STUDYPIE

Predicting Financial Time Series using Deep Learning

Module2. Preprocessing for Cryptocurrency Data

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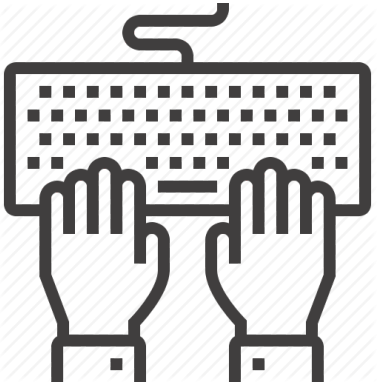
Keras

Hands on Labs Preprocessing for Cryptocurrency Data



Preprocessing for Cryptocurrency Data

Lab5_Preprocessing_for_Cryptocurrency_Data.ipynb

https://colab.research.google.com/drive/1NEUvY8uKCaoht45hPQV_qOps7ZROw1l6

Sklearn Preprocessing

- Sklearn Preprocessing
  - **Standardization**: To transform data so that it has zero mean and unit variance.

    Also called scaling
  - preprocessing.scale()

```
>>> from sklearn import preprocessing
>>> import numpy as np
>>> X_train = np.array([[ 1., -1.,  2.],
...                     [ 2.,  0.,  0.],
...                     [ 0.,  1., -1.]])
>>> X_scaled = preprocessing.scale(X_train)
```

```
>>> X_scaled.mean(axis=0)
array([0., 0., 0.])

>>> X_scaled.std(axis=0)
array([1., 1., 1.])
```

Parameters:

X: Data to be scaled

with_mean: Boolean. Whether to center the data (make zero mean)

with_std: Boolean (whether to make unit standard deviation

Collection Deque

- Deque
  - Deques are a generalization of stacks and queues
  - maxlen: Maximum size of a deque or None if unbounded

```
>>> from collections import deque
>>> d = deque(maxlen=3)
>>> for i in range(1, 7):
...     d.append(i)
...     print d
...
deque([1], maxlen=3)
deque([1, 2], maxlen=3)
deque([1, 2, 3], maxlen=3)
deque([2, 3, 4], maxlen=3)
deque([3, 4, 5], maxlen=3)
deque([4, 5, 6], maxlen=3)
```

Thank you ☺

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