

UNIVERSITY of WASHINGTON

Paper Trading with Machine Learning Models

Daniel Hunegnaw, Kai Luo | EE P 596 Advanced Machine Learning | 03-07-22

Insights

We have run both EMA and STL based models for Paper Trading. Despite the period being bad due to the current situation (Russia-Ukraine war having negative impact on trade), the EMA based model is performing better than the STL based. There are so many valleys than peaks on the trend, and the algorithm has bought stocks but have not sold yet. However, we believe that we should test the model for a longer period like for a month or two to get understanding of the model performance. Below are screenshots showing Paper Trading live action and the Paper Trading account summary in Alpaca for EMA based model

Running Paper trading

```
please uncomment the code below for running the trade job
```

```
p = pTrader.PaperTrader( API_KEY_ID=Api_Key,SECRET_KEY=Secret_Key,model='ema')
p.run_trading()

Starting trading MSFT
Finishing trading MSFT
Starting trading GOOG
Finishing trading GOOG
Starting trading NFLX
Finishing trading NFLX
Starting trading AMD
Finishing trading AMD
Starting trading FB
Finishing trading FB
```

Fig 1. While paper trading is running

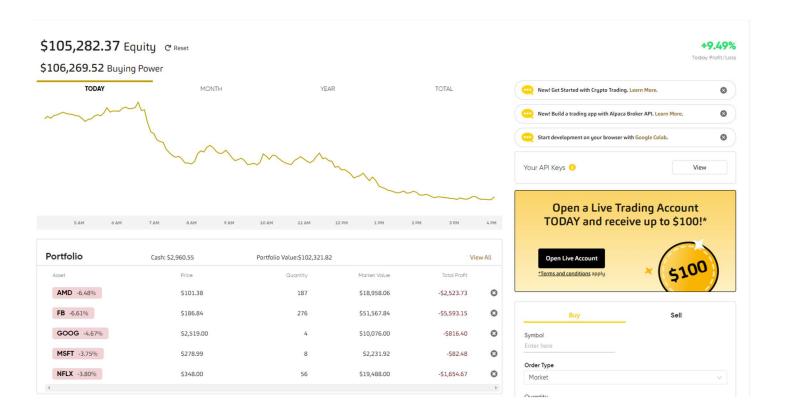


Fig 2. Paper Trading Status on EMA based model