Prediksi Pergerakan Saham Menggunakan Support Vector Regression dan Long Short-Term Memory

Nova Monica Sarumpaet[1], Indwiarti[2], Aniq Atiqi Rohmawati[3]

[1,2,3]Fakultas Informatika, Universitas Telkom, Bandung
[1]novasarumpaet@student.telkomuniversity.ac.id, [2]indwiarti@telkomuniversity.ac.id,
[3]aniqatiqi@telkomuniversity.ac.id

Abstract
Stock prediction is one of the exciting solutions in the world of computing. A stock prediction has a vital role in determining the pattern of stock movements over time. A successful price prediction model is so profitable for investors to determine the time to buy or sell stocks. In this study, we used Support Vector Regression and Long Short-Term Memory to predict stock price in the Nasdaq's dataset. The results show that the Long Short-Term Memory model has a better prediction than the Support Vector Regression model. The best RMSE value is 192.6, MAE of 144.12, and R-Squared 0.9941. These results show good predictions because it gives the smallest error value and the largest R-Squared.

Keywords: stock price prediction, SVR, LSTM, Nasdaq