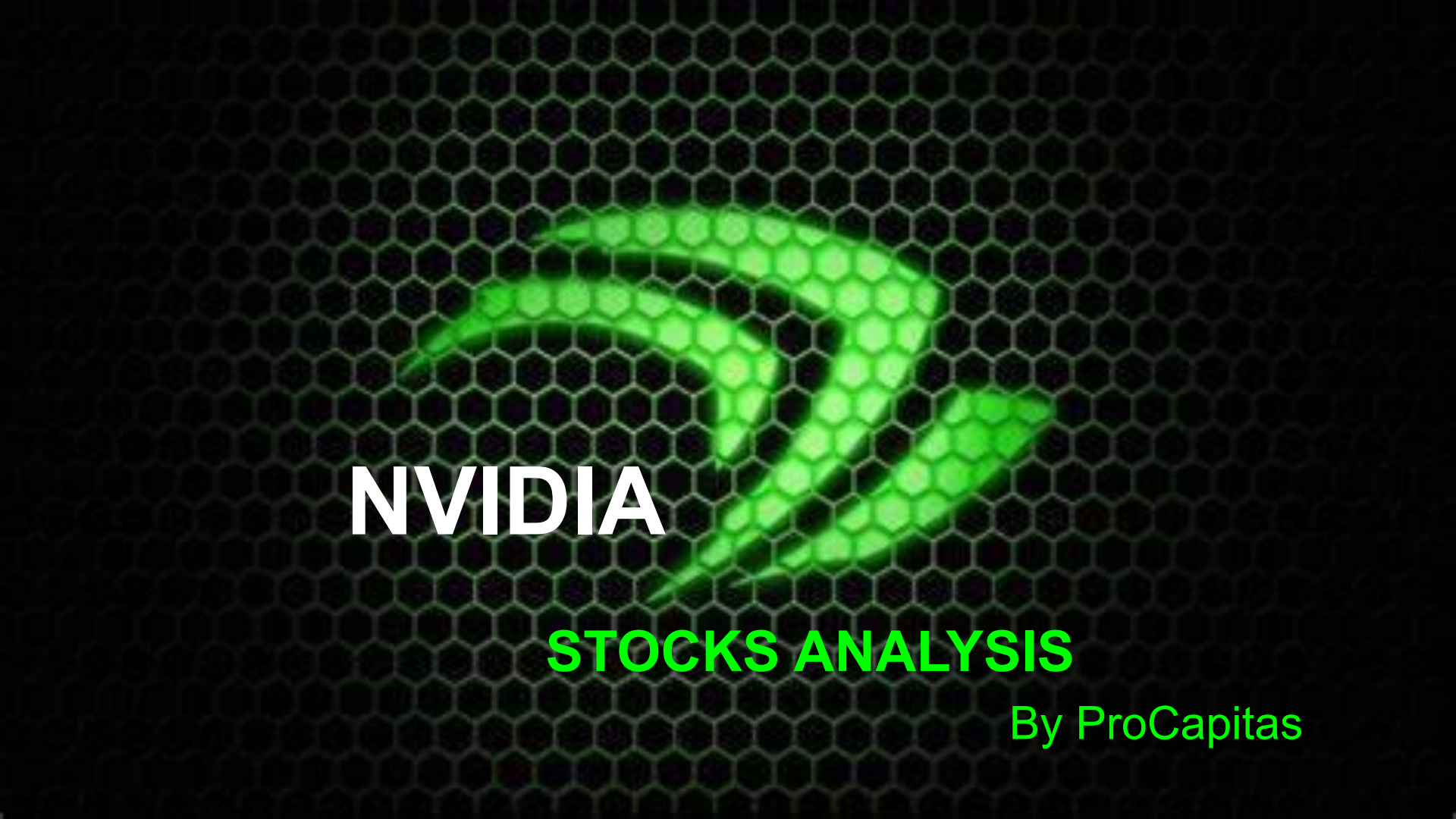

NVIDIA
STOCKS ANALYSIS
By ProCapitas

KEY STAKEHOLDERS

Organisation

ProCapitas

Teams

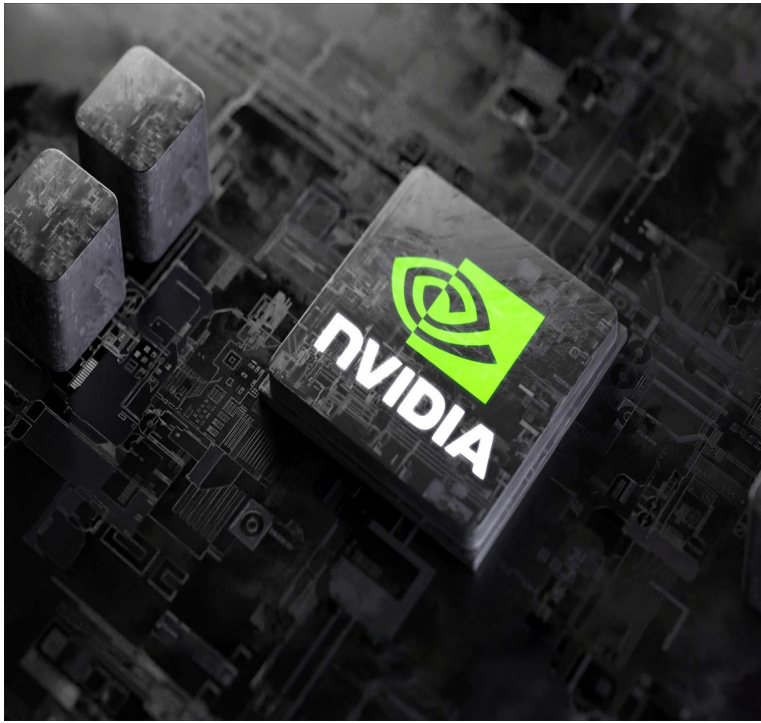
Analytics department

Finance department

Client

BACKGROUND

Founded in 1993, NVIDIA is the world leader in accelerated computing. Our invention of the GPU in 1999 sparked the growth of the PC gaming market, redefined computer graphics, revolutionized accelerated computing, ignited the era of modern AI, and is fueling industrial digitalization across markets. NVIDIA is now a full-stack computing infrastructure company with data-center-scale offerings that are reshaping industry



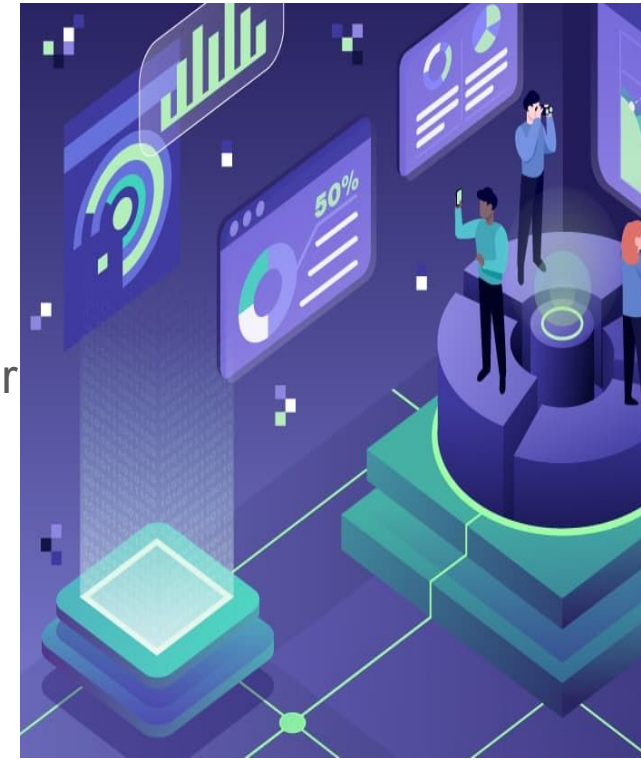
LIBRARIES USED

- Numpy - For mathematical modeling
- Matplotlib and seaborn - For creating visuals
- **ML libraries - For predictive stock analysis**
- Sklearn library (Scikit - learn) - For creating of predictive model

VISUALISATION

Initial Visuals

- Pairplot of data
- Close linear plot
- Open date wise join plot
- Open, high, close, low, volume cumsum plot for retur
- Open lagplot
- Year wise close



VISUALISATION

Model Visuals

- Year wise close
- Correlation chart
- Open and close date wise join plot (histogr
- Close and open distplot
- Close prediction plot (linear)
- Close prediction plot (distplot)

METHODS

Train_test_split Method - For training some portion of model and then using it to get results

Random Forest Regressor = Random Forest Regressor is a powerful machine learning algorithm used for predicting numerical values. It is an ensemble learning method that combines the predictions of multiple decision trees to improve accuracy and reduce overfitting . This technique is particularly effective for regression tasks, where the goal is to predict continuous values.

MODEL EVALUATION

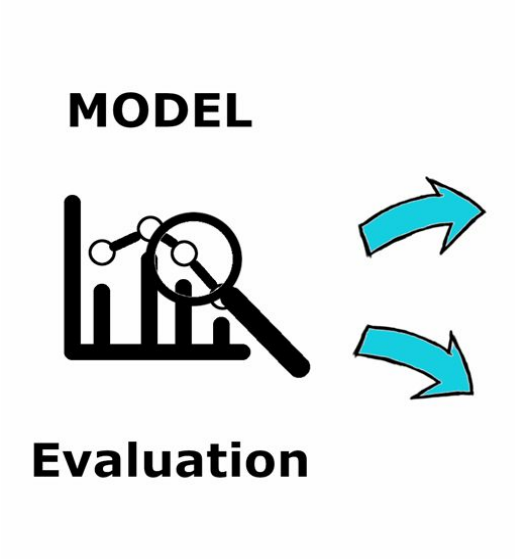
metrics.mean_absolute_error(y_test,y_pred) = 0.08

metrics.mean_squared_error(y_test,y_pred)= 0.09

np.sqrt(metrics.mean_squared_error(y_test,y_pred)) = 0.30

r2_score(y_test,y_pred) = 0.99

Indicating model accuracy of 99%.



THANK

YOU