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# Stock Price Prediction-Using Random Forest

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## Abstract

**Background:** Stock market prediction aims to determine the future movement of the stock value of a financial exchange. The accurate prediction of share price movement will lead to more profit investors can make. (ARIMA) is used as the machine learning technique to analyze and predict future stock prices based on historical prices. ARIMA [1], p, d, q. ARIMA (p, d, q) [2], Logistic Regression [3] Objectives: The stock price prediction data will be collected, and then it will need to be pre-processed with Random Forest. ARIMA (p, d, q) model, logistic regression model. Finally, we forecast the next 30 days and which visualise the result.

**Methodology:** The methodology used in this research consists of stock price prediction in the coming 30 days using ARIMA model, ARIMA (p, d, q) model, logistic regression model with the help of Random Forest that is a machine learning ensemble method.

**Result and discussion:** According to our research the current Stock Price Prediction, the value of stock will rise by 0.75% and reach 4,471.37 October 15,2021. Result analysis and experimental evolution on TAIEX data 2021, state that the proposed method has shown the RMSE value is 43.7685.

**Conclusions and Future Work:** Here our future efforts will be focused on developing accurate and dependable decision to determine the stock price prediction, which will include new performance indicators based on profits and returns. In future promising to be there an error free prediction.

## References

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