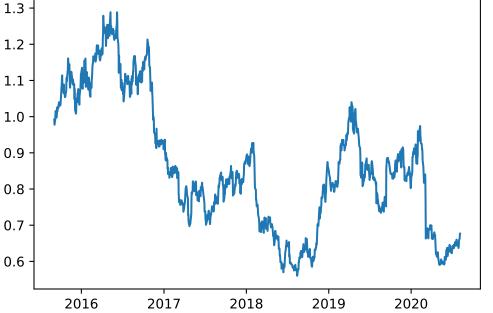
Out of sample results for \$1 invested with AdaBoost for CO1



Out of sample results for \$1 invested with AdaBoost for SP1 3.5 3.0 2.5 2.0 1.5 1.0

2018

2019

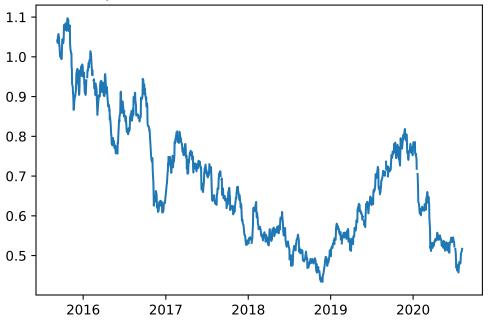
2020

2016

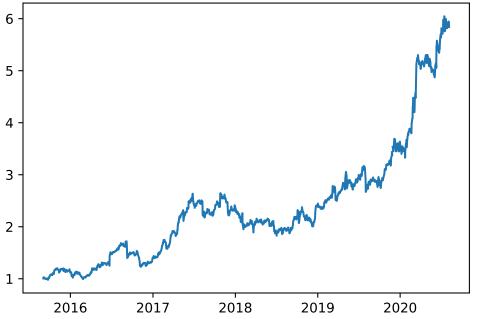
2017

Out of sample results for \$1 invested with AdaBoost for TY1 1.4 1.3 1.2 1.1 1.0 0.9 8.0 2016 2017 2018 2019 2020

Out of sample results for \$1 invested with AdaBoost for HG1



Out of sample results for \$1 invested with AdaBoost for NQ1

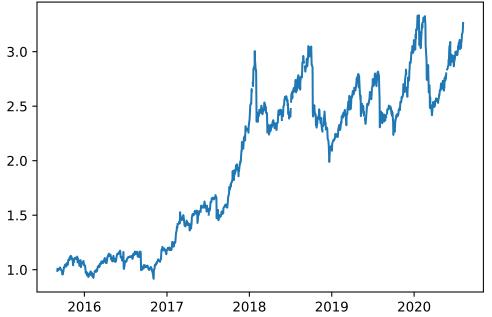


Out of sample results for \$1 invested with AdaBoost for GC1 2.50 2.25 2.00 1.75 1.50 1.25 1.00 0.75 2016 2017 2018 2019 2020

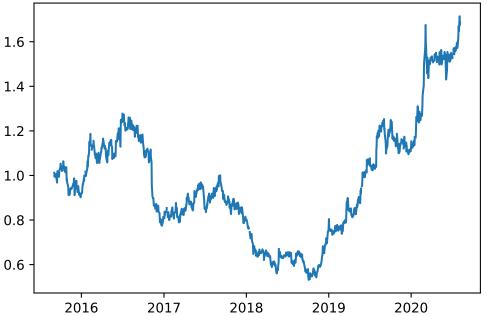
Out of sample results for \$1 invested with Random Forest for CO1



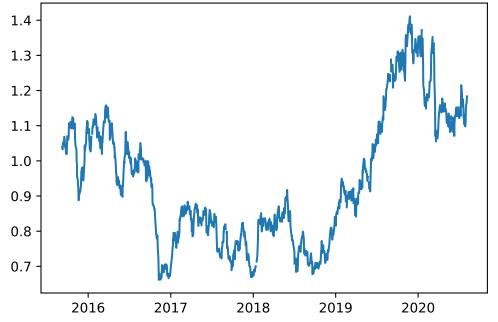
Out of sample results for \$1 invested with Random Forest for SP1



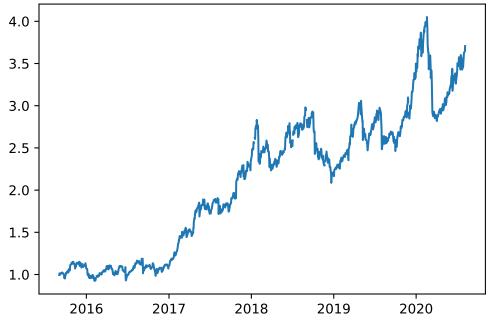
Out of sample results for \$1 invested with Random Forest for TY1



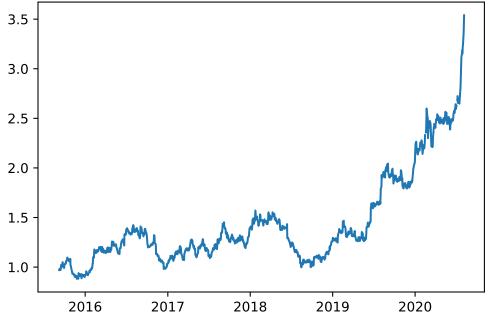
Out of sample results for \$1 invested with Random Forest for HG1



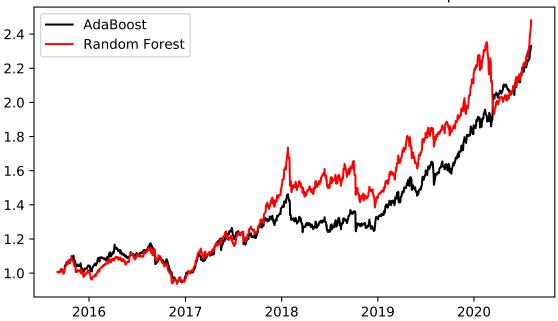
Out of sample results for \$1 invested with Random Forest for NQ1



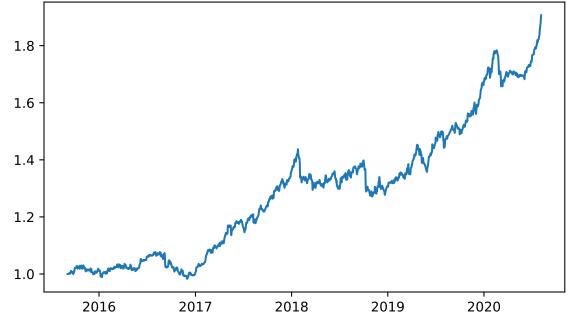
Out of sample results for \$1 invested with Random Forest for GC1



AdaBoost and Random Forest out of sample



Portfolio: 50% in ATS optimization + 25% in AdaBoost + 25% in Random Forest



Buy and Hold portfolio of futures contract, rebalanced daily 1.4 1.3 1.2 1.1 1.0 0.9 8.0

2018

2019

2020

2016

2017

Model vs Benchmark of Buy and Hold

