**Capstone Idea:**

The aim of this project is to perform advanced time series analysis, regression models and deep learning methods to come up with a multifactor model for predicting cryptocurrency prices.

It has a community version (open source) python API Client which can be used to query daily data. This project will focus on the two most popular and longest data cryptocurrencies (BTC and ETH). On top of that, I will be querying specific metrics (~10 metrics) for each cryptocurrency to expand on the dataset. I will use obtain 5 years of daily price and metrics data.

**Additional steps to augment the predictive model:**

The dataset will be joined with traditional asset class prices obtained from YFinance Python API and economic data from FRED.stlouisfed.org.

Sentiment analysis using Google Trends to see if the number of searches for a specific keyword pertaining the cryptocurrency of interest adds any predictive power to our model. This may involve Natural Language processing to identify key words.

**Data Sources:**

CoinMetrics is founded in 2017 and is becoming the leading platform for analyzing and monitoring crypto networks and assets.

CoinMetrics python API: <https://pypi.org/project/coinmetrics-api-client/>

https://github.com/coinmetrics/api-client-python/tree/master/docs

US Economic data: <https://fred.stlouisfed.org/>

Yahoo Finance stock market data: <https://pypi.org/project/yfinance/>

Google Trends PyTrend: <https://pypi.org/project/pytrends/>