

The List of the Best Strategies We Have

### WELCOME!

Thank you for buying our Strategy Library and welcome to the world of investing with Lumiwealth! My hope is that after you finish this document you become a much smarter and more profitable investor.

I've been able to make millionaires out of the people I have managed money for and I hope I can do the same for you. It's not that complicated but it does take some knowledge, work, and discipline.

Please take your time reading this document because I took a lot of time making it. I strongly believe that if you follow the knowledge laid out here then you can be significantly wealthier, happier, and more stress-free. Trust me when I say that a few \$million in the bank will make life easier for you and everyone you care about.

Robert Grzesike



#### REMINDER!

If you want to get really good at this stuff then we have a course on algorithmic trading that will knock your socks off. Click the link below to learn more about our program.



Robert has been programming for over 20 years and knows almost every major programming language. He started coding at age 12, started his first successful software company at age 15, and sold his first company for over \$1 million by the age of 23.

After business school and his Master of Finance degree, he made a startup with friends that he sold for over \$1 million. After that, he took some time off to travel and ended up in New York City to pursue his dream of using software to take the investment world to the next level.

In New York City, Robert worked for several prominent software/finance companies including Greystone and Voyager.

#### ABOUT THE AUTHOR

"Learning how to backtest and automate your strategies is the key to long-term success. Many people think they are great investors until they get tested. Technology can put you in the top 1% of investors with very little effort, the same way that technology has disrupted every other industry.

At Greystone, he worked directly with the CEO and family who are worth over \$2 billion. He hired a team and led them to create a website that made the mortgage lending process easier using software and machine learning (AI). To date, this software has likely originated over \$20 billion in mortgages.

At Voyager, Robert was one of the first 5 employees, working out of a WeWork in SoHo NYC. A few years later the company grew to be worth over \$3 billion on the stock market.

After Voyager, Rob decided to start Lumiwealth to help everyday people to make the kind of returns he saw on Wall Street. Today he works tirelessly to make sure that everyday people can do as well (or better!) than the billionaires in New York. The goal is to make our clients collectively \$10 billion+

## How to Use This Document

This document outlines our latest research on trading strategies using software and data to analyze each strategy. We used our custom-made backtesting/trading library (called <u>Lumibot</u>) to build each of these strategies so that a computer can fully automate every trade. Once we have built a strategy, we then backtest it (simulate trading using historical data) and try different inputs in order to optimize it. The strategies in this document are the ones that have achieved the best backtesting results and that we believe could make money in the future.

#### A few things to note:

- 1. The results in this document are based on backtesting, which has the potential to be flawed for a number of reasons including data discrepancies, trading fee discrepancies, differences between live trading vs the simulation, and more. That being said, we have worked very hard on making sure our backtests are accurate and unbiased.
- 2.Backtesting results do not necessarily mean that the strategy will perform the same in the future. We believe that many patterns in the market repeat themselves and backtesting is the best way that we know how to predict the future, but it is definitely not a sure thing.
- 3. We are not financial advisors and should not be considered as such. We are providing you with our research and steps to replicate the stretgy, but what you do with this information is up to you. Please always consult with an investment advisor before making any investment decisions.

Now that that's out of the way, on the upcoming pages you will find our research and methodology on the strategies we found most interesting. Each section will contain a description of the strategy, our backtesting results, and ways to replicate the strategy. Enjoy!

P.S. If you're interested in learning how to build strategies like this yourself, or if you want access to our library of code then you should take our Algorithmic Trading Courses. Click the buttons below to learn more. One button will take you to the course page to learn more, or you can click the "Book a Call" button to speak with someone over the phone if you prefer to speak with a human/have more questions.

### 1) BTC Trend Following

This is a very simple strategy that has some amazing results. Basically, this strategy follows a trading pattern called Trend Following, which is an investment approach that aims to capture gains by buying an asset that is showing an upward price movement (an uptrend) or selling an asset is showing a downward price movement (a downtrend). This strategy assumes that prices tend to persist in their current direction and tries to profit from these continued price movements. The objective is to enter positions in the direction of the trend and hold until the trend shows signs of reversal. This approach can be used in many different financial markets, including stocks, commodities, crypto, and foreign exchange.



We've tried many different types of Trend Following strategies, but this is the one that our computer algorithms found was the most successful. Here are the steps:

- 1. Pick an asset (we will be using BTC here, but this also works on other assets such as ETH)
- 2.Calculate the 17-day Exponential Moving Average (you can do this using charting software from most brokers).
- 3. When the current price of BTC is above the 17-day Exponential Moving Average, then buy BTC and hold it.
- 4. When the price of BTC is *below* the 17-day Exponential Moving Average, then sell your BTC and instead hold onto cash. Historically this would have protected you from losing more money.

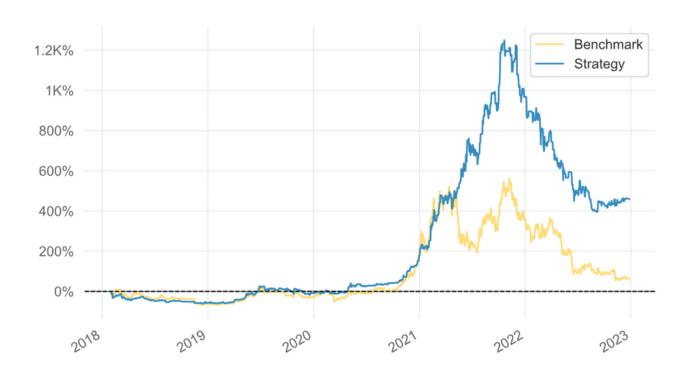


That's it. It sounds very simple but we have tested many different things to arrive at this strategy. For example, we tested:

- **Different indicators**, including Simple Moving Averages, Exponential Moving Averages, MACD, and more
- Different time frames. We ran our software code to test 2-day, 3-day, 4-day, etc. all the way up to 50-day moving averages. We found that 17 days works the best. (PS. If you want the code to test this yourself, you should check out our <u>Algorithmic Trading</u> <u>Course</u>)
- Different assets. We've tested this on many different crypto assets including BTC, ETH LTC, DOGE, and more. We've also tested this on stock ETFs including SPY and QQQ. We've found ETH and BTC to work the best using this hold/sell approach.
- Different ways to trade. For BTC and ETH the buy and hold vs sell and hold cash worked the best, but for SPY and QQQ we found other methods to be more effective.

Below are the backtesting results using our trading algorithms/software code. A backtest is a technique that we teach in our <u>Algorithmic Trading Course</u>, where we simulate trading in the past to see what would have happened if we ran the strategy over the past few years/months. It doesn't guarantee that you'll see the same results again in the future, but you would have gotten these results if you had done it in the past, and chances are that the patterns will repeat themselves. You can find our backtesting results below:

#### **Cumulative Returns vs Benchmark**



**Trading Strategy Toolkit** 

Notice here that this strategy totally smokes owning BTC on its own. BTC by itself would have made 62.83% from 2018-2023 (the benchmark is BTC), but our strategy made 7.4x more than BTC at 459.39%. This huge difference can be achieved by doing something so simple, and something that can be very easily automated using software code. Not only that, but the risk metrics are a lot better too, such as the max drawdown (63.3% vs 76.63%) and the volatility (41.09% vs 60.15%). Overall you would have beaten Bitcoin by almost 10x while taking less risk!

These are great results, especially for a strategy that is so simple. I've been running this strategy personally using the code that I give out in our <u>Algorithmic Trading Course</u>, and have made some great returns so far!

Metric	Strategy	Benchmark
Risk-Free Rate	0.0%	0.0%
Time in Market	72.0%	100.0%
Cumulative Return	459.39%	62.83%
CAGR%	42.0%	10.44%
Sharpe	0.79	0.42
Prob. Sharpe Ratio	98.38%	86.72%
Smart Sharpe	0.79	0.42
Sortino	1.23	0.6
Smart Sortino	1.23	0.6
Sortino/√2	0.87	0.42
Smart Sortino/√2	0.87	0.42
Omega	1.23	1.23
Max Drawdown	-63.3%	-76.63%
Longest DD Days	508	485
Volatility (ann.)	41.09%	60.15%
R^2	0.0	0.0
Information Ratio	0.01	0.01
Calmar	0.66	0.14
Skew	0.69	-0.37
Kurtosis	19.71	7.65

# 2) Congress/House Following Strategy

There's been a lot of talk lately about insider trading by members of Congress, most notably by Nancy Pelosi (LOL). People are saying that these members of Congress are making a lot of money because they know things that the general public does not. We personally found this very intriguing so we put it to the test. Here is our trading algorithm follows the House Representatives in the government and trades the same stocks that they do. This strategy is a bit more complicated to follow but gives great results.



Here's how to copy the strategy:

- 1.**Get a feed of all the trades that congress has made recently**. There are lots of websites that do this including <a href="www.capitoltrades.com">www.capitoltrades.com</a>
- 2.Get a tally of the stocks they bought recently (we found 28 days works best, but 30 days is pretty good too). You can get this tally at <a href="https://www.capitoltrades.com/trades?">https://www.capitoltrades.com/trades?</a> <a href="txDate=30d&txType=buy">txDate=30d&txType=buy</a> or by going to <a href="capitoltrades.com">capitoltrades.com</a>, clicking on trades, changing the timeframe to 30 days, and setting the transaction type to buy.
- 3.If a stock had 4 purchases or more, then we will add that to our portfolio and divide our money among those stocks based on the number of buys. Eg. If there were 8 buys for Microsoft and 4 buys for Google, then we would put 66% of our money into Microsoft and 33% of our money into Google.
- 4. If there were no stocks that had 4+ buys, then this probably means that congress is worried about the stock market in general and it's better to hang around in cash. In our trading algorithm, we use the ETF with the ticker SGOV during these times. It is a super safe ETF that almost never moves but still pays you a few % while you wait.
- 5. Repeat this daily. Every day the tally will be a little different and might get you to adjust your portfolio.

This strategy is a bit more complicated than the first, but the results are great (especially if you prefer stocks). Here are a few things we tested to arrive at this strategy. We tested:

- The number of days to look back. We ran our Python code to test looking back 5 days, 6 days, 7 days, etc. all the way up to 60 days. We found that 28 days worked best, but anywhere from 25 35 days was enough to beat the stock market. In the steps above I say to use 30 days, but that's only because it's hard to get exactly 28 days without using software code. If you want to learn how to use software code to get exactly 28 days of lookback and automate this whole process for you then check out our Algorithmic Trading Course.
- The number of buys required. We thought: what if we just bought everything congress bought? This didn't work out well, especially after trading fees since our algorithm would end up buying 100s of stocks sometimes. Then we tried 2 buys, 3, 4, 5, and 6 buys as the threshold. It ends up that 4+ buys is the sweet spot that would have been most profitable.

Here are the backtesting results of this strategy. The blue line is our strategy, whereas the yellow line is the benchmark (in this case the S&P 500). Clearly, Congress has an advantage in stock picking! It's pretty amazing how they made so much money even in a bear market!

#### **Cumulative Returns vs Benchmark**



**Trading Strategy Toolkit** 

Once again, our algorithm totally kills it! In this case, we would have made 24.0%/ yr on our money when the stock market (S&P 500) was down -2.36%/ yr. Not only does this mean that this strategy would have been super profitable, but it also means that you would have beaten the bear market! While everyone else was losing money, you would have been almost 50% richer! That's amazing.

Metric	Strategy	Benchmark
Risk-Free Rate	0.0%	0.0%
Time in Market	65.0%	83.0%
Cumulative Return	43.18%	-3.9%
CAGR%	24.0%	-2.36%
Sharpe	0.79	-0.01
Prob. Sharpe Ratio	87.06%	49.15%
Smart Sharpe	0.69	-0.01
Sortino	1.19	-0.02
Smart Sortino	1.05	-0.02
Sortino/√2	0.84	-0.01
Smart Sortino/ $\sqrt{2}$	0.74	-0.01
Omega	1.21	1.21
Max Drawdown	-22.69%	-24.49%
Longest DD Days	238	380
Volatility (ann.)	27.29%	18.43%
R^2	0.0	0.0
Information Ratio	0.04	0.04
Calmar	1.06	-0.1
Skew	0.54	-0.08
Kurtosis	11.04	2.17

# 3) UPRO Buy at Close

I read an article on Bloomberg one day that I thought was very interesting. It discussed a very strange anomaly in the stock market: for some reason, returns overnight are much better than returns during the day. The original article from Bloomberg is behind a paywall, but <a href="here">here's an article that describes the effect</a>. To summarize the article: most of the gains in the stock market happen overnight (from market close to the next day's opening), rather than during market hours, and this has been happening for many, many years. The theory is that market psychology/day traders make this possible, but regardless of why it happens, we decided to put it to the test.



Here's how to copy the strategy:

- 1. Buy the ticker UPRO at the market close (our algorithm does it at around 3:55 pm EST).
- 2.As soon as the market opens, sell UPRO (9:30 am EST) and hold cash until 5 minutes before the market closes, at which point go back to step one (buy UPRO).

That's it. Very, very simple. Here are a few things we tested to arrive at this strategy. We tested:

• Different ticker symbols. We tried SPY (S&P 500 ETF), QQQ (Nasdaq ETF), UPRO (3x Leveraged S&P 500), TQQQ (3x Leveraged Nasdaq) and SSO (2x Leveraged S&P 500). They all had some pretty interesting results, but UPRO seems the best. We think this is because the leverage helps the strategy overcome the trading fees associated with buying/selling daily (we assumed a 0.01% trading fee/slippage) and because holding overnight gives us a better risk/return ratio which is improved by using leverage.

As always, if you're interested in experimenting with this strategy (changing the symbols, using different markets, etc) then you should sign up for our <u>Algorithmic Trading Course</u> or <u>book a call with one of our experts</u>. You will get access to the code for this strategy and lots of help with understanding/modifying it.

Here are the backtesting results (the blue line is our strategy, and the yellow line is the S&P 500):

#### **Cumulative Returns vs Benchmark**



Trading Strategy Toolkit

As you can see, this strategy would have more than doubled the S&P 500 (the benchmark) in terms of returns per year (19.27% vs 8.71%), however, it does come with risk. There's risk inherently associated with owning leveraged ETFs, and it shows in the higher volatility and higher max drawdown. That being said, the returns are about 2.2x the benchmark, while the max drawdown is only 1.8x the benchmark, so it seems that you're more bang for your risk doing this strategy.

Either way, I just want to remind you to be careful with strategies that take on leverage. You shouldn't ever put all of your money into any one strategy, but that is even more important with a leveraged strategy.

Metric	Strategy	Benchmark
Risk-Free Rate	0.0%	0.0%
Time in Market	97.0%	100.0%
Cumulative Return	53.61%	22.56%
CAGR%	19.27%	8.71%
Sharpe	0.67	0.53
Prob. Sharpe Ratio	85.41%	79.65%
Smart Sharpe	0.62	0.49
Sortino	0.99	0.75
Smart Sortino	0.91	0.7
Sortino/√2	0.7	0.53
Smart Sortino/ $\sqrt{2}$	0.65	0.49
Omega	1.13	1.13
Max Drawdown	-43.88%	-24.49%
Longest DD Days	397	370
Volatility (ann.)	35.45%	19.06%
R^2	0.26	0.26
Information Ratio	0.03	0.03
Calmar	0.44	0.36
Skew	0.16	-0.21
Kurtosis	2.39	1.37

# 4) Diversified Leverage

This strategy is inspired by Ray Dalio's All Weather strategy, which you can read about here. Ray Dalio is an extremely successful investor manages the largest hedge fund in the world), so it's usually a good idea to listen to his advice. The website given above can explain it in more detail, but the idea is to diversify your portfolio very well, using stocks. bonds. commodities, and gold so that you really reduce your risk without totally killing your returns. His strategy is great for improving your risk/return ratio but we thought it could be improved on.



Enter stage: Diversified Leverage. Basically what we try to do with this strategy is to diversify very well among different asset classes to reduce risk, but simultaneously use leveraged ETFs to increase our returns. Effectively this should give us a high return but reduce a lot of the risk using diversification.

Here's how to copy the strategy:

- 1. Buy these symbols in these proportions. Eg. If the allocation to this strategy is \$10,000 then you should put \$2,000 into TQQQ, \$2,000 into UPRO, etc
  - a.TQQQ (3x Leveraged Nasdaq): 20%
  - b. UPRO (3x Leveraged S&P 500): 20%
  - c.UDOW (3x Leveraged Dow Jones): 10%
  - d.TMF (3x Leveraged Treasury Bonds): 30%
  - e. UGL (3x Leveraged Gold): 5%
  - f.DIG (2x Leveraged Oil and Gas Companies): 15%
- 2.If/when these proportions go out of whack, (eg. if UPRO grew to be 25% of your total allocation) then you need to sell the winners and buy the losers until the proportions are back to how they were in step 1. The backtest uses a portfolio drift of 5%, meaning that if the sum of all the differences is 5% or more, then it triggers a rebalance (eg. if UPRO grew to 25%, then that would be a 5% drift). It's also possible to just rebalance at a set time interval (eg. every 2 months), but we've found portfolio drift to have better results, probably because you naturally trade less often (less trading fees), and you trade when big market moves happen.

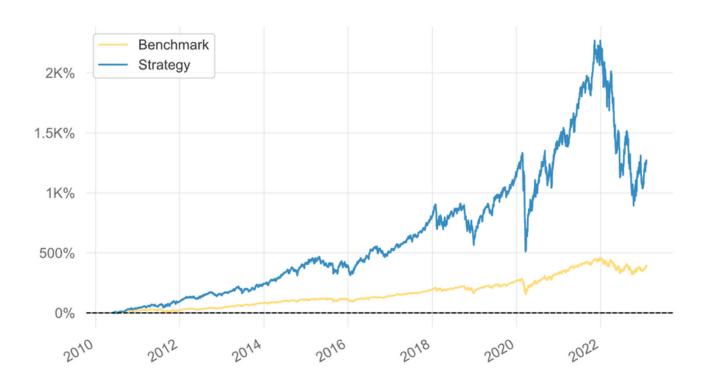
Here are a few things we tested to arrive at this strategy. We tested:

- Different weights. We tested a LOT of different combinations of weights for each symbol, testing if we had more stocks vs bonds or more gold, etc. The weights we arrived at were what we found had the best risk/reward ratio.
- Different symbols. We tested a lot of different symbols as well, including 2x leveraged, 3x leveraged, different ETFs, etc. We also struggled a bit with finding the 5% commodity allocation that Ray Dalio recommends since there are no 3x leveraged commodity ETFs with a long enough track record. However, since oil and gas are the biggest parts of commodity indexes anyways, we figured a 2x oil and gas ETF would be a good replacement (and it backtested very well!).

This is a very common strategy that people like to play around with. Very often in our classes, people ask "what if we added XX ETF?" or "what if we increased the % for XX?". It's definitely a fun thing to play around with and is very easy to do even if you have never programmed before. If you want to experiment with the symbols/weights then you can get access to our code by purchasing the <u>Algorithmic Trading Course</u>.

Either way, here are the results of the backtest. As usual, the blue line is our strategy and the yellow line is the S&P 500:

#### **Cumulative Returns vs Benchmark**



**Trading Strategy Toolkit** 

The results here are pretty impressive as well, especially considering that 2021 is one of the worst years possible for a strategy like this (it is VERY rare that stocks and bonds both fall at the same time as they did in 2021). This strategy is definitely riskier than the S&P 500 so please use caution, but there does seem to be a good tradeoff for returns given the increase in risk.

Metric	Strategy	Benchmark
Risk-Free Rate	0.0%	0.0%
Time in Market	85.0%	82.0%
Cumulative Return	1,272.16%	395.86%
CAGR%	22.94%	13.46%
Sharpe	0.76	0.73
Prob. Sharpe Ratio	99.83%	99.77%
Smart Sharpe	0.74	0.71
Sortino	1.05	1.03
Smart Sortino	1.02	0.99
Sortino/√2	0.75	0.73
Smart Sortino/√2	0.72	0.7
Omega	1.16	1.16
Max Drawdown	-58.07%	-33.68%
Longest DD Days	448	394
Volatility (ann.)	27.31%	15.92%
R^2	0.0	0.0
Information Ratio	0.02	0.02
Calmar	0.39	0.4
Skew	-0.75	-0.55
Kurtosis	10.52	14.15

# TALK TO OUR SPECIALISTS



# IF YOU WANT TO CONTINUE YOUR LEARNING AND BUILD SOME GREAT TRADING ALGORITHMS:

Then I recommend speaking with our excellent staff. We have taught thousands of people how to code and create automated trading strategies. If you want to learn more, then book a call with one of our specialists, who can help guide you toward your next steps

**BOOK A CALL** 

support@lumiwealth.com



What did you think about this library? Let us know so that we can make this and other learning materials better!

It will only take two minutes, please let us know how you liked this by clicking below:

Click Here to Rate This Library