Group 4: Proposal

Tools to use: google colab

Importing library. Scitlearn and XGboost

Purpose of this project :

Which prediction model is better?

How risky is it to invest in certain assets?

Eg. Select 3 cryptos, and 3 tech stocks make 2 buckets

About data:

1. Past price data 3 Bitcoin, Etherium, Doge, 3 tech Apple, Microsoft and Google

Daily prices from 1/1/2016 to current (5 years)

Possible application to models:

1. (Linear Regression might not work for cryptos) different kind models for crypto predictions (scikitlearn and XGboost) (See section 10-3)
   * Run one model through each library, evaluate and select one.
   * Try 3 regression models learned in the class

LSTM, look into auto-regression models

Statsmodels in python (it would be bran new)

1. Determine the level of risk with all crypto and stocks (See section 11, to determine the model)
   * Need to set parameters
   * Possible visualization: scatter plot

Allocate tasks by steps by people.

1. Pricing prediction part

Step1: Get data and clean up

Step2: First we need to find out models for cryptos, and

Apply to models to the 3 stocks if it works or not

Step3: Evaluation and select model

2. Risk analysis part

Choose a classification model