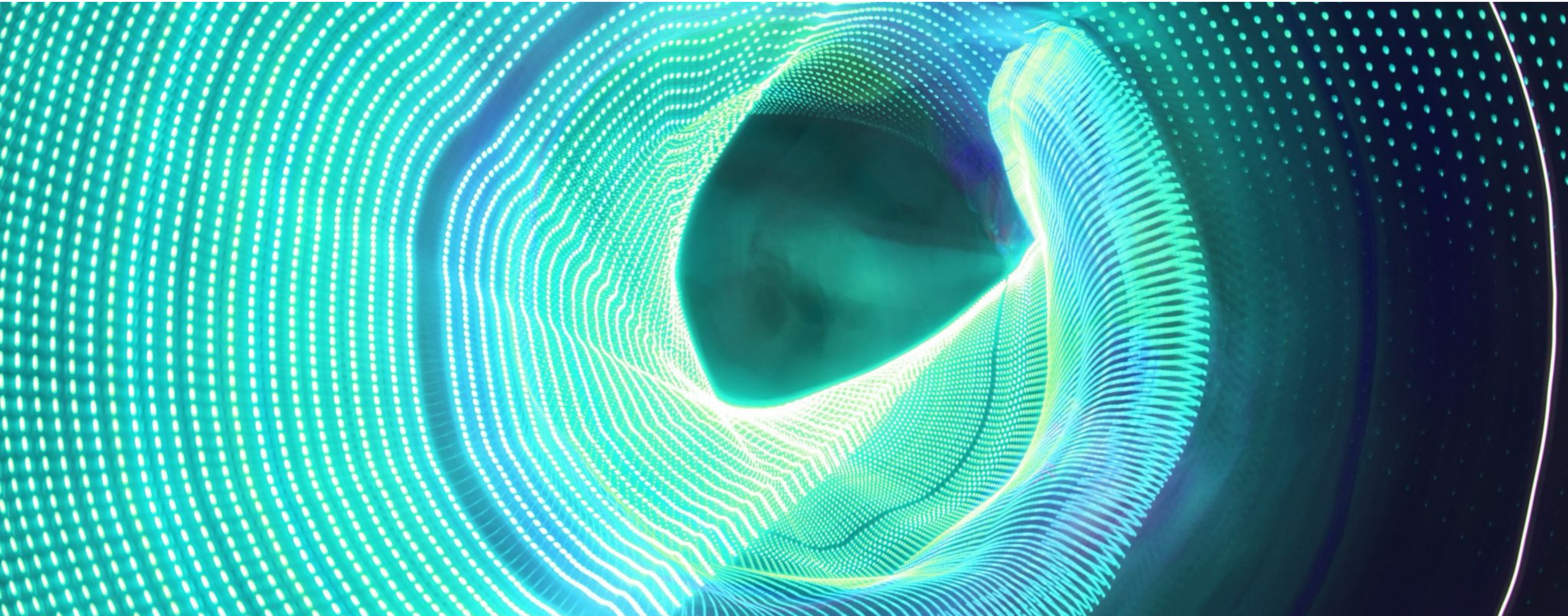
Meents'ul

Cryptoassets

Rodolfo Juárez Herrera



Summary

- The following codes will try to incorporate cryptoassets into data science and ML environment.
- Cryptoassets are more volatile and risky, however, investors may expect higher returns vis-a-vis stocks and ETF´s.

Libraries

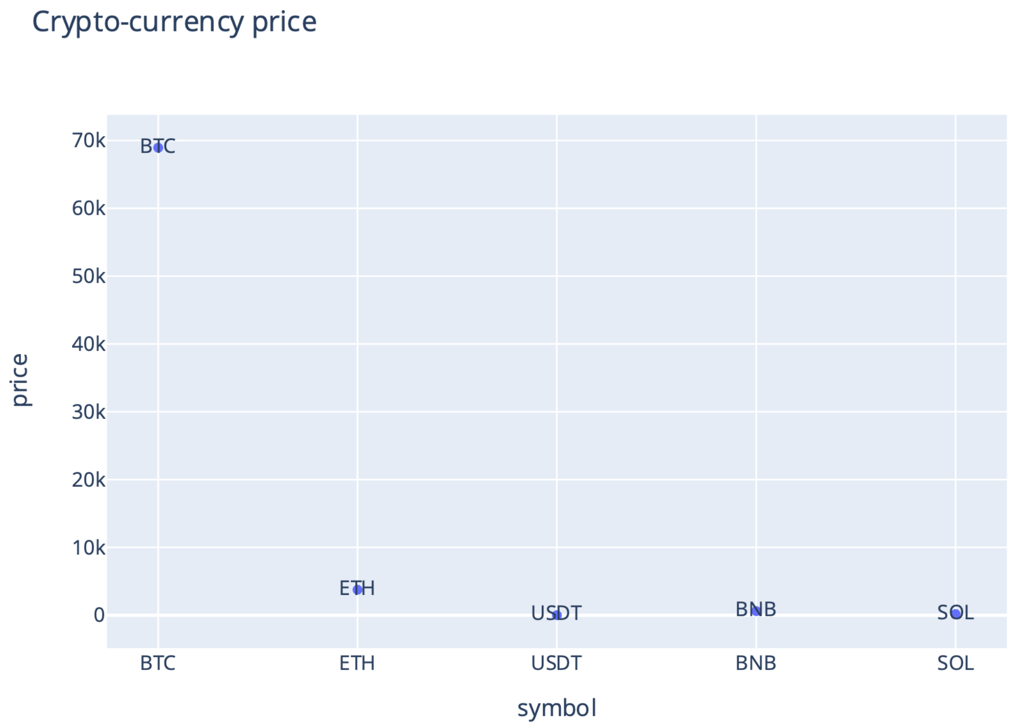
- Requests
- Numpy
- plotly
- Yfinance
- Riskfolio
- PyPortfolioOpt

Code 1: Extraction and clustering

Stage 1: Extraction and visualization

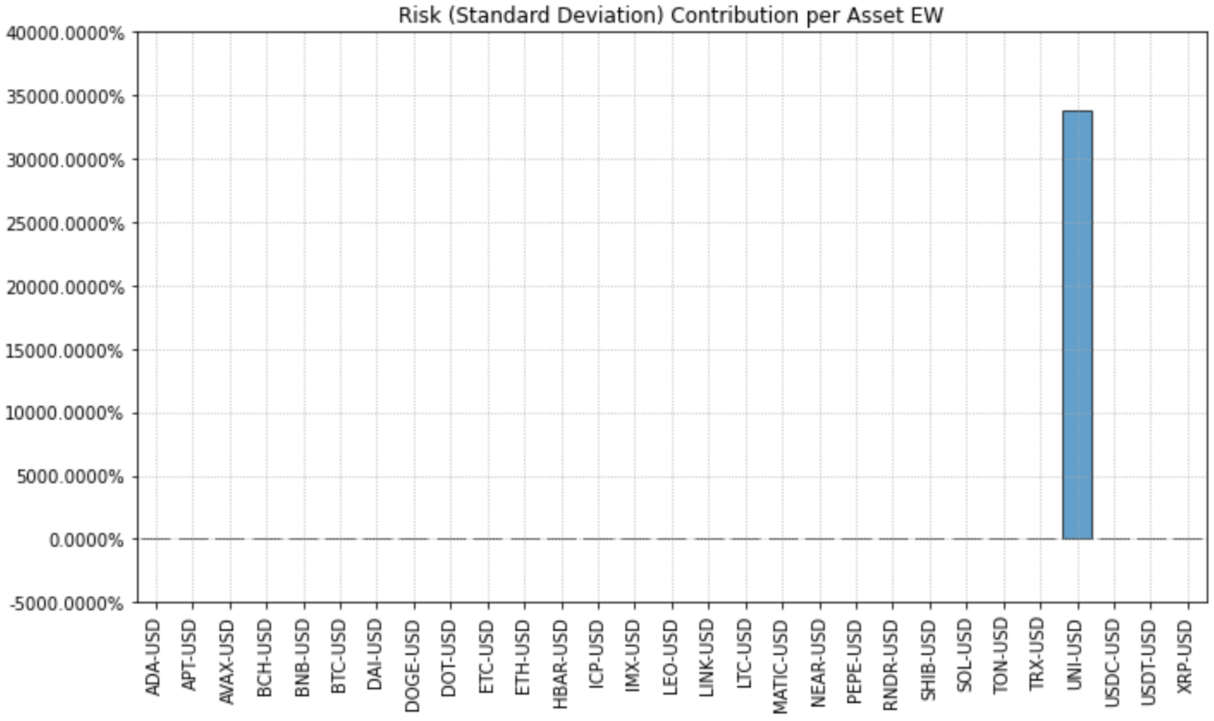
CoinMarketCap

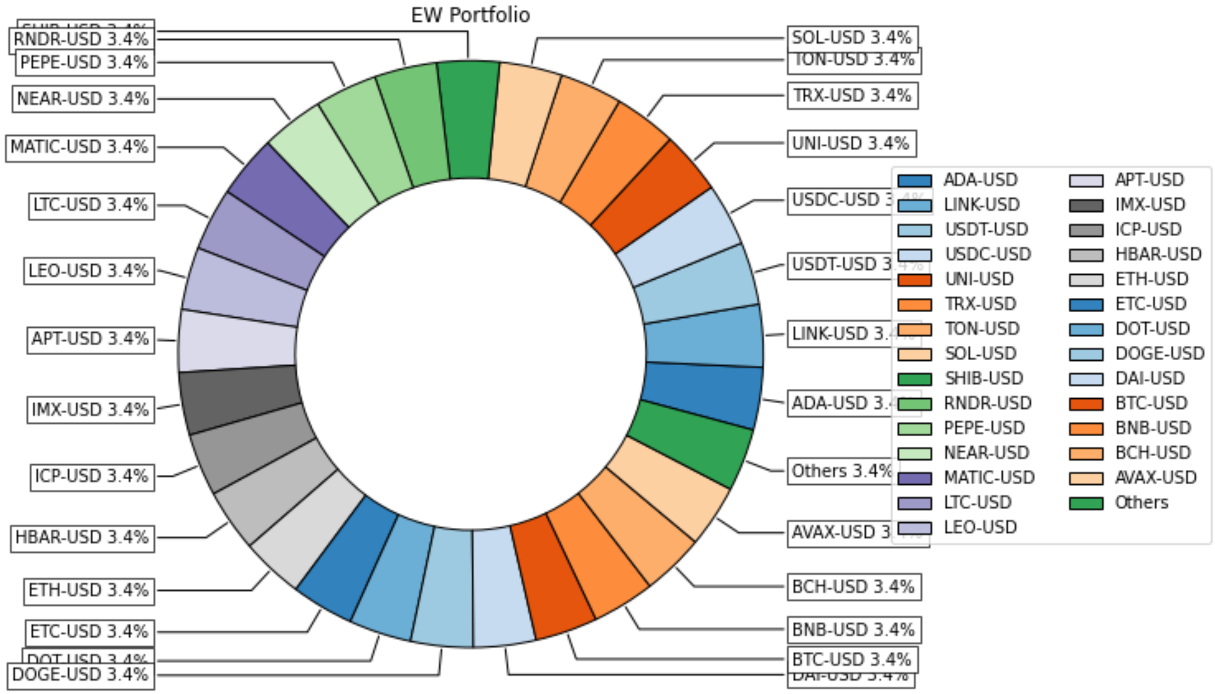
API, JSON, DF



Plotly within the console

Stage 2: Equal weight porfolio





29 cryptos, symbols extracted from API, last 5 years data from yfinance.
EW portfolio built with riskfolio, error.

Code 2: Optimization using PyPortfolioOpt

- print("Expected Return:", expected_return)
- print("Volatility:", volatility)
- print("Sharpe Ratio:", sharpe_ratio)

Eigenvalues did not converge, due to extreme volatility

Conclusiones