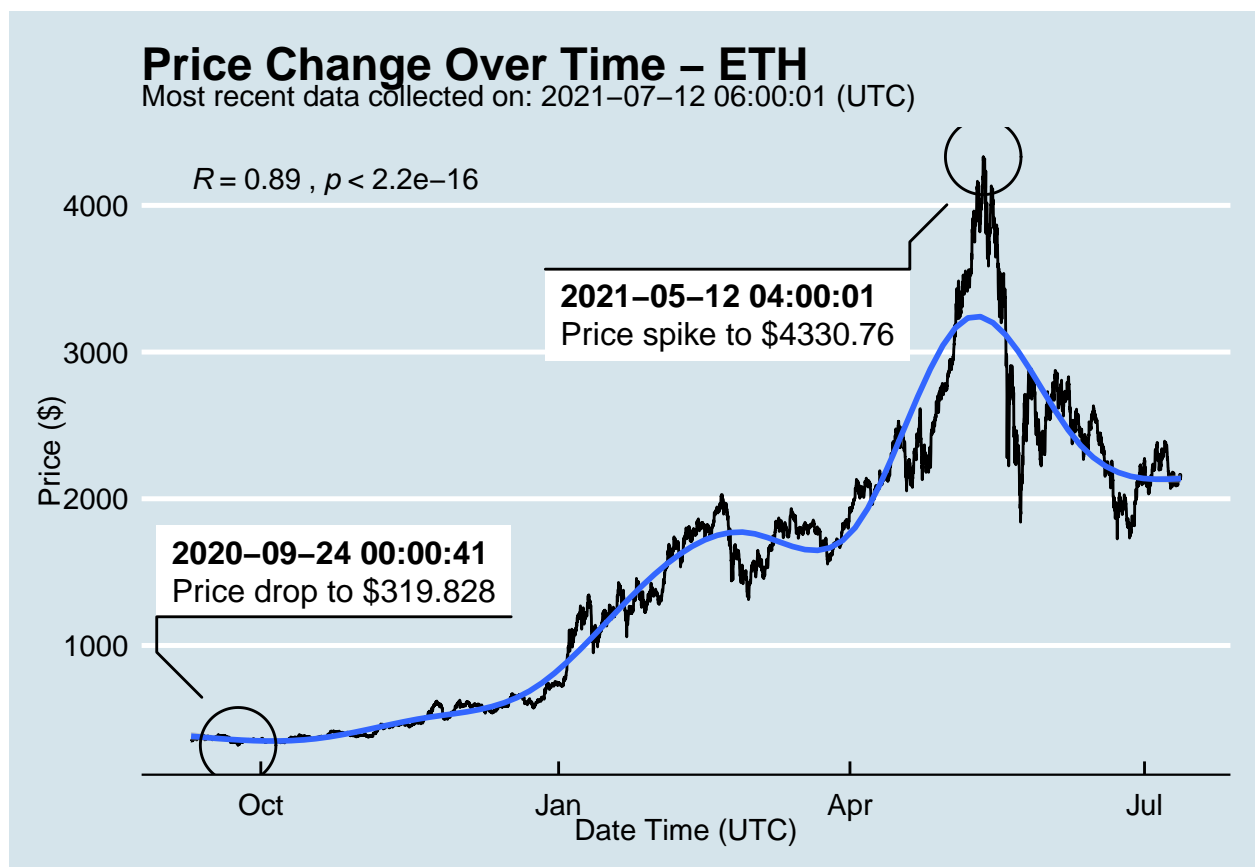# R Markdown Output

Last run on: 2021-07-12 06:12:37

Overview

This document has code embedded throughout. In the next section we will create a visualization using the already loaded dataset `eth_data`:

```
datatable(eth_data)
```

Price Chart - Ethereum

Python Code Example

```python
import pandas as pd
# Create the Python object from R
df = r.cryptodata
# Show the new Python dataframe
df
```

```
##            pair symbol  ask_1_price        date_time_utc
## 0       ETHUSD    ETH     2151.045  2021-07-12 06:00:01
## 1       BTCUSD    BTC    34344.240  2021-07-12 06:00:00
## 2       ETHUSD    ETH     2149.095  2021-07-12 05:00:01
## 3       BTCUSD    BTC    34301.190  2021-07-12 05:00:00
## 4       ETHUSD    ETH     2164.946  2021-07-12 04:00:01
## ...        ...    ...          ...                  ...
## 15149   BTCUSD    BTC    11827.080  2020-08-14 00:03:56
## 15150   BTCUSD    BTC    11551.860  2020-08-13 03:03:54
## 15151   BTCUSD    BTC    11605.670  2020-08-13 02:04:01
## 15152   BTCUSD    BTC    11633.600  2020-08-13 01:03:53
## 15153   BTCUSD    BTC    11573.270  2020-08-13 00:03:52
##
## [15154 rows x 4 columns]
```

One more Python example

The code below creates a new column `price_percentile` that specifies if the price for the row was in the upper or lower 50th percentile of prices (BTC should be upper and ETH lower):

```python
import numpy as np
# Create a new column based on the ask_1_price value:
df['price_percentile'] = np.where(df['ask_1_price'] >
                            np.percentile(df['ask_1_price'], 50),
                        'upper 50th percentile of prices',
                        'lower 50th percentile of prices')
# Show modified dataframe:
df[['symbol', 'ask_1_price', 'price_percentile']]
```

```
##          symbol  ask_1_price              price_percentile
## 0           ETH     2151.045  lower 50th percentile of prices
## 1           BTC    34344.240  upper 50th percentile of prices
## 2           ETH     2149.095  lower 50th percentile of prices
## 3           BTC    34301.190  upper 50th percentile of prices
## 4           ETH     2164.946  lower 50th percentile of prices
## ...         ...          ...                          ...
## 15149       BTC    11827.080  upper 50th percentile of prices
## 15150       BTC    11551.860  upper 50th percentile of prices
## 15151       BTC    11605.670  upper 50th percentile of prices
## 15152       BTC    11633.600  upper 50th percentile of prices
## 15153       BTC    11573.270  upper 50th percentile of prices
##
## [15154 rows x 3 columns]
```