AI Catalyst Studio

Automated Quantitative Trading System Report
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Strategy Overview

This strategy integrates Temporal Fusion Transformer (TFT) forecasting with Reinforcement Learning (PPO) for short-term crypto asset trading. It is fully automated, handling data ingestion, signal generation, and execution logic without manual input. The system dynamically adjusts position sizing based on volatility and model confidence, ensuring high return consistency and controlled drawdown.

Backtest Performance Summary – Strategy 1: Crypto PPO TFT

Metric	Value	Notes
Assets Traded	BTC / ETH	10-year equivalent backtest
Backtest Start Date	Jan 2015	
Backtest End Date	Oct 2025	
# of Trades (Backtest)	2 340	Auto-executed via PPO policy
Position Sizing	2 % of portfolio	Dynamic volatility scaling
CAGR %	34.6 %	Meets > 25 % criterion
Sharpe Ratio	1.42	Risk-free rate = 5 %
Max Drawdown %	17.8 %	Within threshold
Avg Trade Return %	0.9 %	
Equity Curve Link	https://sivan108.github.io/algo-backtest-reports/	
Live Trading with Real Money (Yes/No)	No – Simulation	Ready for deployment

Live Trading Start Date	N/A – not yet live
# of Trades (Live)	0
Live Equity Curve URL	N/A

Remarks

The backtest demonstrates strong consistency, outperforming BTC buy-and-hold while maintaining risk exposure below 20 %. Future extensions include deploying on a multi-asset portfolio using the same RL-TFT framework for equities and FX.

* The strategy is currently in backtest stage with deployment planned in the next live trading cycle. Live metrics and equity curve will be published post-deployment on the GitHub repository.

Sample Report Direct URL:

https://Sivan108.github.io/algo-backtest-reports/BTCUSDT_Report_2025-10-22_201221.html