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# Stock Market Prediction using Machine Learning

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**ABSTRACT:** In the finance world stock trading is one of the most important activities. Stock market prediction is an act of trying to determine the future value of a stock other financial instrument traded on a financial exchange. This paper explains the prediction of a stock using Machine Learning. The technical and fundamental or the time series analysis is used by the most of the stockbrokers while making the stock predictions. The programming language is used to predict the stock market using machine learning is Python. In this paper we propose a Machine Learning (ML) approach that will be trained from the available stocks data and gain intelligence and then uses the acquired knowledge for an accurate prediction. In this context this study uses a machine learning technique called Support Vector Machine (SVM) to predict stock prices for the large and small capitalizations and in the three different markets, employing prices with both daily and up-to-the-minute frequencies

**KEYWORDS:** stock market, SVM, Machine Learning

## I. INTRODUCTION

Basically, quantitative traders with a lot of money from stock markets buy stocks derivatives and equities at a cheap price and later on selling them at high price. The trend in a stock market prediction is not a new thing and yet this issue is kept being discussed by various organizations. There are two types to analyze stocks which investors perform before investing in a stock, first is the fundamental analysis, in this analysis investors look at the intrinsic value of stocks, and performance of the industry, economy, political climate etc. to decide that whether to invest or not. On the other hand, the technical analysis it is an evolution of stocks by the means of studying the statistics generated by market activity, such as past prices and volumes. In the recent years, increasing prominence of machine learning in various industries have enlightened many traders to apply machine learning techniques to the field, and some of them have produced quite promising results.

The probable stock market prediction target can be the future stock price or the volatility of the prices or market trend. In the prediction there are two types like dummy and a real time prediction which is used in stock market prediction system. In Dummy prediction they have define some set of rules and predict the future price of shares by calculating the average price. In the real time prediction compulsory used internet and saw current price of shares of the company.

## II. LITERATURE SURVEY

### 2.1 Naive Bayes classification Fake news detection:

Information preciseness on Internet, especially on social media, is an increasingly important concern, but web-scale data hampers, ability to identify, evaluate and correct such data, or so called "fake news," present in these platforms. In this paper, we propose a method for "fake news" detection and ways to apply it on Facebook, one of the most popular online social media platforms. This method uses Naive Bayes classification model to predict whether a post on Facebook will be labeled as REAL or FAKE. The results may be improved by applying web Scrapping method. Web Scrapping is a technique employed to extract large amounts of data from difierent websites and to store as desired. Received results suggest, that fake news detection problem can be addressed with machine learning methods. This method is easy to implement and requires a small amount of training data to estimate the parameters .



## 2.2 Linear SVM Classifier Automatic Detection of Fake News:

The proliferation of misleading information in everyday access media outlets such as social media feeds, news blogs, and online newspapers have made it challenging to identify trustworthy news sources, thus increasing the need for computational tools able to provide insights into the reliability of online content. In this paper, we focus on the automatic identification of fake content in online news. Our contribution is twofold. First, we introduce two novel datasets for the task of fake news detection, covering seven different news domains. We describe the collection, annotation, and validation process in detail and present several exploratory analyses on the identification.

## III. PROPOSED SYSTEM

Step 1: This step is important for the download data from the net. We are predicting the financial market value of any stock. So that the share value up to the closing date are download from the site.

Step 2: In the next step the data value of any stock that can be converted into the CSV file (Comma Separate Value) so that it will easily load into the algorithm.

Step 3: In the next step in which GUI is open and when we click on the SVM button it will show the window from which we select the stock dataset value file.

Step 4: After selecting the stock dataset file from the folder it will show graph Stock before mapping and stock after mapping.

Step 5: The next step algorithm calculated the  $\log_2 c$  and  $\log_2 g$  value for minimizing error. So, it will predict the graph for the dataset value efficiently. Step 6: In final step algorithm display the predicted value graph of select stock which shows the original value and predicted value of the stock.

## IV. CONCLUSIONS

In the project, we proposed the use of the data collected from different global financial markets with machine learning algorithms in order to predict the stock index movements. SVM algorithm works on the large dataset value which is collected from different global financial markets. Also, SVM does not give a problem of over fitting. Various machine learning based models are proposed for predicting the daily trend of Market stocks. Numerical results suggest the high efficiency

## REFERENCES

- [1] Zhen Hu, Jibe Zhu, and Ken Tse “Stocks Market Prediction Using Support Vector Machine”, 6th International Conference on Information Management, Innovation Management and Industrial Engineering, 2013.M.
- [2] Wei Huang, Yoshiteru Nakamori, Shou-Yang Wang, “Forecasting stock market movement direction with support vector machine”, Computers & Operations Research, Volume 32, Issue 10, October 2005, Pages 2513–2522.
- [3] N. Ancona, Classification Properties of Support Vector Machines for Regression, Technical Report, RIIESI/CNRNr. 02/99.
- [4] K. jae Kim, “Financial time series forecasting using support vector machines,” Neurocomputing, vol. 55, 2003.
- [5] Debashish Das and Mohammad shorif uddin data mining and neural network techniques in stock market prediction: a methodological review, international journal of artificial intelligence & applications, vol.4, no.1, January 2013





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