## Call Option Screener

by James Burns at Metis

#### **DISCLAIMER & WARNING**

#### Fiduciary/Licenses

I am not a Fiduciary. I am not providing a service to investors; this presentation is for educational purposes only.

I do not have Securities Licenses needed to sell this product.

#### High Risk/Reward

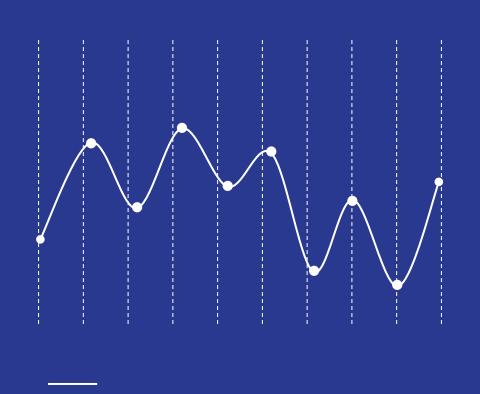
This model is not for everyone. The strategy is risky. It is advised to use the predictions of this model as a complement to a well diversified portfolio. DO NOT PUT ALL OF YOUR EGGS IN ONE BASKET WITH THIS STRATEGY.

#### Use other tools

This is a presentation on a screener. The screener's output should be considered in combination with other research and domain knowledge (preferably, professional knowledge of stock & option trading).

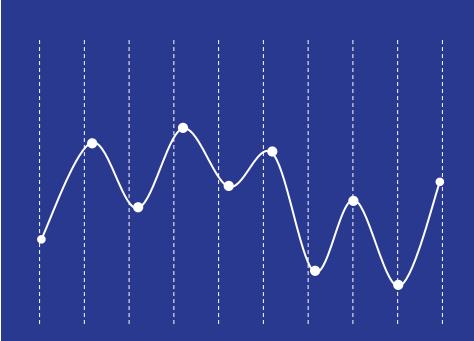
# What is a Call Option?





# Dataset & Assumptions

- 20 Years of S&P 500 data scrapped using the Yahoo Finance API
- 15 Years of data used in the model
- 3% premium on an at-the-money call option that expires in 1 month.
- Features are "momentum" of various bands of historical performance.
- Target is 6%+ gain in the underlying stock performance during the month.
  - True Positive predictions will yield at least 100% profits
  - False Positive predictions will typically yield 100% loss



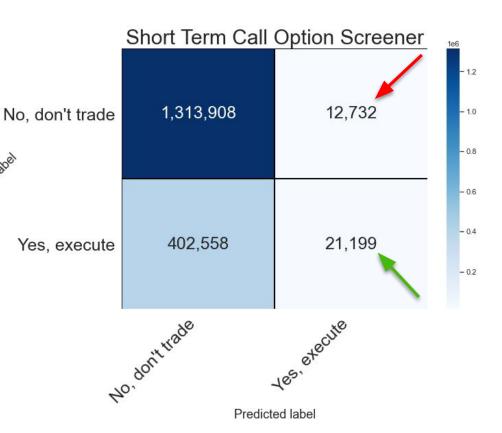
#### Confusion Matrix, Scores & Precision

**XGBoost** 

Precision: 62.48%

**False Discovery Rate: 37.52%** 

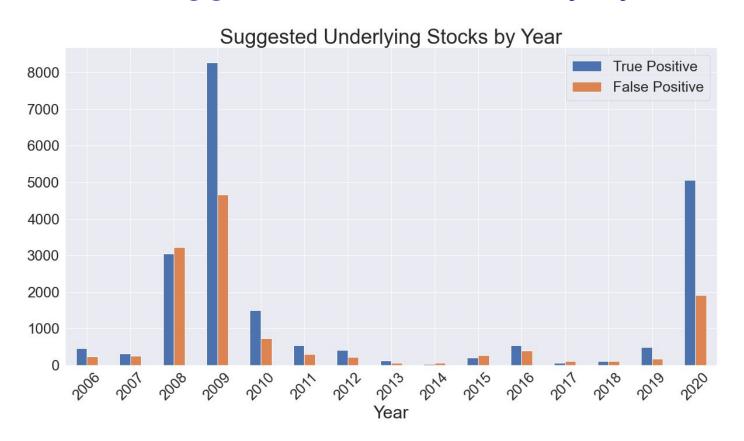
**Test Accuracy Score: .7628** 



## Model Suggestions - Top 5 Underlying Stocks



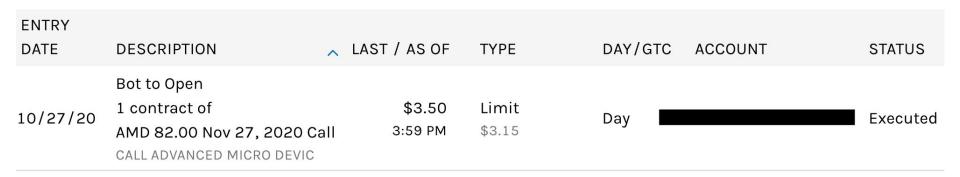
### Model Suggestions - Historically by Year



## Stock Suggestions on 10/27/2020

Date	Ticker	adj_close	final_model_prediction
2020-10-26 00:00:00	UAL	35.34000015258789	Yes, execute
2020-10-26 00:00:00	DVN	8.8100004196167	Yes, execute
2020-10-26 00:00:00	FLS	29.95000076293945	Yes, execute
2020-10-26 00:00:00	DD	58.5	Yes, execute
2020-10-26 00:00:00	SPG	64.68000030517578	Yes, execute
2020-10-26 00:00:00	AMD	82.2300033569336	Yes, execute
2020-10-26 00:00:00	DFS	65.87999725341797	Yes, execute
2020-10-26 00:00:00	HFC	19.3799991607666	Yes, execute
2020-10-26 00:00:00	ALK	38.58000183105469	Yes, execute
2020-10-26 00:00:00	AAL	11.800000190734865	Yes, execute
2020-10-26 00:00:00	OKE	29.51000022888184	Yes, execute

### My Trade on 10/27/2020



Today, the market is tanking. So, this has not been a profitable trade thus far.



## Questions?

