Graphical user interface, application

Description automatically generated

Figure . Hyplot.scatter.

Graphical user interface, application

Description automatically generated

Figure . 3D-scatter.

Graphical user interface, application

Description automatically generatedFigure . Elbow curve.

Bitcoin is now widely known cryptocurrency. The popularity of this currency is evident both in the three-dimensional modelling of clusters and in the scatter plot. Bitcoin seems to be an interesting material for research. There is a dominant cryptocurrency.

The first step was to process the data. The process involved cleaning up data, removing null values,

removing cryptocurrencies without mining coins. In addition, the "get\_dummies ()" encoding method was used for text functions and StandardScaler () was used to standardize and transform the data.

Reduction of data dimensions with PCA. At this point, the data frame dimensions have been reduced to three major components and a new data frame has been created.

Cryptocurrency Clustering with K-Means. During this step, a knee curve was created to find the best value for the clustering groups and the K-Means algorithm was used to predict the K clusters for the cryptocurrencies in question.

Visualization of the results. In this last step, three types of numbers were used: 3D scatter plot to visualize the three PCAs, hvplot.table to visualize all currently tradable cryptocurrencies, and a 3D scatter plot to visualize "Total Coins Mined" versus "Total Coin Supply" by coin name and clusters .