## Abstract

Stock price index data is an example of financial time series data which tends to change and contain noise. Such noise happens when the data contains less needed information. Thus can influence the stock price index prediction. Therefore, noise identification and noise removal using Independent Component Analysis (ICA) method are needed, before constructing model for stock price index prediction using Support Vector Regression (SVR).

ICA is a new technique to process statistical signal. Independent Components (ICs) with less information can be identified and removed by using ICA method. ICs with most information will be used as inputs in SVR to build sistem for predicting the closing price of stock index.

Financial time series data used in this project are taken from Indeks Harga Saham Gabungan (IHSG) and Jakarta Islamic Index (JII).

**Keywords**: financial time series, stock price index, Independent Component, Support Vector Regression.