

Nexstar Media Group

Scrapping data

```
In[96]:= pos = FinancialData["NASDAQ:*", "Lookup"];

In[97]:= Scrapping[stock_] := Module[{data = stock},
  returns =
    (Drop[data[[All, 2]], 1] - Drop[data[[All, 2]], -1]) / Drop[data[[All, 2]], -1];
  ShapiroWilkTest@returns
];

In[98]:= Possibles = {};

In[105]:= While[True,
  curr = RandomChoice@pos;
  pos = DeleteCases[pos /. curr → 1, _Integer];
  Print[curr];
  p = Scrapping[FinancialData[curr, "Jul. 1, 2017"]];
  If[p > 0.5, Print[":)"];
  Append[Possibles, curr];
  Break[]]]

NASDAQ:RGLD
NASDAQ:FMAO
NASDAQ:ATRI
NASDAQ:SBT
NASDAQ:CORT
NASDAQ:GLBZ
NASDAQ:ESES
NASDAQ:CSGS
NASDAQ:ASND
NASDAQ:FGBI
NASDAQ:TBBK
NASDAQ:HTHT
NASDAQ:DAKT
NASDAQ:ADRO
NASDAQ:EGBN
NASDAQ:FSTR
```

NASDAQ:MRCY
NASDAQ:FYX
NASDAQ:PPH
NASDAQ:TBNK
NASDAQ:GNTX
NASDAQ:EUHI
NASDAQ:GIFI
NASDAQ:AMNB
NASDAQ:FIZZ
NASDAQ:RMCF
NASDAQ:LAWS
NASDAQ:MICT
NASDAQ:GILT
NASDAQ:ULBI
NASDAQ:EYE
NASDAQ:PSCU
NASDAQ:BLPH
NASDAQ:MDLZ
NASDAQ:RGLS
NASDAQ:STLD
NASDAQ:NVMM
NASDAQ:HURN
NASDAQ:AMKR
NASDAQ:HFGIC
NASDAQ:NEO
NASDAQ:ZEUS
NASDAQ:TEAM
NASDAQ:FNTE
NASDAQ:TTPH
NASDAQ:MTGE
NASDAQ:GLPI
NASDAQ:LKQ
NASDAQ:VRNA
NASDAQ:CDTI
NASDAQ:RETA
NASDAQ:CHSCO

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NASDAQ:GOODM
NASDAQ:ODP
NASDAQ:IPXL
NASDAQ:ADBE
NASDAQ:RRGB
NASDAQ:ATSG
NASDAQ:LAND
NASDAQ:VTWG
NASDAQ:SCPH
NASDAQ:FFIC
NASDAQ:PICO
NASDAQ:HAIN
NASDAQ:AXON
NASDAQ:NXST
: )

```

Testing data

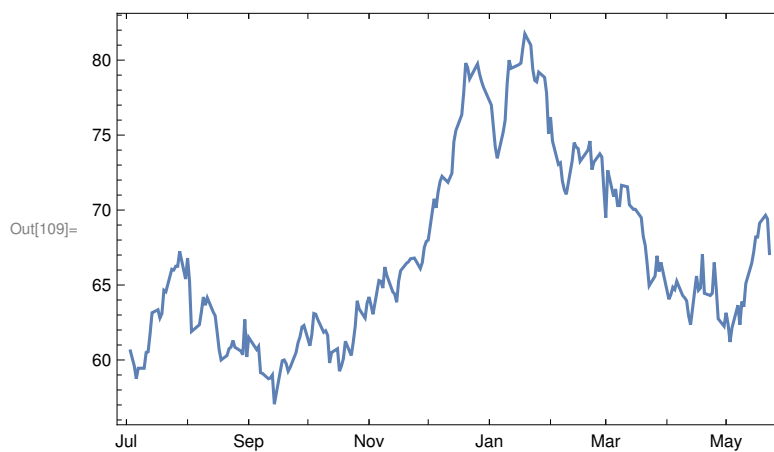
```
In[127]:= Length@FinancialData[curr, "Jul. 1, 2017"]
```

```
Out[127]= 224
```

```
In[128]:= FinancialData[curr, "Company"]
```

```
Out[128]= Nexstar Media Group
```

```
In[108]:= data = FinancialData[curr, "Jul. 1, 2017"];
DateListPlot[data]
```

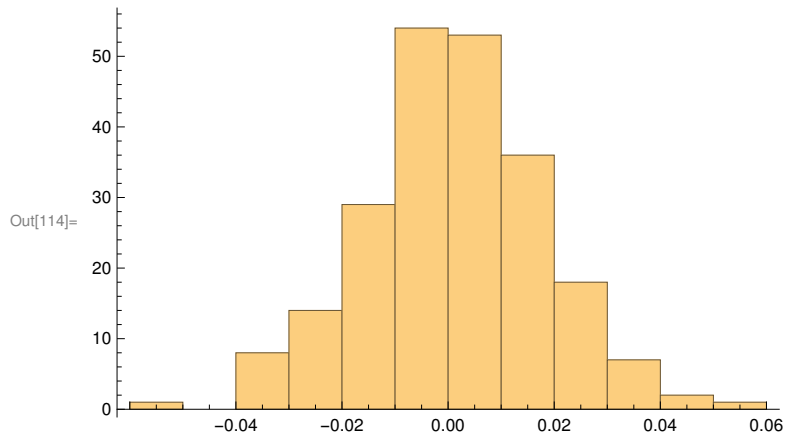


```
In[110]:= Length[data]
```

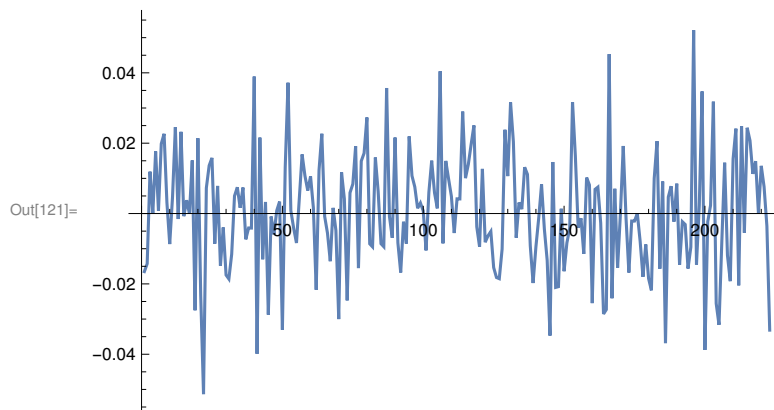
```
Out[110]= 224
```

```
In[112]:= data = data[[All, 2]];
returns = (Drop[data, 1] - Drop[data, -1]) / Drop[data, -1];
```

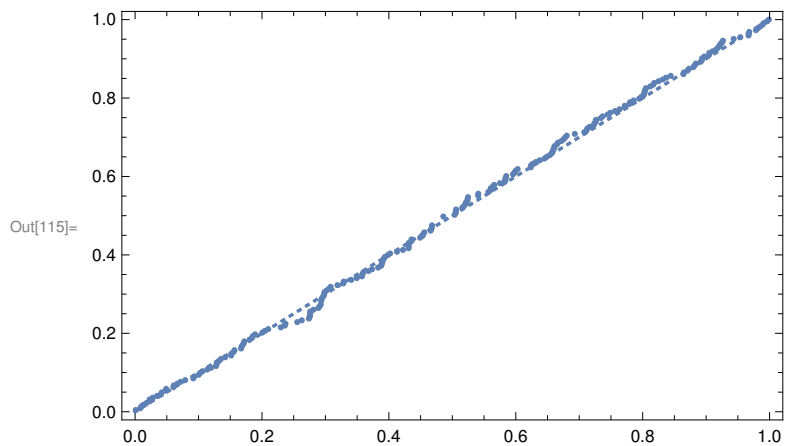
```
In[114]:= Histogram@returns
```



```
In[121]:= ListLinePlot[returns]
```



```
In[115]:= ProbabilityPlot@returns
```



```
In[116]:=  $\mathcal{H}$  = DistributionFitTest[returns, Automatic, "HypothesisTestData"];
 $\mathcal{H}$ ["TestDataTable", All]
```

```
Out[117]=
```

	Statistic	P-Value
Anderson-Darling	0.165314	0.955695
Baringhaus-Henze	0.138282	0.914426
Cramér-von Mises	0.0252673	0.919558
Jarque-Bera ALM	0.756168	0.666875
Mardia Combined	0.756168	0.666875
Mardia Kurtosis	0.752167	0.451951
Mardia Skewness	0.0123764	0.911419
Pearson χ^2	6.96413	0.958638
Shapiro-Wilk	0.997845	0.991928

```
In[118]:=  $\mathcal{H}$ ["TestConclusion", "ShapiroWilk"]
```

```
Out[118]= The null hypothesis that
           the data is distributed according to the NormalDistribution[ $\hat{x}$ ,  $\hat{y}$ ]
           is not rejected at the 5 percent level based on the Shapiro-Wilk test.
```

Exporting data

```
In[124]:= Export[curr <> "-raw.csv", FinancialData[curr, "Jul. 1, 2017"]]
```

```
Out[124]= NASDAQ:NXST-raw.csv
```

```
In[125]:= Export[curr <> "-values.csv", data]
```

```
Out[125]= NASDAQ:NXST-values.csv
```

```
In[126]:= Export[curr <> "-returns.csv", returns]
```

```
Out[126]= NASDAQ:NXST-returns.csv
```