

Team members:

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Algorithm language :

We are using Python language to develop our trading bot and Meta Trader 4 for the back-testing program.

Indicators used :

We are working both on the Bollinger Bands and on the RSI Index based on short periods of 15 minutes.

For the definition of those, Bollinger Bands are a type of statistical chart characterizing the prices and volatility over time of a financial instrument or commodity.

The relative strength index (RSI) is an indicator to intend to the chart the current and historical strength or weakness of a stock or market based on the closing prices of a recent trading period (that not the same as the relative strength).

Trading strategy details :

We're first starting to calculate the three Bollinger bands on a T period based on 20 candles and the T-1 period that gives us 3 values for the upper, middle and lower band. Actually, We are using the upper and lower to determine the limit of buy and sell action.

Additionally, we calculate the RSI indicator on a period of 14 candles that return a number between 0 and 100. We can see that as a percentage of security on the trade we will establish with.

To activate a position, we are looking for two conditions: we will open a sell position if first we exceed the upper band, and the RSI indicator is above 70. And we will open a buy position if we are under the lower band and a RSI of 30.

About the investment, we take positions with 0.01€ and set the stop-loss at the half of the amount invested (0.005€ for our exemple) and we set the maximum of gain on 10% of the investment. Only once position at the time.