

Homework due Sunday, Feb 19 before 12:00am

1. Drawdown is defined as the drop from a local maximum of the yearly returns curve to the next local minimum. Drawdowns are bad because they make investors anxious.

Another measure of performance is the maximum drawdown over a period.

Use the included 3 sets of optimal features over the holding period 2003-2018 and an AdaBoostClassifier. Use Optuna to find hyper-parameters for the training period 2001-01-01 to 2004-01-01 and use these hyper-parameters and the sets of optimal features to compute the maximum drawdown for each of them.

Try different Optuna objectives such as accuracy and max drawdown on the period 2001-01-01 to 2004-04-01

Next try to change the labels as in Homework 1 and 2 (or try to use your own way to make labels) and try to find a strategy that has both good Sharpe Ratio and a small max drawdown.