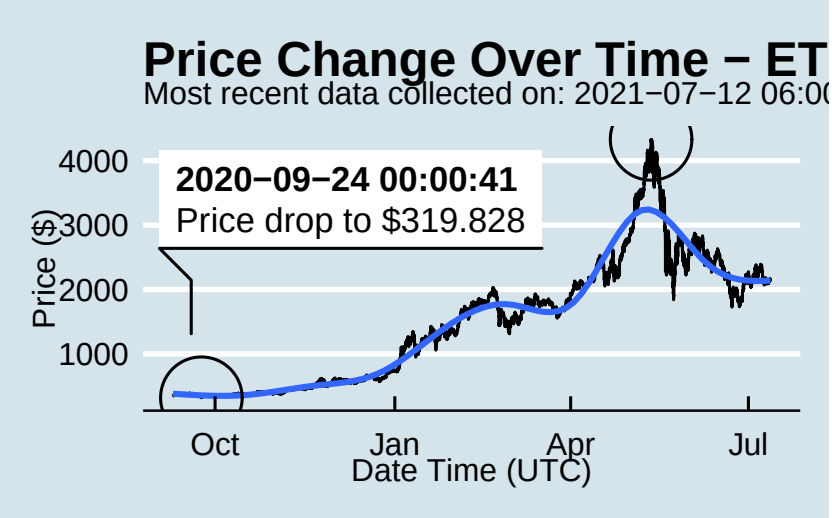
R Markdown Output

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

```
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):

```
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]
```