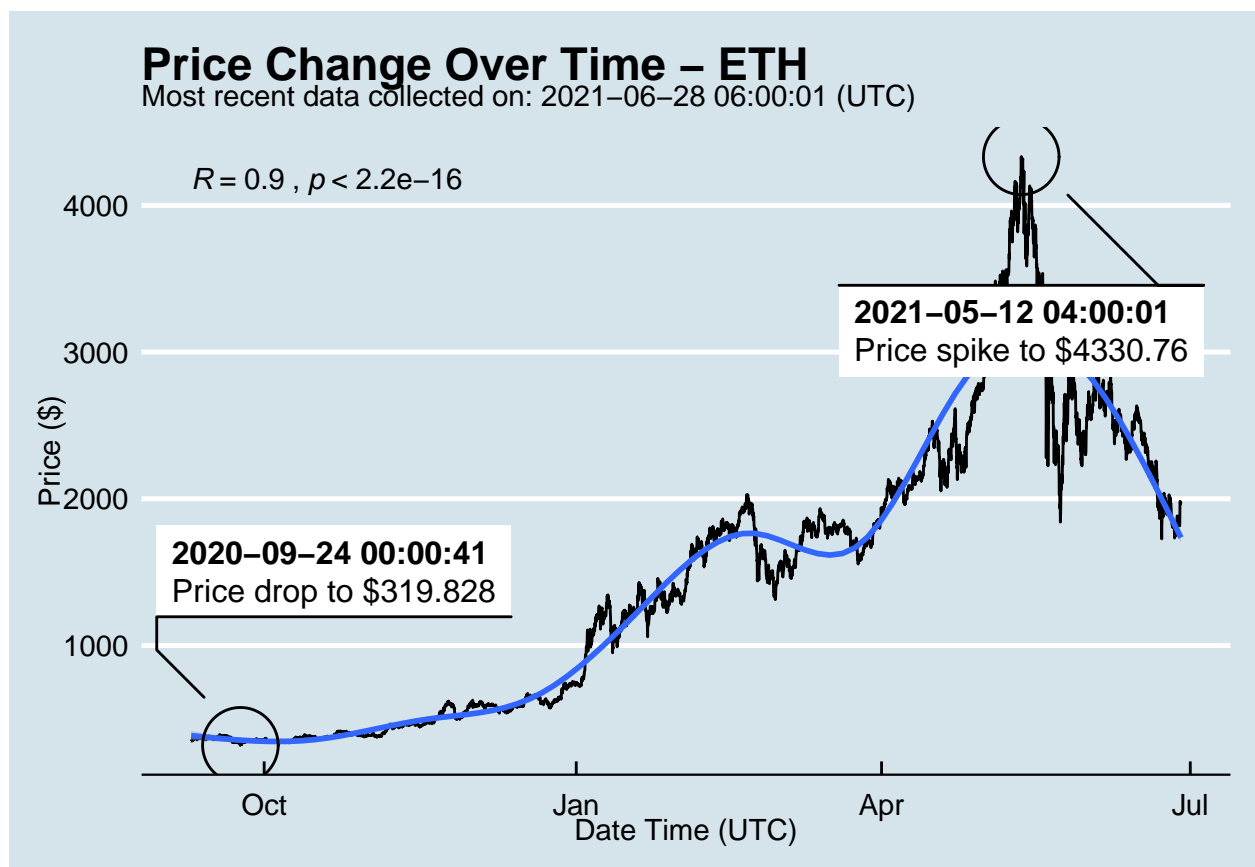# R Markdown Output

Last run on: 2021-06-28 06:12:26

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     1978.112 2021-06-28 06:00:01
## 1        BTCUSD    BTC    34507.360 2021-06-28 06:00:00
## 2        ETHUSD    ETH     1972.800 2021-06-28 05:00:01
## 3        BTCUSD    BTC    34355.610 2021-06-28 05:00:00
## 4        ETHUSD    ETH     1968.607 2021-06-28 04:00:01
## ...         ...    ...          ...                   ...
## 14567    BTCUSD    BTC    11972.900 2020-08-10 06:03:50
## 14568    BTCUSD    BTC    11985.890 2020-08-10 05:03:48
## 14569    BTCUSD    BTC    11997.470 2020-08-10 04:32:55
## 14570    BTCUSD    BTC    10686.880                   NaT
## 14571    ETHUSD    ETH      357.844                   NaT
##
## [14572 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     1978.112  lower 50th percentile of prices
## 1          BTC    34507.360  upper 50th percentile of prices
## 2          ETH     1972.800  lower 50th percentile of prices
## 3          BTC    34355.610  upper 50th percentile of prices
## 4          ETH     1968.607  lower 50th percentile of prices
## ...        ...          ...                              ...
## 14567      BTC    11972.900  upper 50th percentile of prices
## 14568      BTC    11985.890  upper 50th percentile of prices
## 14569      BTC    11997.470  upper 50th percentile of prices
## 14570      BTC    10686.880  upper 50th percentile of prices
## 14571      ETH      357.844  lower 50th percentile of prices
##
## [14572 rows x 3 columns]
```