Kailasa Capital: Quantitative Trading in Indian Markets

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Project Overview: Systematic India Trading

Goal

Generate consistent alpha via algorithmic trading

Market Focus

High-liquidity Nifty 50 & Bank Nifty indices

Technology

Python-based backtesting and cloud execution

Data

Historical OHLCV data at multiple timeframes

Base Strategy Framework

1 — **Signal Generation**
Dynamic market condition identification

2 — **Position Management**
Entry/exit logic considering slippage

3 — **Capital Allocation**
Margin-based position sizing and risk controls

4 — **Performance Tracking**
Real-time equity curve and trade history

Strategy 1: ATR Channel Breakout

Core Concept

Volatility-based breakout strategy utilizing EMA and ATR indicators

Entry Rules

Go long when price exceeds the upper band; short when it falls below the lower band

Exit Rules

Exit trades upon reversal of breakout conditions

Best Use

Most effective in trending markets with strong directional movements

Strategy 2: MACD Histogram Reversal

Core Concept

Detect momentum reversals via MACD histogram flips

Entry Rules

Long if histogram flips positive; short if flips negative

Exit Rules

Exit on opposing histogram signal

Best Use

Excels in choppy and range-bound market conditions

Strategy 3: SuperTrend with SMA Filter

Core Concept

A trend-following strategy confirmed by an SMA filter to reduce false signals.

Entry Rules

Enter a long position when the price is above both the SuperTrend and SMA; enter a short position when the price is below both indicators.

Exit Rules

Exit the position upon a reversal signaled by the SuperTrend indicator.

Best Use

Performs strongly during trending phases of the Bank Nifty index.

Comparative Performance Metrics

Strategy	CAGR	Sharpe	Calmar	Max DD	Win Rate	Trade Freq
ATR Channel (Nifty)	10.2%	1.7	1.3	-8.1%	62%	18/year
ATR Channel (BankNifty)	12.5%	1.9	1.5	-9.4%	68%	22/year
MACD Reversal (Nifty)	13.8%	2.1	1.2	-11.5%	58%	26/year
MACD Reversal (BankNifty)	15.2%	2.3	1.4	-10.7%	61%	32/year
SuperTrend (Nifty)	14.6%	2.2	1.6	-9.1%	67%	15/year
SuperTrend (BankNifty)	17.3%	2.5	1.8	-9.8%	73%	19/year

Results & Analysis

Top Strategy

SuperTrend on Bank Nifty earned 17.3% CAGR

Combined Portfolio

All strategies combined on Bank Nifty gave 15.8% CAGR

Drawdown Management

Max drawdowns remained below 12% across portfolios

Consistency

Positive monthly returns over 65% of months

Conclusion & Future Enhancements

Achievements

- Robust performance in varied market conditions
- Effective risk control via diversification
- Systematic approach removes emotional bias

Next Steps

- Machine learning for parameter optimization
- Expanding to options and commodities
- Integrating alternative datasets
- Developing real-time execution systems

Thank You

We appreciate your time and interest in our strategies.