



# Crypto Market Data

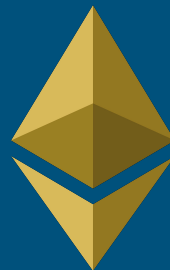


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# Primary Dataset

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## BTC, ETC, and LTC market data

- <http://www.cryptodatadownload.com/index.html>
- Contains hourly market data from Coinbase for BTC, ETC, and LTC since Bitcoin's creation in 2009
- BTC is the 'golden standard' of the cryptos and is the reference point for most all cryptocurrencies
  - Volume\_BTC field
- ETH and LTC are much more volatile, better representing the smaller cryptos that make up most of the crypto market

## All crypto market data

- <https://www.kaggle.com/idanerez/all-crypto-data-every-12-hrs/version/2>
- Contains market data (every 12h) for all cryptocurrencies and tokens since 2018

# Primary Dataset Transforms

## Cleaning data

- Originally Three 1 Hour Tables and One 12 Hour Table
- Parsing time/date
- Selecting years

## Improving and adding to data

- Adding range
- Combining into 24hr, monthly, etc
- Beam



# Secondary Dataset

## Secondary dataset

### Amazon, Facebook, and Apple Market Data

- <https://www.kaggle.com/stexo92/gafa-stock-prices>
- Contains daily market data on these companies since they entered the market
- Apple (1980), Amazon (1997), and Facebook (2012) went public at different points in time



# Secondary Dataset Transforms

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## Cleaning data

- Originally 1 massive CSV file containing all stock values
- Parsing time/date
- Selecting years
- Separating the GAFA data

## Improving and adding to data

- Adding range
- Parsing time/date
- Combining into 24hr, monthly, etc
- Beam



# Cross-Dataset Queries

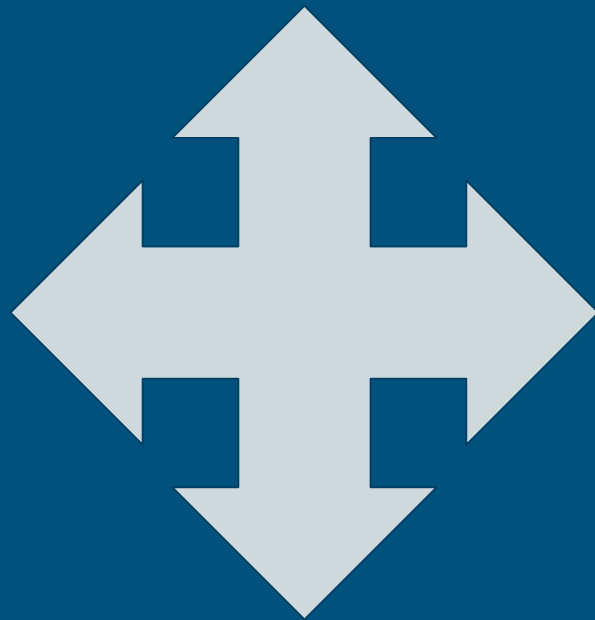
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## Analyzing data

- Comparing BTC against LTC/ETH
- Analyzing Volatility

## Cross-dataset queries

- GAFA Stocks Rise/Fall, Crypto Rise/Fall
- Workflow



# Findings

## Views

BTC vs ETH/LTC to show volatility

All cryptos vs Individual Stocks

Conclusion: crypto market vs market.



- Bitcoin volume is comparable to GAFA, but there is little correlation between trends across both markets
  - One is based on the gold standard and one isn't
- The crypto market tends to be dependent on itself while the stock market is far more dependent on outside factors

# Going Forward

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- 2018 Crypto Boom/Bust
- Analyzing trends from older years
- Limitations of stocks as economic indicators
- Do analysis in percentages
- Cryptos vs value of gold
  - Stocks are indirectly grounded by the value of gold via international currencies whereas cryptos aren't