

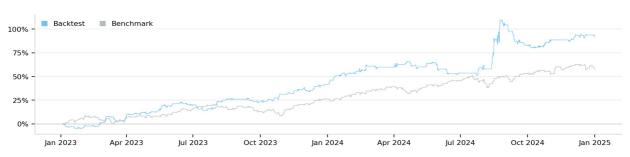
## Strategy Description

Weekly statistical arbitrage strategy. PCA is performed on the log prices of technology assets — selected by volume — over the past month. Principal components meeting a specified explained variance ratio are retrieved as factors. Assets are regressed against these factors and residuals are measured. A Kalman filter is applied to reduce noise in the residuals and then Z-scores are computed. Reversion signals occur when the absolute value of a Z-score — with a RSI adjustment for robustness — exceeds a threshold. EGARCH is used to track the conditional volatility of the industry ETF — QQQ — which then serves to dynamically alter the Z-score threshold. The industry regime is detected using ARIMA to ensure that reversion trades are not placed in trending conditions — long or short QQQ in those instances.

#### **Key Statistics Runtime Days** 731 Drawdown 14.1% Probabilistic SR Turnover 22% 88% CAGR 38.7% Sharpe Ratio 1.4 Capacity (USD) 3.6M Sortino Ratio 1.9 Trades per Day 2.0 Information Ratio 0.5 Drawdown Recovery 116

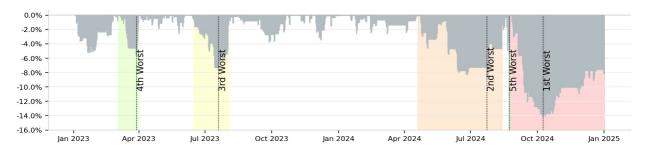


#### **Cumulative Returns**



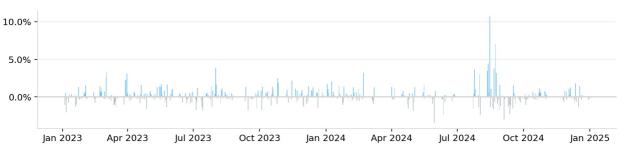


#### Drawdown

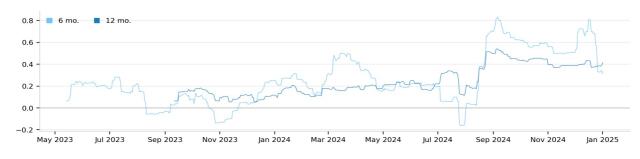




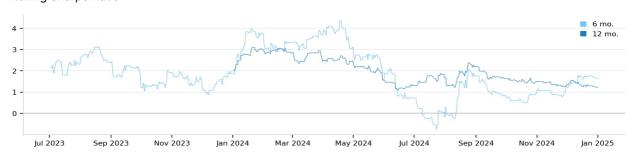




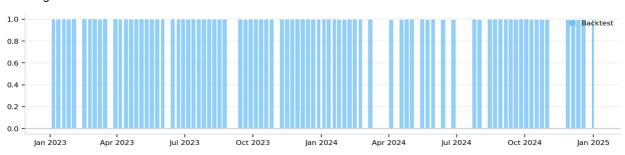
## Rolling Portfolio Beta

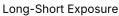


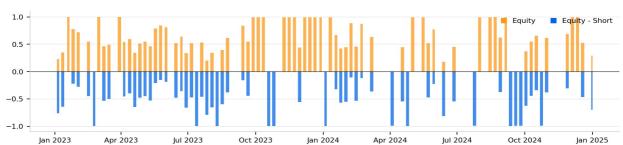
# Rolling Sharpe Ratio



#### Leverage









Russia Invades Ukraine 2022-2023

Al Boom 2022-Present

