

Final Report

1 Introduction

1.1 Overall Goals

The primary goal of the project was to construct a program to analyze Cryptocurrencies and use graph-based algorithms to identify potential opportunities for profit. The initial intention was to scrape real-time data from Reddit, Twitter, and other social media platforms, and combine this data with quantitative analysis of price movements and similarities between Cryptocurrencies.

1.2 Relevancy to Graph Mining

The use of graph-based algorithms was a foundational idea for the overall success of the project. On a high level, a graph would be constructed containing various information about different Cryptocurrencies, and an algorithm such as triadic closure or Pagerank would be run on the graph to predict similar Cryptocurrencies.

2 Background Information

2.1 Cryptocurrencies

3 Algorithms

3.1 Clustering

3.1.1 K-Means

3.1.2 DBSCAN

3.2 Regression Similarity

4 Method

5 Results

6 Conclusion