Project proposal
Forecasting NVIDIA stock price

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Introduction

An Investment Management firm has a cash that need to invested.

since they don't have experience investing in technology sector, they asked group of data scientist to make a model that predict what is the price of stock going to be based on many variables

forecasting a stock is challenging task therefore it is needed to be studied with many other variables to minimize the error

NVIDIA stock was set to be studied and its relationship with variables such as (Competitors

, video games companies, crypto currencies , economic performance indexes and others)

in the end the model should be able to forecast the stock price based on given variables

Questions

Forecasting the stock is impossible however getting an estimated value is possible with the condition to use multiple variables affecting the stock

To build such model we need to know

- What are the possible variables affecting the stock?
- How much each variable affects the stock?
- Is there correlation between the variables with each other?
- Do I need to use all variables?

Data

The forecasted stock is NVIDIA stock

For the data used , features were categorized on different types as follows

Hardware industry stock: intel and amd

Gaming companies stock: Riot games, Epic games, EA and activation

Crypto currency: bitcoin , Ethereum

Others: gold, oil

Tools

- Python and pandas for data manipulation
- statsmodels and sklearn for liner regression analysis
- BeautifulSoap and selenium for webscraping
- Matplotlib and seborn for data visualization

MVP

The MVP should be able to forecast the desired Stock price