

Problem Statement

How can we use PCA and modeling analysis on CC130 to explain which stocks can explain the index by 80%?

Context

The CCI30 is a rules-based index designed to objectively measure the overall growth, daily and long-term movement of the blockchain sector. It does so by tracking the 30 largest cryptocurrencies by market capitalization, excluding stablecoins. It serves as a tool for passive investors to participate in this asset class, and as an industry benchmark for investment managers. The CCI30 is the most accurate instrument for measuring the whole cryptocurrencies market, and the Blockchain sector in general. It represents a useful tool for investors, a benchmark for traders and asset managers, a replicable index for passive funds and ETFs. In short, it is the industry standard for cryptocurrencies. Our project is to look within the CCI30 to analyze which stocks listed in CCI30 explain the behavior of the index.

Criteria for Success

Finding the set of stocks in CCI30 that explains up to 80% of the index's variance

Scope of Solution Space

Only looking at the top 30 crypto currencies on the CCI30 website

Only using data from CCI30

Constraints

There will still be some margin of error in our model as we are only aiming to explain 80% of the variance

Data Sources

Datasets on cc130.com

Coinapi.com