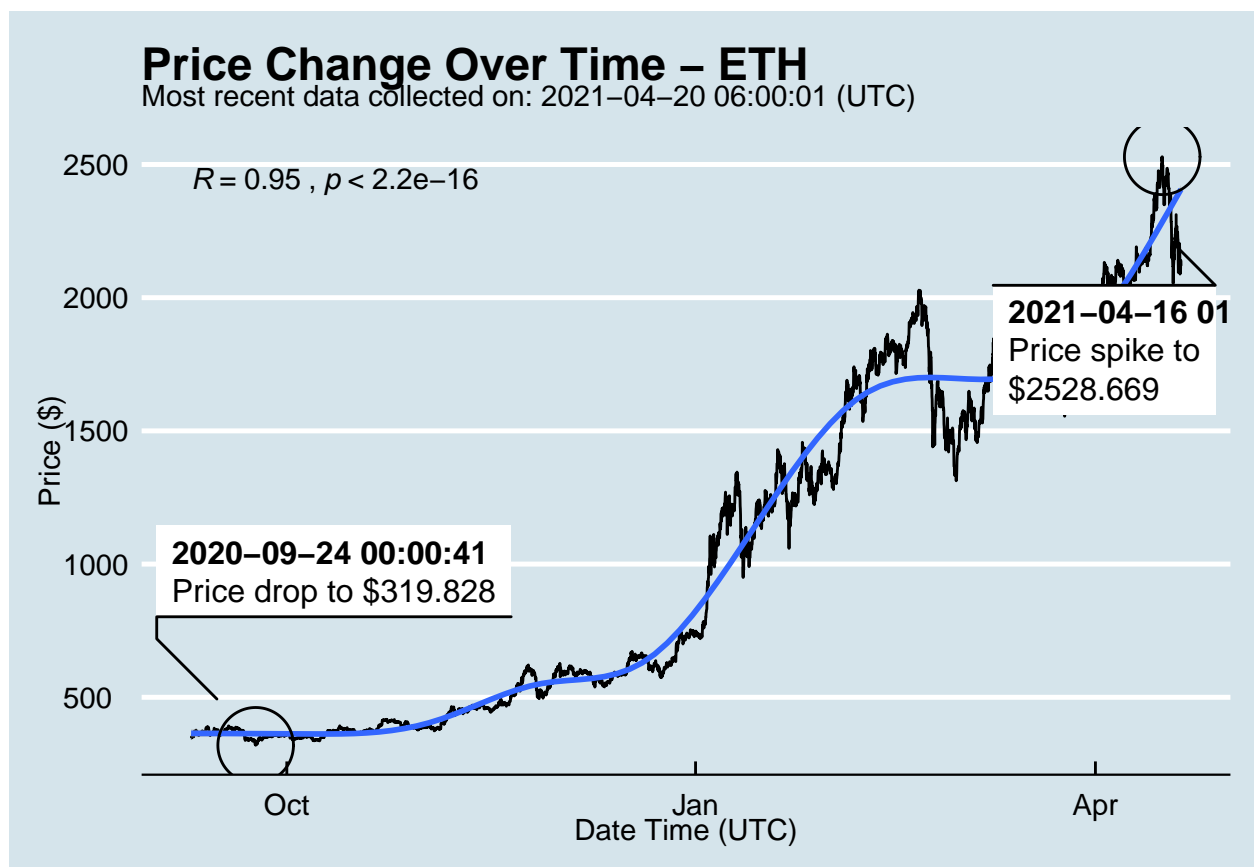# R Markdown Output

Last run on: 2021-04-20 06:15:59

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     2119.397  2021-04-20 06:00:01
## 1       BTCUSD    BTC    54940.000  2021-04-20 06:00:00
## 2       ETHUSD    ETH     2139.733  2021-04-20 05:00:01
## 3       BTCUSD    BTC    55253.290  2021-04-20 05:00:00
## 4       ETHUSD    ETH     2103.784  2021-04-20 04:00:01
## ...        ...    ...          ...                  ...
## 11261   BTCUSD    BTC    11972.900  2020-08-10 06:03:50
## 11262   BTCUSD    BTC    11985.890  2020-08-10 05:03:48
## 11263   BTCUSD    BTC    11997.470  2020-08-10 04:32:55
## 11264   BTCUSD    BTC    10686.880                  NaT
## 11265   ETHUSD    ETH      357.844                  NaT
##
## [11266 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     2119.397  lower 50th percentile of prices
## 1          BTC    54940.000  upper 50th percentile of prices
## 2          ETH     2139.733  lower 50th percentile of prices
## 3          BTC    55253.290  upper 50th percentile of prices
## 4          ETH     2103.784  lower 50th percentile of prices
## ...        ...          ...                              ...
## 11261      BTC    11972.900  upper 50th percentile of prices
## 11262      BTC    11985.890  upper 50th percentile of prices
## 11263      BTC    11997.470  upper 50th percentile of prices
## 11264      BTC    10686.880  upper 50th percentile of prices
## 11265      ETH      357.844  lower 50th percentile of prices
##
## [11266 rows x 3 columns]
```