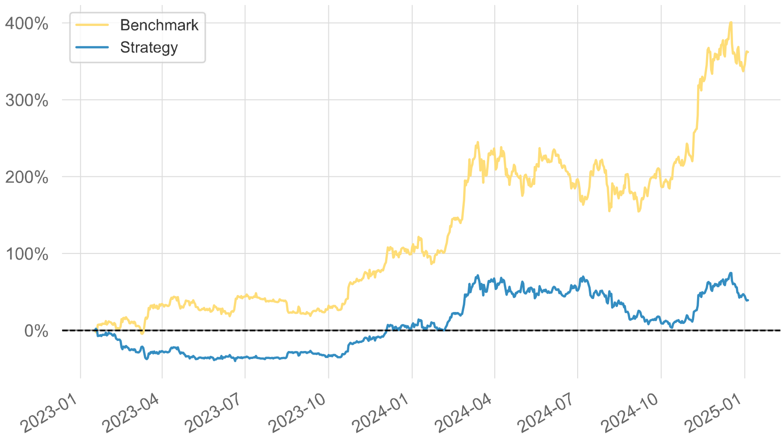
EMA Crossover Strategy Backtest

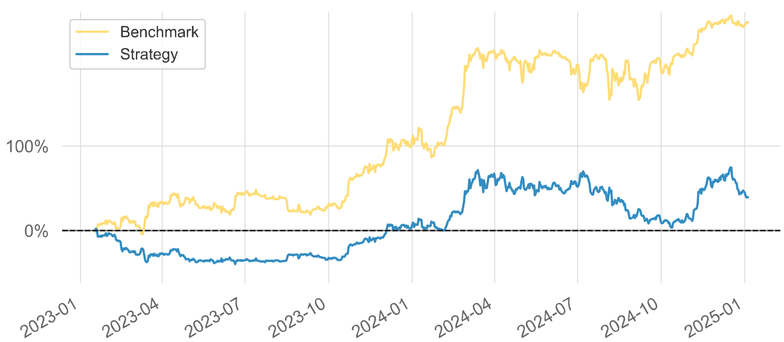
17 Jan, 2023 - 4 Jan, 2025

Benchmark is BENCHMARK | Generated by QuantStats (v. 0.0.62)

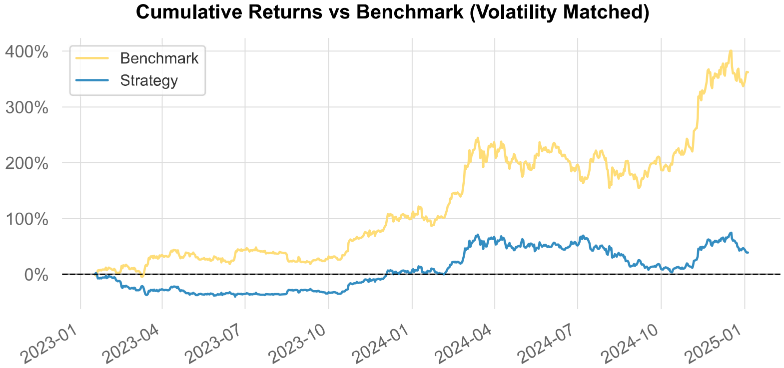
Cumulative Returns vs Benchmark



Cumulative Returns vs Benchmark (Log Scaled)



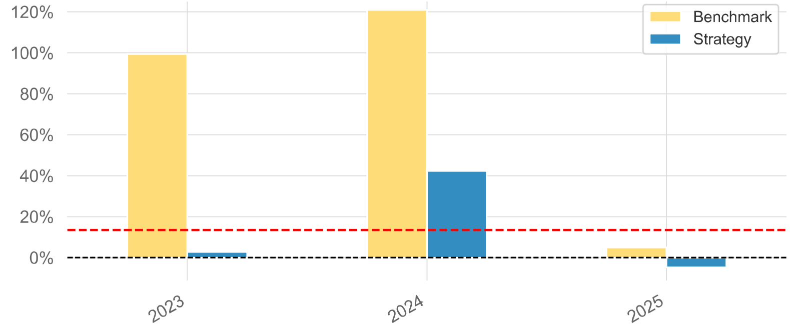
Cumulative Returns vs Benchmark (Volatility Matched)



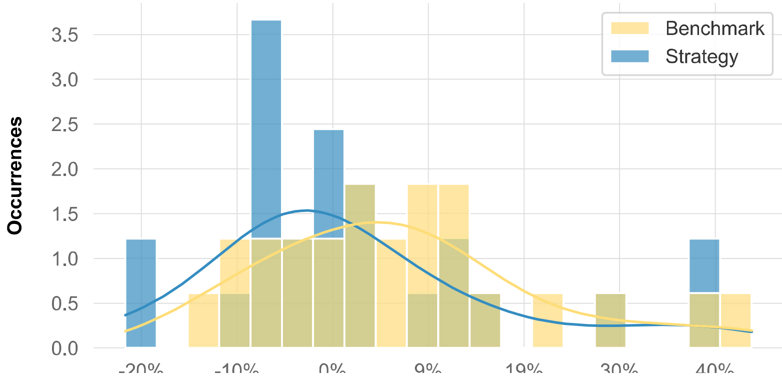
EOY Returns vs Benchmark

Key Performance Metrics

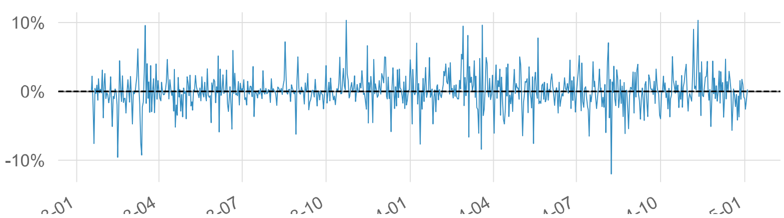
Metric	Benchmark	Strategy
Risk-Free Rate	0.0%	0.0%
Time in Market	100.0%	100.0%
Cumulative Return	362.22%	39.26%
CAGR﹪	71.14%	12.33%
Sharpe	1.52	0.49
Prob. Sharpe Ratio	99.59%	79.53%
Smart Sharpe	1.48	0.47
Sortino	2.51	0.72
Smart Sortino	2.44	0.69
Sortino/√2	1.78	0.51
Smart Sortino/√2	1.73	0.49
Omega	1.09	1.09
Max Drawdown	-26.18%	-41.27%
Longest DD Days	237	320
Volatility (ann.)	40.63%	40.79%
R^2	0.07	0.07
Information Ratio	-0.05	-0.05
Calmar	2.72	0.3
Skew	0.62	0.06
Kurtosis	2.63	2.82
Expected Daily	0.21%	0.05%
Expected Monthly	6.31%	1.33%
Expected Yearly	66.58%	11.67%
Kelly Criterion	12.72%	11.74%
Risk of Ruin	0.0%	0.0%
Daily Value-at-Risk	-3.96%	-4.15%
Expected Shortfall (cVaR)	-3.96%	-4.15%
Max Consecutive Wins	8	8



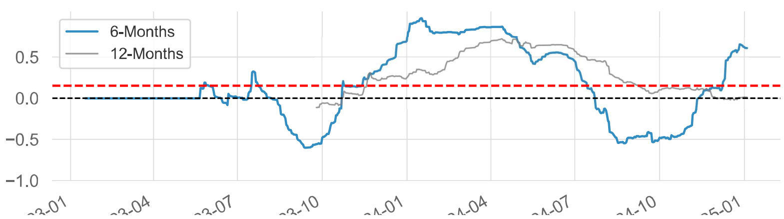
Distribution of Monthly Returns



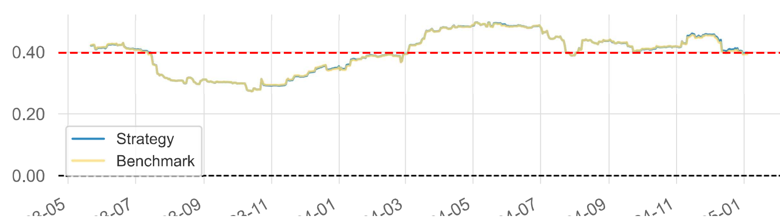
Daily Active Returns



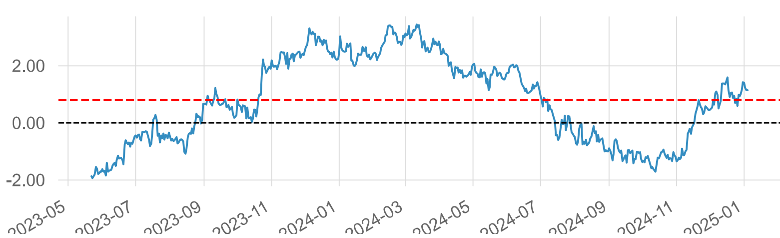
Rolling Beta to Benchmark



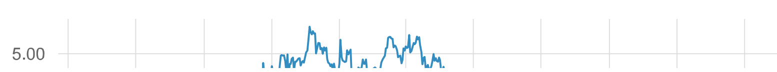
Rolling Volatility (6-Months)



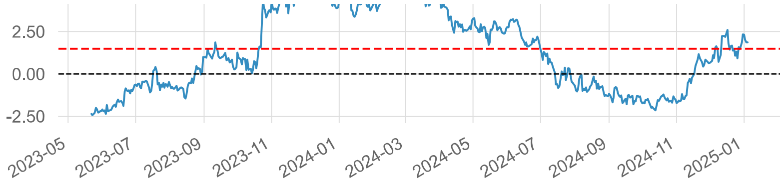
Rolling Sharpe (6-Months)



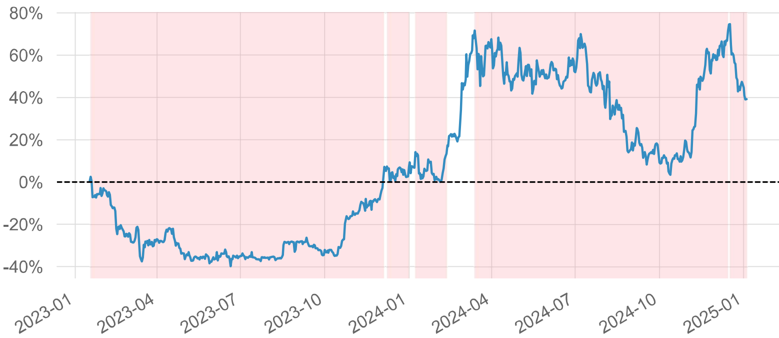
Rolling Sortino (6-Months)



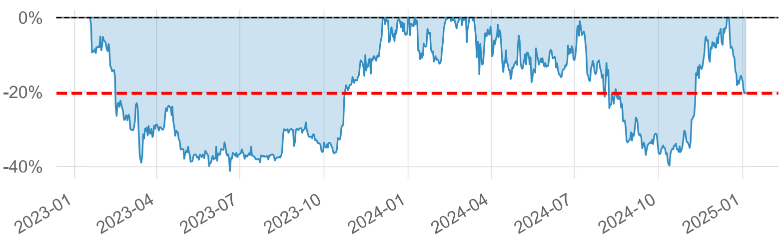
Metric	Benchmark	Strategy
Max Consecutive Losses	8	7
Gain/Pain Ratio	0.32	0.09
Gain/Pain (1M)	3.29	0.58
Payoff Ratio	1.3	1.3
Profit Factor	1.32	1.09
Common Sense Ratio	1.64	1.2
CPC Index	0.87	0.71
Tail Ratio	1.24	1.1
Outlier Win Ratio	4.21	4.53
Outlier Loss Ratio	4.28	3.91
MTD	4.87%	-4.74%
3M	61.2%	27.81%
6M	62.79%	-12.22%
YTD	4.87%	-4.74%
1Y	128.49%	33.69%
3Y (ann.)	71.14%	12.33%
5Y (ann.)	71.14%	12.33%
10Y (ann.)	71.14%	12.33%
All-time (ann.)	71.14%	12.33%
Best Day	12.0%	10.33%
Worst Day	-8.43%	-12.0%
Best Month	43.77%	40.28%
Worst Month	-15.03%	-21.69%
Best Year	121.0%	42.35%
Worst Year	4.87%	-4.74%
Avg. Drawdown	-4.67%	-10.83%
Avg. Drawdown Days	14	53
Recovery Factor	6.74	1.38
Ulcer Index	0.1	0.24
Serenity Index	2.36	0.14
Avg. Up Month	21.24%	18.42%
Avg. Down Month	-6.34%	-10.03%
Win Days	50.63%	50.07%
Win Month	68.0%	40.0%



Strategy - Worst 5 Drawdown Periods

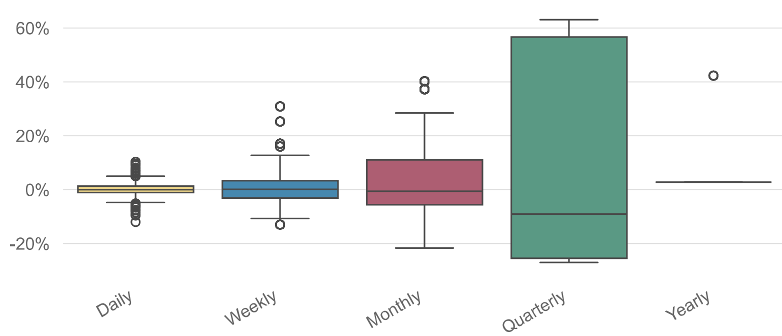


Underwater Plot



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2023	-14.51	-21.68	-24.61	-11.99	2.76	-9.90	3.47	22.38	-12.35	0.00	0.00	0.00
2024	-0.97	-3.49	0.00	8.96	-16.78	9.50	-8.71	-10.97	-9.01	-9.18	0.00	-4.68
2025	-9.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Strategy - Return Quantiles



Metric	Benchmark	Strategy
Win Quarter	77.78%	44.44%
Win Year	100.0%	66.67%
Beta	-	0.26
Alpha	-	0.04
Correlation	-	25.54%
Treynor Ratio	-	153.1%

EOY Returns vs Benchmark

Year	Benchmark	Strategy	Multiplier	Won
2023	99.43%	2.70%	0.03	-
2024	121.00%	42.35%	0.35	-
2025	4.87%	-4.74%	-0.97	-

Worst 10 Drawdowns

Started	Recovered	Drawdown	Days
2023-01-19	2023-12-04	-41.27%	320
2024-03-14	2024-12-14	-39.78%	276
2024-12-18	2025-01-04	-20.43%	18
2024-01-09	2024-02-11	-12.40%	34
2023-12-09	2023-12-31	-6.66%	23
2024-03-05	2024-03-07	-6.62%	3
2024-01-03	2024-01-07	-4.72%	5
2024-02-21	2024-02-25	-2.93%	5
2024-02-29	2024-03-02	-2.08%	3
2023-12-06	2023-12-07	-1.78%	2