ABSTRACT

Stock Price Prediction of PT Bank Mandiri (Persero) Tbk Using K-Nearest Neighbors and Support Vector Machine

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With the fluctuating stock price movements, it is necessary to do modeling to predict the increase and decrease in the value of PT Bank Mandiri Tbk's shares. The researcher focuses this research on testing the K-Nearest Neighbors and Support Vector Machine algorithms to predict the stock price of PT Bank Mandiri Tbk. This research uses four variations of the number of feature indicators to predict the closing price of PT Bank Mandiri Tbk's shares. One indicator uses the close feature, two indicators use the open and close features, three indicators use the open, high, and close features, and four indicators use the open, high, low, and close features. The research takes datasets from the Yahoo Finance platform. Prediction results using one indicator have the best results on the KNN algorithm with an RMSE value of 158 with an accuracy of 98.3%. Prediction results using four indicators have the best results on the SVM algorithm with an RMSE value of 149 with an accuracy of 98.5%.

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