

# Review of: "Machine Learning Methods in Algorithmic Trading: An Experimental Evaluation of Supervised Learning Techniques for Stock Price"

Elia Yathie Matsumoto<sup>1</sup>

<sup>1</sup> Universidade de São Paulo

Potential competing interests: No potential competing interests to declare.

The paper proposes to “outline a comprehensive study aimed at forecasting stock and currency prices using state-of-the-art Machine Learning”. This is not exactly a brand-new approach, but it is still interesting enough with the potential to bring new insights.

However, it is necessary to ensure that **the authors properly addressed the non-stationarity issues** of the financial price time series.

In several parts of the text, for instance, in item 3.2, the authors wrote, “The historical daily closing**price** data ... containing the close **prices** ...past prices as inputs and future **prices** as targets. “. These descriptions convey the idea that the authors worked with the price time series without testing whether they are stationary. In the case of stationary price time series, we must work on trying to prediction the variation of the price and calculate the prediction of the price by adding the known previous price to the predicted variation.

If the authors are working on trying to predict the variation of the price or if the price time series are stationary (that, according to the Fig. 2 in the paper, this looks unlikely), they should make it very clear in the paper.

On the other hand, if they did everything using non-stationary price time series, the authors must fix it and work on predicting the variation of the prices (it must be done for all methos described in the paper), and accordingly, review the conclusions.

Otherwise, we could not proceed with analyzing other aspects of the paper.