

Forecasting the maximum and minimum daily stock price using various prediction methods

Poongjin Cho¹, Sondo Kim², Sungyoon Choi², Woojin Chang[†]

¹Department of Industrial Engineering, Seoul National University., Daehak-dong, Gwanak-gu, Seoul,
Republic of Korea

E-mail: nadapj@snu.ac.kr

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Forecasting daily stock price is an important task in financial time series area. This study attempts to develop various models and compared their performances in predicting the maximum and minimum stock price of daily stock price. The models are based on various prediction techniques: Artificial neural networks (ANN), Support vector machine (SVM), Elman neural networks (ENN). Input variables include past price and weighted moving average price of stock. Input variables are preprocessed by Independent component analysis (ICA). ICA is a feature extraction that finds independent sources from mixture data of unknown sources. The model performance is evaluated using accuracy for MAE, MAPE, and RMSE for the forecasting values. As a result of its application, investors may be able to define their trading strategy.

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