

Non-stationary Financial Time Series Forecasting Based on Meta-Learning

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Abstract

In this letter, we address the challenge in forecasting non-stationary financial time series by proposing a meta-learning based forecasting model equipped with a CNN predictor and a LSTM meta-learner. The model is applied to a set of short subseries which are the result of dividing a long non-stationary financial time series. As a result, a promising performance can be achieved by the proposed model in terms of making more accurate prediction than the traditional CNN predictor and AR based forecasting models in non-stationary conditions.

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