عنوان مقاله:

Support Vector Regression Parameters Optimization using Golden Sine Algorithm and Its Application in Stock Market

محل انتشار:

فصلنامه پیشرفتهایی در ریاضیات مالی و کاربردها, دوره 7, شماره 2 (سال: 1401)

تعداد صفحات اصل مقاله: 11

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خلاصه مقاله:

Stock price prediction is one of the most important concerns of stockholders. This prediction, independent of the method which is used or the assumptions which are applied, is welcomed and trusted if it can guarantee a high fitting. So due to the high performance prediction, using some complicated models as Machine Learning family such as Support Vector Regression (SVR) was recommended instead of older and lower performance approaches such as multiple discriminant technique. SVR model have achieved high performance on forecasting problems, however, its performance is highly dependent on the appropriate selection of SVR parameters. In this study, a novel GSA-SVR model based on Golden Sine Algorithm is presented. The performance of the proposed model is compared with eleven other meta-heuristic algorithms on some stocks from NASDAQ. The results indicate that the given model here is capable of optimizing the SVR parameters very well and indeed is one of the best models judged by both prediction .performance accuracy and time consumption

کلمات کلیدی:

Golden Sine Algorithm, Meta-heuristics Optimization Algorithms, Parameter tuning, Support Vector Regression, Time Series Prediction