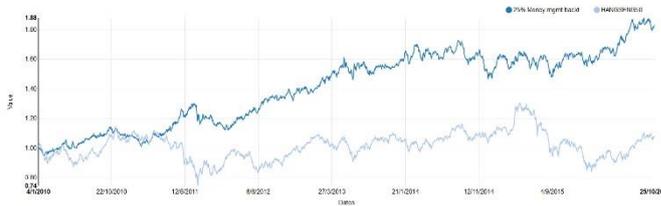# A Quant based augmentative strategy for portfolio composition

HANGSENG50 risk free rate: 4.00% a year	Final Value	Excess RFR (%)	Sharpe Ratio	Sortino Ratio	Max Drawdown (%)	Max Recov Days	Beta	Avg. Turnover (%)
HANGSENG50	1.08	-2.76	-0.15	-0.20	35.59	930	-	-
25% Money mgmt backtest	1.83	5.56	0.43	0.60	15.08	440	0.28	9.92

ALATRA has been designed to add complimentary algorithmic trading strategies to an institution's own strategy.

ALATRA's underlying algorithms focus on the entire distribution rather than a few statistical moments, leading to reduced downside risk and enhancing upside potential. ALATRA analyses a portfolio and then rebalances this to a new portfolio using advanced mathematical models that consider future uncertainties in asset return, interest rate, inflation and liabilities. It identifies and catches signs of bubbles, market trends, overconfidence in M&A deals, and other useful indicators, in any language, and across jurisdictions. Firms also receive a daily buy/sell trading signal.

Key features

Data used

•   Thomson Reuters market and news data

Mathematical model

•   Proven academic concept: second order stochastic dominance

•   Focus on entire distribution rather than statistical moments

•   Purpose is to reduce downside risk and achieve upside potential

•   Money management: volatility reduction through dynamically managing stake

Market Sentiment

•   Sentiment is computed for each asset

•   Current impact values (positive/negative) are derived

•   Impact used to preselect assets for investing long/short

•   Impact used to predict future asset returns

Regime switching

•   Hidden Markov models (e.g. Baum-Welch, Viterbi algorithms) are applied to automatically detect general strategy parameters (e.g. long/short parameters)
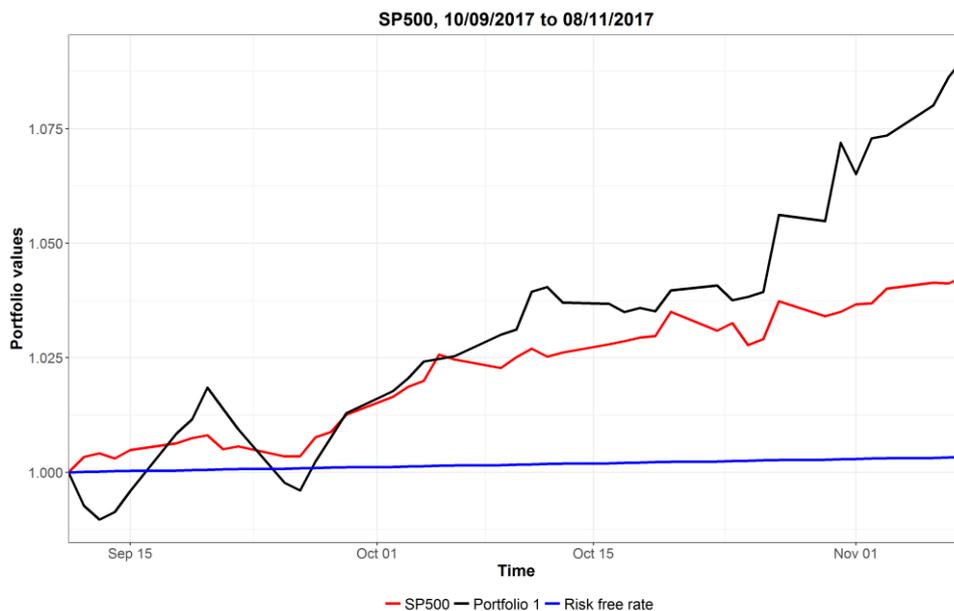
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Advanced
Logic Analytics

Bootstrapping asset returns

•   Simple and moving block bootstrapping

Signal

•   Daily portfolio trade signal

•   Signal gives recommended portfolio composition (long/short)

S & P 5 0 0   L i v e   V i r t u a l   T r a d i n g

SP500, 10/09/2017 to 08/11/2017

Portfolio	Final value	Excess RFR (%)	Sharpe ratio	Sortino ratio	Max draw-down (%)	Max. rec. days	Beta	Av. turnover
SP500	1.04	26.54	5.80	10.94	0.70	5		
Portfolio 1	1.09	66.18	5.66	11.48	2.21	8	0.80	89.65

Founded in 2015 and backed by more than 10 years of academic research in the fields of behavioural science and data analytics, Advanced Logic Analytics offers financial markets firms unique algorithms and powerful analytical solutions to help them find Alpha in data.

Different algorithms, powered by artificial intelligence, are used to drive multiple products within the OneLogic suite of solutions, including: Trading Strategies, Market Sentiment and B2B Robo-Advisor. These solutions help firms capitalise on market swings, reduce downside investment risk and achieve upside potential for their portfolios.

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