

# jhTAlib

Joost Hoeks

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# **jhTAlib**

Technical Analysis Library Time-Series

You can use and import it for your:

- Technical Analysis Software
- Charting Software
- Backtest Software
- Trading Robot Software
- Trading Software in general

Work in progress...

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## **Depends only on**

- The Python Standard Library
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## **Docs**

- .html
  - .epub
  - .json
  - .odt
  - .pdf
  - .rst
  - .rtf
  - .xml
- 

## **Install**

From PyPI:

```
$ [sudo] pip3 install jhtalib
```

From source - source mirror 1 - source mirror 2:

```
$ git clone https://github.com/joosthoeks/jhTALib.git
$ cd jhTALib
$ [sudo] pip3 install -e .
```

---

## Update

From PyPI:

```
$ [sudo] pip3 install --upgrade jhtalib
```

From source - source mirror 1 - source mirror 2:

```
$ cd jhTALib
$ git pull [upstream master]
```

---

## In Colab

From PyPI:

```
!pip install --upgrade jhtalib
import jhtalib as jhta
```

From source - source mirror 1 - source mirror 2:

```
!git clone [-b branch-name] https://github.com/joosthoeks/jhTALib.git
%cd '/content/jhTALib'
import jhtalib as jhta
%cd '/content'
!rm -rf ./jhTALib/
```

---

## Check Installation

```
$ python3
>>> import jhtalib as jhta
>>> jhta.example()
```

If not errors then installation is correct.

```
>>> quit()
```

---

## Basic Usage

```
# Import Built-Ins:
from pprint import pprint as pp

# Import Third-Party:

# Import Homebrew:
import jhtalib as jhta

# df is DataFeed:
df = {
    'datetime': ('20151217', '20151218', '20151221', '20151222', '20151223', '20151224', '20151225'),
    'Open': (235.8, 232.3, 234.1, 232.2, 232.7, 235.4, 236.9, 234.85, 236.45, 235.0),
    'High': (238.05, 236.9, 237.3, 232.4, 235.2, 236.15, 236.9, 237.6, 238.3, 237.25),
    'Low': (234.55, 230.6, 230.2, 226.8, 231.5, 233.85, 233.05, 234.6, 234.55, 234.4),
    'Close': (234.6, 233.6, 230.2, 230.05, 234.15, 236.15, 233.25, 237.6, 235.75, 234.4),
    'Volume': (448294, 629039, 292528, 214170, 215545, 23548, 97574, 192908, 176839, 69347)
}

# basic usage:
#pp(df)
pp(jhta.SMA(df, 10))
#pp(jhta.BBANDS(df, 10))
```

---

## Examples

```
$ cd example/
```

### Example 1

```
$ python3 example-1-plot.py
```

or

<https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/example/example-1-plot.ipynb>

---

### **Example 2**

```
$ python3 example-2-plot.py
```

or

<https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/example/example-2-plot.ipynb>

---

### **Example 3**

```
$ python3 example-3-plot.py
```

or

<https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/example/example-3-plot.ipynb>

---

### **Example 4**

```
$ python3 example-4-plot-quandl.py
```

or

<https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/example/example-4-plot-quandl.ipynb>

---

### **Example 5**

```
$ python3 example-5-plot-quandl.py
```

or

<https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/example/example-5-plot-quandl.ipynb>

---

### **Example 6**

```
$ python3 example-6-plot-quandl.py
```

or

<https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/example/example-6-plot-quandl.ipynb>

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### **Example 7**

`$ python3 example-7-quandl-2-df.py`

or

<https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/example/example-7-quandl-2-df.ipynb>

---

### **Example 8**

`$ python3 example-8-alphavantage-2-df.py`

or

<https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/example/example-8-alphavantage-2-df.ipynb>

---

### **Example 9**

`$ python3 example-9-cryptocompare-2-df.py`

or

<https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/example/example-9-cryptocompare-2-df.ipynb>

---

### **Example 10**

DF NumPy Pandas

<https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/example/example-10-df-numpy-pandas.ipynb>

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## Example 11

### Basic Usage

<https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/example/example-11-basic-usage.ipynb>

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### Test

```
$ cd test/  
$ python3 test.py
```

---

### Reference

```
$ python3  
>>> import jhtalib as jhta  
>>> dir(jhta)  
>>> help(jhta)  
>>> help(jhta.behavioral_techniques)  
>>> help(jhta.candlestick)  
>>> help(jhta.cycle_indicators)  
>>> help(jhta.data)  
>>> help(jhta.event_driven)  
>>> help(jhta.experimental)  
>>> help(jhta.general)  
>>> help(jhta.information)  
>>> help(jhta.math_functions)  
>>> help(jhta.momentum_indicators)  
>>> help(jhta.overlap_studies)  
>>> help(jhta.pattern_recognition)  
>>> help(jhta.price_transform)  
>>> help(jhta.statistic_functions)  
>>> help(jhta.uncategorised)  
>>> help(jhta.volatility_indicators)  
>>> help(jhta.volume_indicators)  
>>> quit()
```

---

## Notebooks

- <https://github.com/joosthoeks/jhTAlib/tree/master/notebook>

### A Sane and Simple bitcoin Savings plan SSS

- [https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/notebook/a\\_sane\\_and\\_simple\\_bitcoin\\_savings\\_plan\\_\(sss\).ipynb](https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/notebook/a_sane_and_simple_bitcoin_savings_plan_(sss).ipynb)
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### Dollar Cost Averaging Discount DCAD

- [https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/notebook/dollar\\_cost\\_averaging\\_discount\\_dcad.ipynb](https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/notebook/dollar_cost_averaging_discount_dcad.ipynb)
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### Recession Probability

- [https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/notebook/recession\\_probability.ipynb](https://colab.research.google.com/github/joosthoeks/jhTAlib/blob/master/notebook/recession_probability.ipynb)
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## Donation and Funding

- BTC: 3KCoXMyUDgVABoFSuV8GQT3k8qkUhEDG9X
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