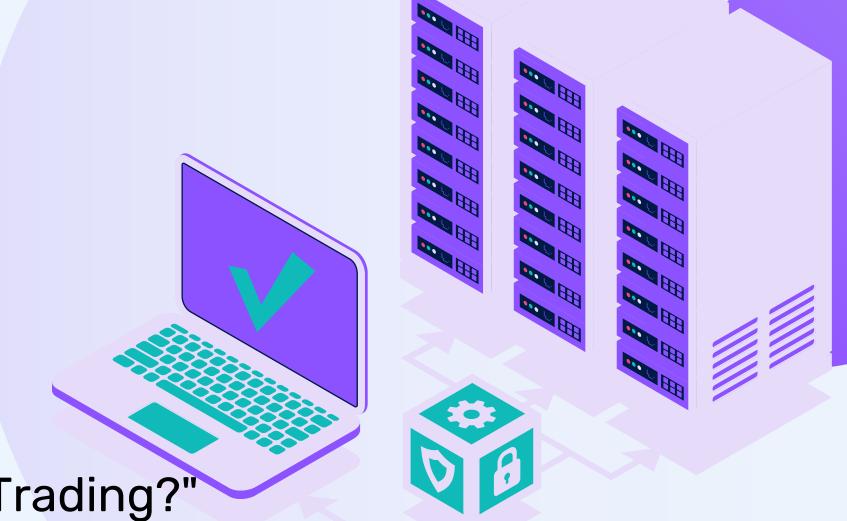


# Algorthmic Trading

"Is Algorthmic Trading the Future of Trading?"





#### OUR TEAM

#### Meet our amazing team

**MENTOR** 

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#### What is Algorthmic Trading?

Algorithm trading(algo trading) uses computer programs that follows pre defined rules to place orders.

#### Why Algo Trading?

- Reduced the possibility of mistakes by human traders based on emotional and psychological factors.
- Algo-trading can be backtested using available historical and real-time data to see if it is a viable trading strategy.
- Reduced transaction costs
- Trades are executed at the best possible prices





#### **Strategies**

Some of the most common algo trading strategies are:-

- Trend-Following Strategies
- Volatility strategies
- Price action strategies





#### TREND-FOLLOWING STRATEGIES

This strategies follow trends in moving averages, channel breakouts, price level movements, and related <u>technical</u> <u>indicators</u>. There we have backtested one of trend name as moving average.





50 NIFTY ⊕ 4h □□ 益 Indicator	s 🔠 🛱 Alert 🐠 Replay		$\leftarrow$
Stock Screener V Pine Editor Strategy Test	er Trading Panel		_ ()
My Strategy ⊚ ± 🛱			
Overview Performance Summary List of Trad	es		
	All	Long	Short
Net Profit	-43330.00 -4.33%	496430.00 49.64%	-539760.00 -53.98%
Gross Profit	2082935.00 208.29%	1305515.00 130.55%	777420.00 77.74%
Gross Loss	2126265.00 212.63%	809085.00 80.91%	1317180.00 131.72%
Max Run-up	580825.00 60.21%		
Max Drawdown	620120.00 61.77%		
Buy & Hold Return	1996786.40 199.68%		
Sharpe Ratio	0.019		
Sortino Ratio	0.041		
Profit Factor	0.98	1.614	0.59





Stock Scre	ener · Pine Editor	Strategy Tester	Trading Panel						
My Strateg	y ⊚ ± ੴ								
Overview	Performance Summary	List of Trades							
Trade #	<b>Type</b> Entry Short	<b>Signal</b> short	<b>Date/Time</b> 2012-06-05 13:1	<b>Price</b> 5 4880.95	Contracts	Profit	Cum. Profit	Run-up	Drawdown
8	Exit Long	short	2012-06-05 13:1	5 4880.95		100 -8055.00 -1.62 %	-13025.00 -0.81 %	2075.00 0.42 %	19115.00 3.85 %
0	Entry Long	long	2012-05-30 09:1	5 4961.50	100				
7	Exit Short	long	2012-05-30 09:1	5 4961.50	400	21650.00	-4970.00	38905.00	10160.00 1.96 %
,	Entry Short	short	2012-04-25 13:1	5 5178.00	100	100 21630.00	2.22 %	7.51 %	
6	Exit Long	short	2012-04-25 13:1	5 5178.00	100	-14775.00 -2.77 %	0 –26620.00 % –1.5 %	1670.00 0.31 %	16510.00 3.1 %
	Entry Long	long	2012-04-18 13:1	5 5325.75	100	-2.77 %			
5	Exit Short	long	2012-04-18 13:1	5 5325.75	100	-7575.00	75.00 -11845.00 1.44 % -0.76 %	6650.00 1.27 %	9200.00 1.75 %
	Entry Short	short	2012-04-13 09:1	5 5250.00	100	-1.44 %			
4	Exit Long	short	2012-04-13 09:1	5 5250.00	100	100 -3645.00 -0.69 %	-4270.00 -0.36 %	415.00 0.08 %	9565.00 1.81 %
	Entry Long	long	2012-04-09 09:1	5 5286.45	100				
3	Exit Short	long	2012-04-09 09:1	5 5286.45	100	3310.00		18360.00	6640.00 1.25 %
	Entry Short	short	2012-03-21 13:15	5 5319.55	100	0.62 %		3.45 %	
2	Exit Long	short	2012-03-21 13:1	5 5319.55	100	100 -7405.00 -1.37 %	.00 -3935.00 5205.00 7 % -0.74 % 0.97 %	5205.00	16035.00 2.97 %
	Entry Long	long	2012-03-15 13:1	5 5393.60	100			0.97 %	
1	Exit Short	long	2012-03-15 13:1	5 5393.60	100	3470.00	3470.00	25685.00	7110.00
	Entry Short	short	2012-02-29 09:1	5 5428.30	100	0.64 %	0.35 %	4.73 %	

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# FEW BACKTESTED DATA FROM TOTAL OF 142 TRADES

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Stock Scre	ener V Pine Editor	Strategy Tester	Trading Panel						
My Strateg	y ⊚ ± ©7								
Overview	Performance Summary	List of Trades							
Trade #	Туре	Signal	Date/Time	Price	Contracts	Profit	Cum. Profit	Run-up	Drawdown
15	Exit Short	long	2012-11-07 13:15	5772.65	100	-17245.00 -3.08 %	-13325.00	1715.00	17590.00 3.14 %
15	Entry Short	short	2012-10-30 13:15	5600.20	- 100		-1.72 %	0.31 %	
14	Exit Long	short	2012-10-30 13:15	5600.20	100	19365.00	3920.00	40880.00	1260.00 0.23 %
14	Entry Long	long	2012-09-12 13:15	5406.55	100	3.58 %	1.97 %	7.56 %	
13	Exit Short	long	2012-09-12 13:15	5406.55	100	-13675.00 -2.59 %	-15445.00	5410.00	14870.00 2.82 %
13	Entry Short	short	2012-08-30 09:15	5269.80				1.03 %	2.82 %
12	Exit Long	short	2012-08-30 09:15	5269.80	100	7340.00	-1770.00	25220.00	3175.00 0.61 %
12	Entry Long	long	2012-08-03 09:15	5196.40	100	1.41 %	0.74 %	4.85 %	
11	Exit Short	long	2012-08-03 09:15	5196.40	100	555.00		16955.00	5580.00 1.07 %
	Entry Short	short	2012-07-18 09:15	5201.95	100	0.11 %	0.06 %	3.26 %	
10	Exit Long	short	2012-07-18 09:15	5201.95	100	17730.00	-9665.00	32390.00	2985.00 0.59 %
	Entry Long	long	2012-06-08 13:15	5024.65	100	3.53 %	1.82 %	6.45 %	
9	Exit Short	long	2012-06-08 13:15	5024.65	100	-14370.00	-27395.00	3325.00	17870.00
	Entry Short	short	2012-06-05 13:15	4880.95	100			0.68 %	
8	Exit Long	short	2012-06-05 13:15	4880.95	100	-8055.00	-13025.00	2075.00	19115.00
	Entry Long	long	2012-05-30 09:15	4961.50	100	<b>−1.62</b> %	-0.81 %	0.42 %	3.85 %

#### **Volatility strategies**

This strategy use the momentum of market. It is very useful in futures and the rally can fetch you very high returns







Performance metric	S&P 500 ETF (SPY)	Nasdaq 100 ETF (QQQ)
First trade	2018-08-06 12:50	2018-08-06 12:50
Last trade	2018-11-02 15:55	2018-11-02 15:50
Time frame	5 minutes	5 minutes
Net profit	-\$3,959	-\$4,568
Gross profit	\$6,629	\$5,502
Gross loss	-\$10,588	-\$10,070
Max drawdown	\$5,180	\$5,463
Profit factor	0.626	0.546
Total trades	374	367
Win percentage	27.81%	30.52%
Avg trade	-\$10.59	-\$12.45
Avg win trade	\$63.74	\$49.12
Avg losing trade	-\$39.21	-\$39.49
Win/loss ratio	1.625	1.244
Commission paid	\$3,504	\$3,448
Slippage	2 ticks	2 ticks





#### PRICE ACTION STRATEGIES

This strategies follow trends in moving averages, channel breakouts, price level movements, and related <u>technical</u> <u>indicators</u>. There we have backtested one of trend name as moving average.





Performance metric	SPY (S&P 500 ETF)	QQQ (Nasdaq 100 ETF)
First trade	1993-03-02	1999-06-02
Last trade	2018-05-02	2017-09-05
Time frame	1 day	1 day
Net profit	-\$2,311	-\$3,547
Gross profit	\$13,229	\$4,404
Gross loss	-\$15,540	-\$7,951
Max drawdown	\$7,341	\$4,474
Profit factor	0.851	0.982
Total trades	66	40
Win percentage	50%	45%
Avg trade	-\$35.02	-\$88.68
Avg win trade	\$400.88	\$244.67
Avg losing trade	-\$470.91	-\$361.41
Win/loss ratio	0.851	o.677
Commission paid	\$952	\$600
Slippage	2 ticks	2 ticks





### Conclusions

Since more and more financial awareness is spreading, people tend to incline themselves towards Algo trading as it does not require a lot of time and is very easy to understand. The freelancing industry is also booming so coding strategy will be easier for not coding background people.



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# Thank You