Financial Time-Series Forecasting Challenge

30412 - Machine Learning

Welcome to the 2021 group challenge for the machine learning course.

The rules of engagement are simple:

- The data consist of time series, splitted in a training and a test set;
- The training set contains both inputs and outputs. The inputs are the returns for the first 50 time steps and the outputs that are the returns of the time series for the 51-st time step.
- The test set contains only the inputs.
- Each time series has its first 50 values indexed by columns from 0 to 49. There is an additional column called 'w', which you can disregard.

Your task is to predict the value in the column indexed by '50' (the 51st time step) from the values in the columns indexed by '0' to '49' (the first 50 time steps).

The final submission consists of:

- The predictions on the test set, to be uploaded on the Bocconi Data Science Challenges platform
- A short (!) report detailing your approach, 2 pages maximum
- A notebook with code that reproduces the predictions on the test set, starting from the training set. This should include hyperparameter optimization.

The submission deadline is next Wednesday, the 28th, at 3:00 pm CET.

I suggest you submit at least one hour before in case servers are congested. Once the deadline is passed there is nothing we can do.

Good luck!