

Stock Price Prediction based on Financial Ratios using Support Vector Algorithm

Chinmay Sarnaik*, Anand Gandhi*, Chaitrali Rane*, Atharva Lokhande*, Pallavi Baviskar**

* Computer Science and Engineering

**Professor, Computer Science and Engineering

PES Modern College of Engineering, Pune, Maharashtra

Abstract: *Stock markets are without any doubt, an integral and indispensable part of a country's economy. There is a growing realization amongst the booming middle class and its rise in disposable income, that investment in Fixed Deposits with 5-6% per year returns is cut down by inflation. On the other hand, returns in stock market provide up to 15% CAGR returns. With this, we see a rise in amateur investors and retail money flooding the market; especially during pandemic that saw a rise of digital trading platform like Sharekhan, Zerodha, and Espresso in their number of active users. Unfortunately, as much as 95 per cent retail investors to consistently lose money in stock market, due to absence of poor core fundamentals in the company invested. While there are many ways of impulsive buying and selling, here we rather focus on long term investment. This includes holding different assets like mutual funds, securities, shares and stocks for more than a year, preferably for more than 5-10 years. The proposed approach for our system to predict forward stock prices based on the company fundamentals and financial ratios using support vector algorithm*

Keywords: Support Vector Algorithm, SVR, Financial Indicators/ratios, Stock price prediction, Regression Feature Extraction, Machine Learning, Artificial intelligence

REFERENCES

- [1]. Xianghui Yuan , Jin Yuan , Tianzhao Jiang , and Qurat Ul Ain “Integrated Long-Term Stock Selection Models Based on Feature Selection and Machine Learning Algorithms for China Stock Market”, IEEE Access,2020
- [2]. Naliniprava Tripathy, “Stocks Market Prediction Using Support Vector Machine Approach”, IACME,2019
- [3]. Zhen Hu , Jie Zhu and Ken Tse ,” Stocks Market Prediction Using Support Vector Machine”, 6th International Conference on Information Management,2013
- [4]. <https://in.tradingview.com/>
- [5]. <https://www.screener.in>