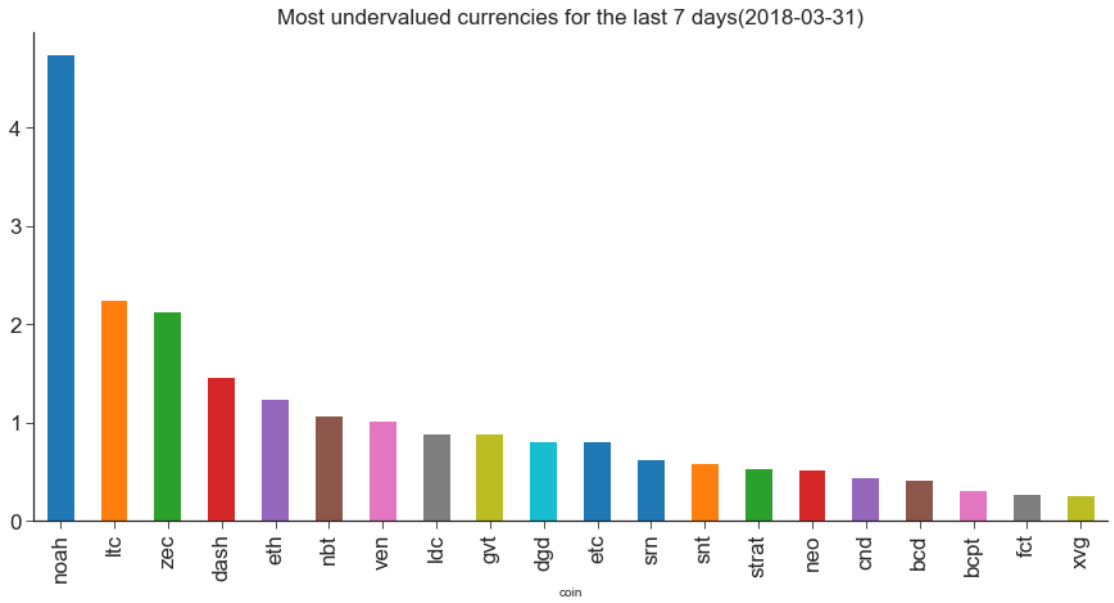
1.1 Most undervalued currencies for the last 30 days

```
In [45]: fig = plt.figure(figsize = (15, 7))
         analysis.get_top_undervalued(20).plot(kind = 'bar', fontsize = 17);sns.despine();
         plt.title('Most undervalued currencies for the last 30 days ({})'.format(dt.date.today
```



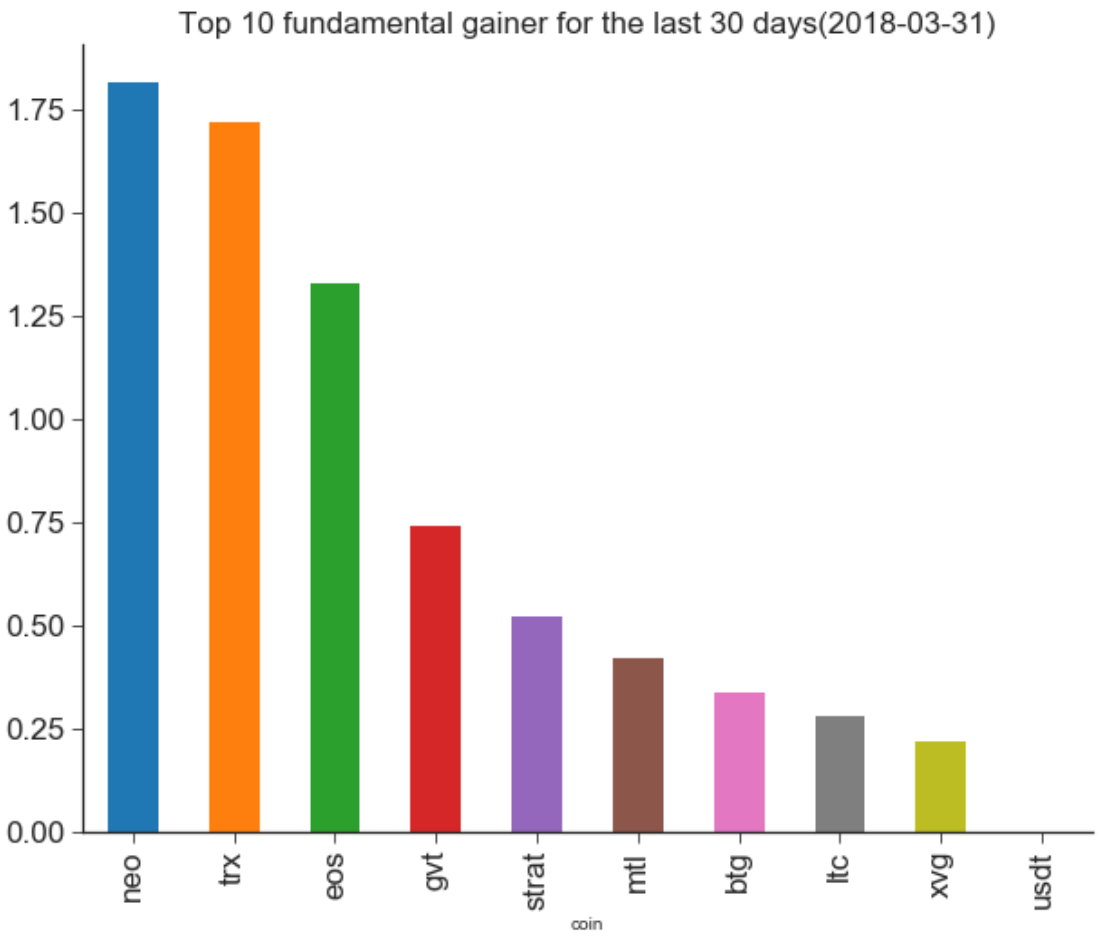
1.2 Most undervalued currencies the last 7 days

```
In [47]: fig = plt.figure(figsize = (15, 7))
         analysis.get_top_undervalued(20, days = 7).plot(kind = 'bar', fontsize = 17);sns.despi
         plt.title('Most undervalued currencies for the last 7 days({})'.format(dt.date.today()
```



1.3 Top 10 fundamental gainer for the last 30 days

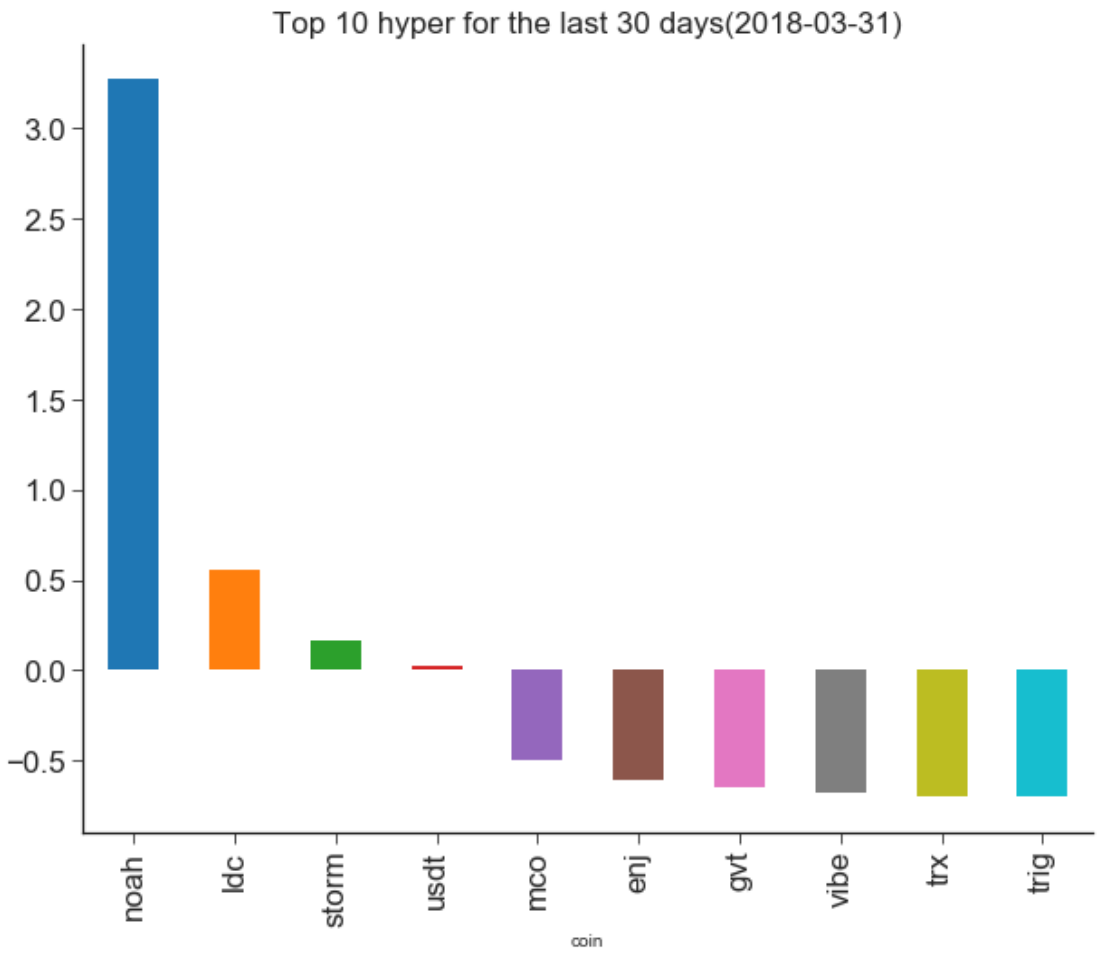
```
In [48]: fig = plt.figure(figsize = (10, 8))
         analysis.get_top_value_gainer(10, days = 30).plot(kind = 'bar', fontsize = 17);sns.des
         plt.title('Top 10 fundamental gainer for the last 30 days({})'.format(dt.date.today()
```



1.4 Top 10 hyper for the last 30 days

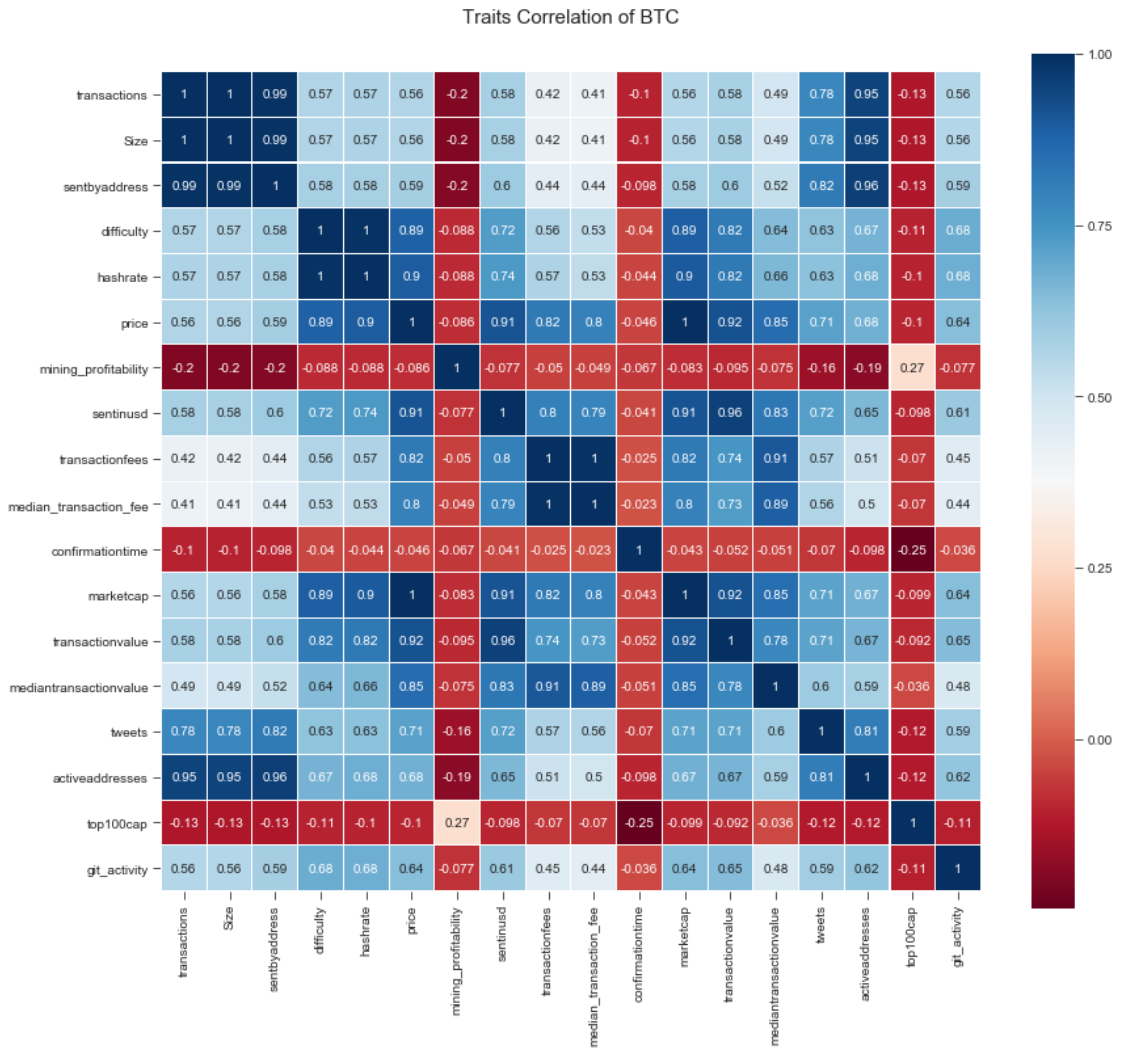
```
In [49]: fig = plt.figure(figsize = (10, 8))
         analysis.get_top_hyper(10, days = 30).plot(kind = 'bar',  fontsize = 17);sns.despine()
         plt.title('Top 10 hyper for the last 30 days({})'.format(dt.date.today()), fontdict =

Out[49]: Text(0.5,1,'Top 10 hyper for the last 30 days(2018-03-31)')
```



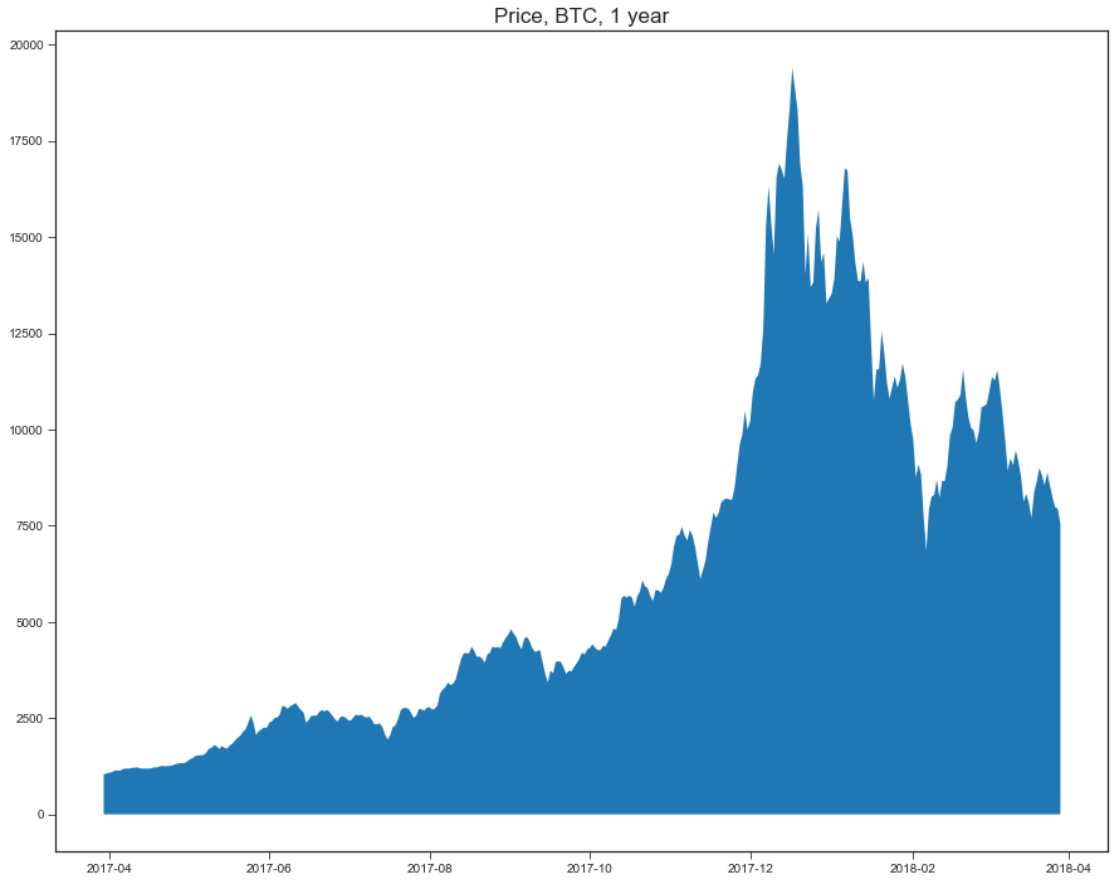
1.5 Correlation matrix for Bitcoin

```
In [50]: colormap = plt.cm.RdBu
         plt.figure(figsize=(14,12));
         plt.title('Traits Correlation of BTC', y=1.05, size=15);
         sns.heatmap(analysis.get_all_traits('btc').corr(),linewidths=0.1,vmax=1.0, square=Tru
```



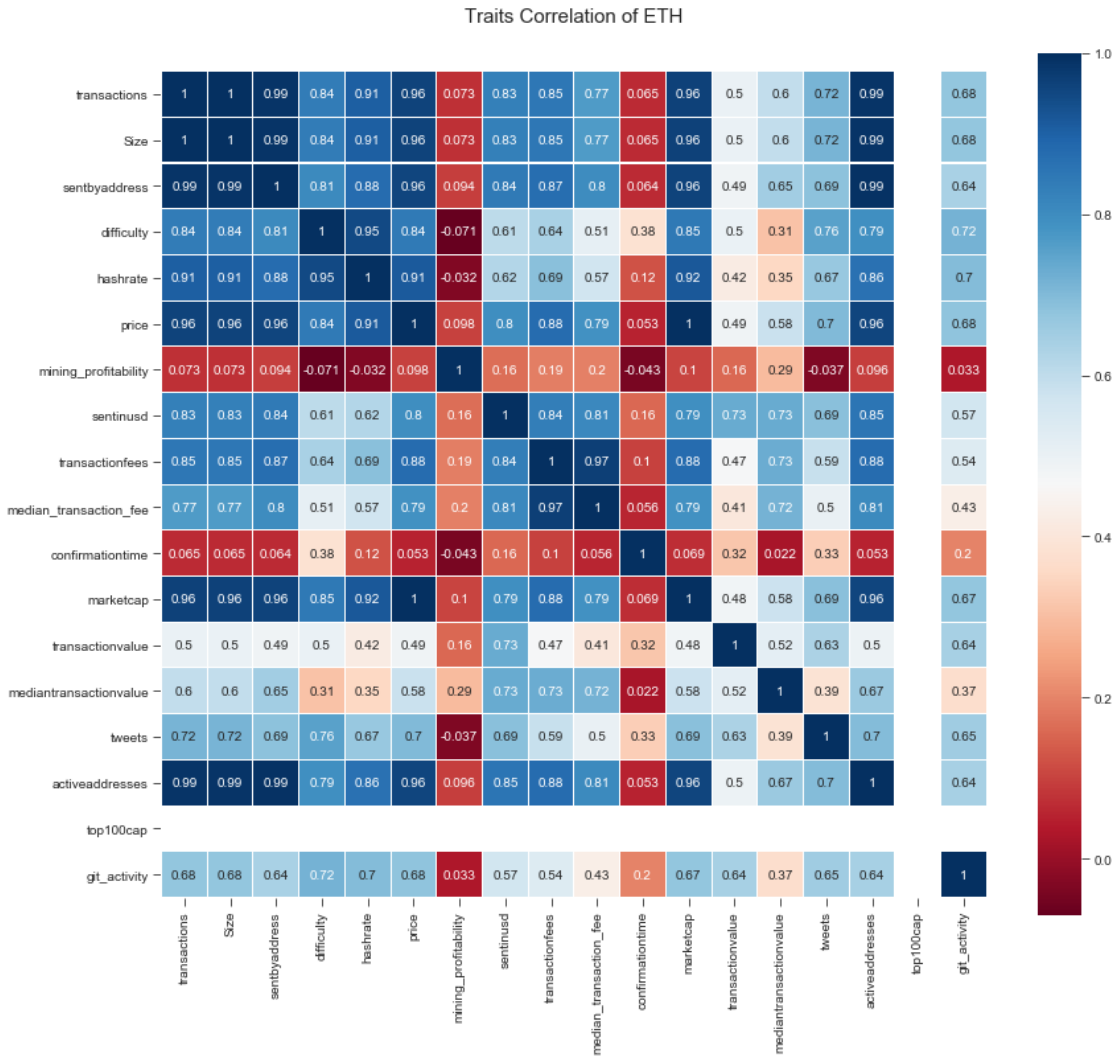
1.6 Individual Traits

```
In [51]: fig = plt.figure(figsize = (15, 12));BTC = analysis.get_all_traits('btc')[-365:]
         plt.fill_between(BTC.index, BTC.price, 0);
         plt.title('Price, BTC, 1 year', fontdict = font);
```



1.7 Correlation matrix for Ethereum

```
In [52]: colormap = plt.cm.RdBu
         plt.figure(figsize=(14,12));
         plt.title('Traits Correlation of ETH', y=1.05, size=15);
         sns.heatmap(analysis.get_all_traits('eth').corr(),linewidths=0.1,vmax=1.0, square=Tru
```



1.8 Correlation matrix for Bitcoin

```
In [53]: sns.pairplot(analysis.get_all_traits('btc'));
```