TQF Project Proposal

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Project Goal:

Predict whether stock price will increase or decrease in the following trading day using stock technical indexes such as RSI (Relative Strength Index), MACD (Moving Average Convergence / Divergence) and so on.

Data Sources:

Wind and JoinQuant

Methology:

Mainly use SVM. If possible, I will try random forest and other methods and compare the results with SVM.

More Details:

To alleviate the noise effect of factors and avoid overfitting problem, I will discretize the original continuous factors. For example, to discretize the SMA (Simple Moving Average), we can compare it with the closing price. If SMA is smaller than closing pricing, we discretize it as 1. Else, we discretize it as -1.

Expected Results:

Calculate and compare accuracies of different methods. Then choose the best one.