

# Modeling multiple time series data using wavelet-based support vector regression

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## Abstract

In recent years, support Vector Regression (SVR) has been applied in various fields such as financial time series prediction and engineering applications. Different from the classical regression approach, SVR attempts to minimize the generalization error bound instead of minimizing the observed training error. This paper deals with the application of wavelet-based support vector regression (WSVR) on multiple time series data. WSVR is the straightforward extension from linear regression to nonlinear regression using the wavelet kernel. The main objective of this paper is to examine the feasibility of WSVR in time series forecasting by comparing it with generalized least squares (GLS) approach.

## Keywords

Support vector regression, Wavelet kernel, Generalized least squares, Time series.

## References

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