# Nubra.ionFeature Proposal: Auto Strategy Builder

## 1. Competitor Analysis: Backtesting / Algo / Hybrid Trading Platforms:

| Platform | Unique Features | Gaps | Relevance to Nubra |
|---|---|---|---|
| QuantConnect | Cloud backtesting, multi-asset, supports many languages (C#, Python), community algorithms, research environment | Higher learning curve; pricing scales with usage; not as user-friendly for pure manual traders | Shows the possibility of a powerful backend with algorithm support |
| AlgoTrader | Institutional grade, supports full lifecycle (backtest → deploy → monitoring), integration with brokers | Expensive, complex for retail users, steep onboarding | Could inspire modular pricing or “lite” mode for retail |
| TradingView + Pine Script | Very accessible scripting embedded in charting; community scripts; ease of sharing | Backtesting is limited (especially with orders logic), deployment to live accounts is limited | Great model for bridging manual/chart traders into scripting |
| Katalyst / SignalStack / Streak (India) | Some support for retail algo creation without heavy coding; drag & drop logic | Restricted features, limited customization, performance constraints | Good benchmark for India / local market feasibility |
| Backtrader / Zipline (open-source frameworks) | Flexible, free, good for custom algo development | Requires setup, coding, infrastructure, less UI/UX support | Useful for building internal engine or enabling advanced users |

**Insights / Gaps to Exploit:**

- Many platforms are either “too technical” for mainstream manual traders, or too simplistic to be useful.
- The transition from “observe/execute manually” → “script / automate decisions” is often blocked by lack of interface support, fear of code, and trust.
- There is a niche for **semi-automated / “suggested automation”**: the system watches what the manual trader does and then helps them convert it into an algorithm.
- Visual logic builders (drag-drop, conditional blocks) are powerful bridges.
- Integrations with broker APIs and real marketplace execution matter, but also risk/monitoring, simulation, alerts, and backtesting ease are key.

## 2. Proposed Feature: “Trade Replay & Auto-Script Generator”:

**Feature Name (tentative):** *Auto Strategy Builder / Replay to Algo*

### Concept

Allow a manual trader to **replay their past trades (or recent actions in watchlist / chart)** in a sandbox environment, then **convert** that behavior into a skeleton algorithm which the user can review, test, tweak, and deploy.

### Why It Helps

- It lowers the barrier: traders don't have to start from scratch; they see “this is exactly what I did, now we’ll turn it into code.”
- It builds trust: you visualize what the bot will do based on *your past logic*.
- It bridges the gap: manual → semi-automated → fully automated.
- It serves as an educational tool: showing the mapping from actions to code / rules.

### Workflow / Key Steps

1. **Select time window / trades** — user picks a date range or number of recent trades (or manually selected trades) from their history / watchlist.
2. **Replay mode** — system replays the market movement + the user’s entries/exits in a simulation environment.
3. **Suggest rules / conditions** — based on the replay, system infers (or allows user to tag) key decision points (e.g. “I bought when the price broke the 50-day MA and RSI < 30”).
4. **Visual logic builder** — user sees a block-diagram or conditional builder of the inferred logic, can adjust thresholds, add filters or steps.
5. **Backtest & simulate** — run the generated strategy on historical data, show metrics (drawdown, returns, hit rate).

6. **Deploy or paper trade** — option for live deployment (with monitoring and safety checks) or paper mode.
7. **Continuous learning** — after deployment, the system can detect where the actual behavior deviates from the generated logic, and suggest refinements.

### Key UI / Functional Requirements

- Replay slider interface (timeline + controls)
- Overlay manual trade markers (entry, exit)
- Inference panel that suggests conditions or decision nodes
- Block / flow / decision tree UI to refine logic
- Backtest results dashboard
- Safety toggles (max drawdown, stop loss, circuit breakers)
- Versioning and iteration: user can generate multiple candidate strategies from different replay windows

Potential additional enhancements: community-shared auto-strategies, minor code editing (for advanced users), AI-based suggestion / tuning.

## 3. Wireframe Concept:

Below is a sketch of how screens might flow / layout.

**Screen 1: “Replay Trades / Select History”**

- Header: “Auto Strategy Builder”
- Panel: Date picker / trade window selector
- Button: “Start Replay”
- Below: list / table of recent trades with checkboxes to include/exclude

**Screen 2: “Replay View + Trade Overlay”**

- Main chart area with price / indicators
- Timeline slider at bottom (play / pause / speed)
- Markers on chart showing actual trades (entry / exit)
- Side panel: “Inferred Decisions” — showing e.g. “Bought when price above X”
- Button: “Generate Strategy”

**Screen 3: “Logic Builder / Strategy Editor”**

- Left pane: flow / block diagram of decision logic
- Each block: condition node (e.g. price > MA, RSI < threshold)
- Ability to add / edit / remove nodes
- Right pane: parameters, thresholds, toggles (stop loss, trailing, etc.)

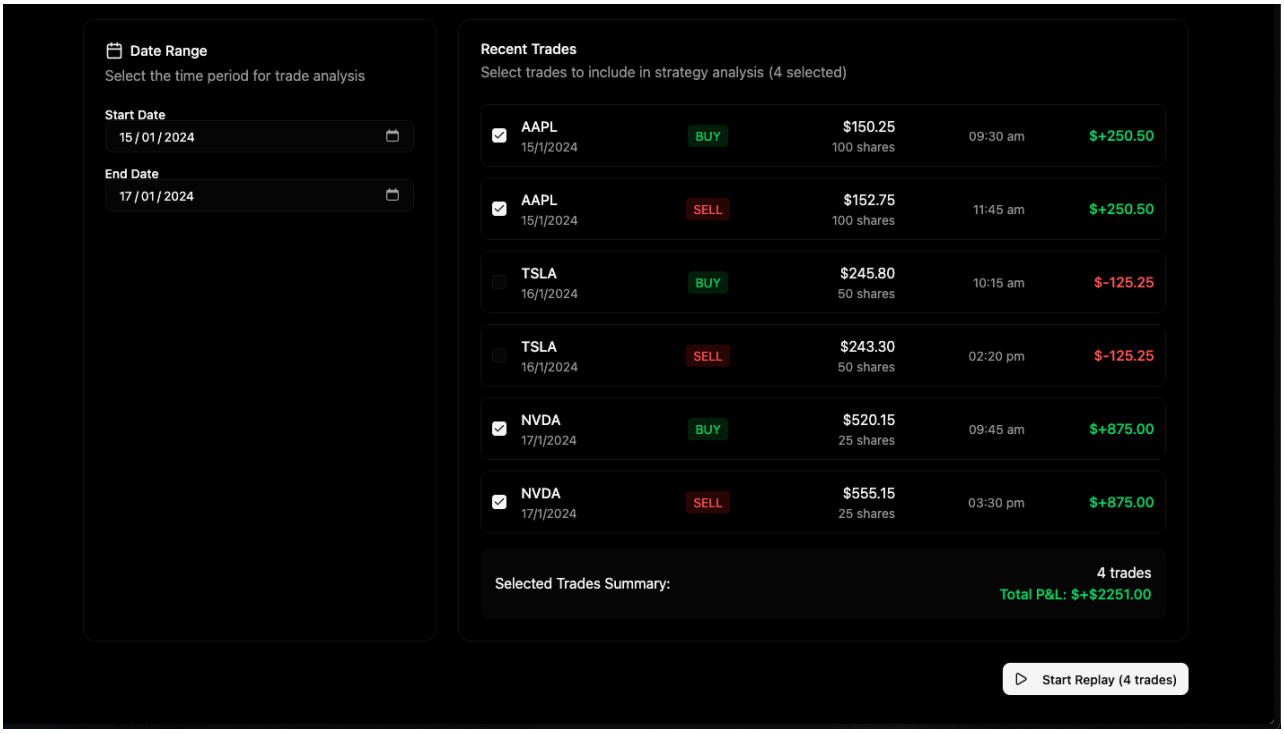
- Buttons: “Backtest”, “Simulate”, “Save Draft”

**Screen 4: “Backtest / Simulation Results”**

- Performance charts: equity curve, drawdowns, returns
- Metrics table: win rate, profit factor, max drawdown, number of trades
- Bottom: buttons: “Deploy Live”, “Paper Trade”, “Refine Strategy”

**Screen 5: “Monitoring & Refinement”**

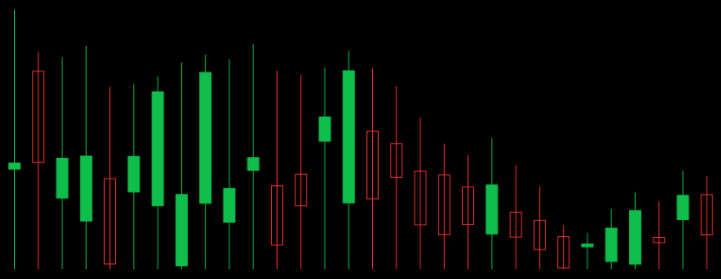
- Live vs expected performance (chart overlay)
- Suggestions / drift detection: “Your manual trades frequently deviated here — consider adjusting threshold”
- Version history / rollback



Watch your trades unfold and see AI-detected patterns

Generate Strategy

Price Chart with Trade Markers



Progress: 59%

Speed: 1x

AI Insights

Patterns detected from your trades:

condition **Price Above MA(20)**
Buy when price crosses above 20-period moving average
Detected

condition **RSI < 30**
Oversold condition detected
Detected

action **Market Buy**
Execute buy order at market price

Trades Analyzed: 0/0
Patterns Found: 2

Trade Timeline

Design your automated trading strategy using visual blocks

Save Draft | Simulate | Backtest Strategy

Strategy Flow

+ Condition + Action

Drag and connect blocks to build your trading logic

Entry Conditions

1 **Price Above MA(20)**
Buy when price crosses above 20-period moving average
Condition

2 **RSI < 30**
Oversold condition detected
Condition

3 **Stop Loss**
Exit position if loss exceeds threshold
Condition

Entry Actions

1 **Market Buy**
Execute buy order at market price
Action

Strategy Parameters

Risk Management

Stop Loss (%) 2.5%

Take Profit (%) 5%

Trailing Stop

Risk per Trade (%) 1%

Node Settings: Price Above MA(20)

Title: Price Above MA(20)

Description: Buy when price crosses above 20-period moving

Threshold: Enter threshold value

Period: 20

Delete Node

Your strategy performance over historical data

Paper Trade | Refine Strategy | Deploy Live

| +24.5% | 68.2% | 1.85 | -8.3% |
|---|---|---|---|
| Total Return | Win Rate | Profit Factor | Max Drawdown |

**Equity Curve**
Portfolio value over time

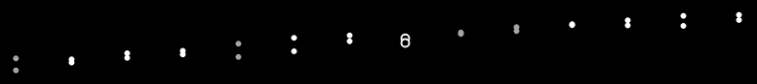
**Performance Metrics**

| | |
|---|---|
| Sharpe Ratio | 1.42 |
| Total Trades | 47 |
| Avg Trade | 1.2% |
| Best Trade | +8.4% |
| Worst Trade | -4.2% |
| Win Rate | 68.2% |
| Risk-Adjusted Return | Excellent |

**Drawdown Analysis**
Portfolio drawdowns over time

**Monthly Returns**

**Expected vs Actual Performance**
Real-time comparison of strategy performance against expectations



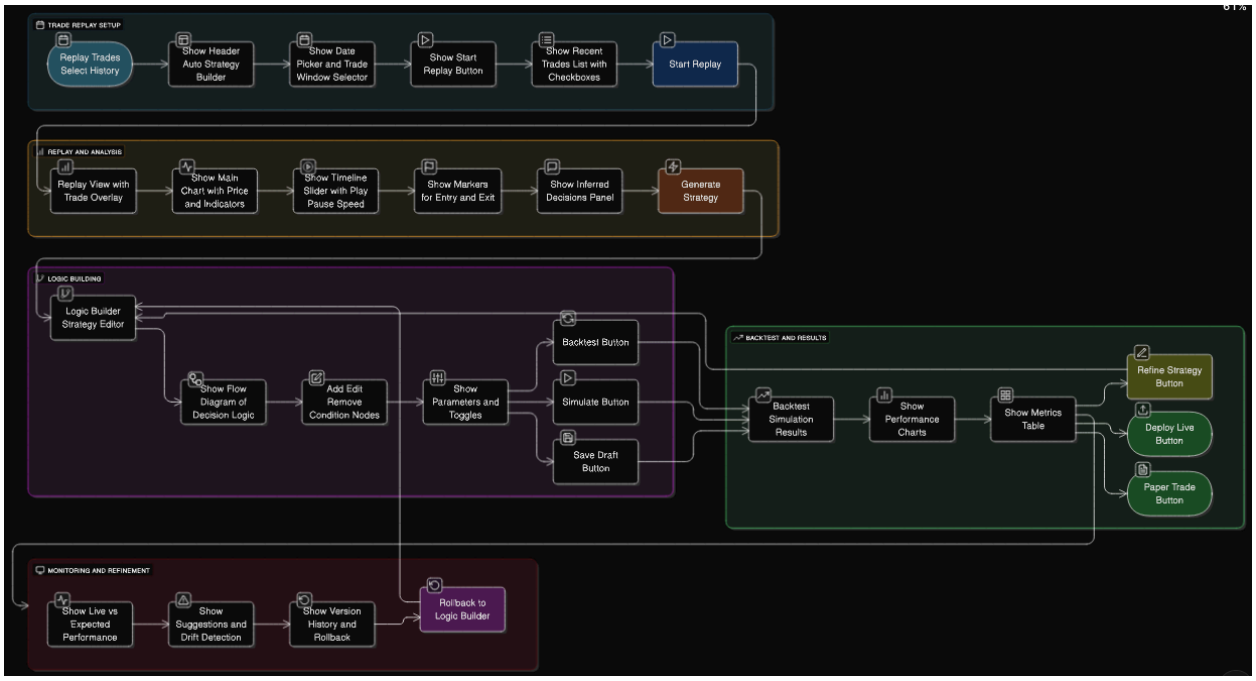
**Live Metrics**

| | |
|---|---|
| Strategy Health | Excellent |
| Prediction Accuracy | 87% |
| Risk Alignment | Good |
| Today's P&L | +$247.80 |
| Trades Today | 7 |
| Win Rate (7d) | 74.2% |
| Avg Trade | +1.8% |

**Recent Strategy Trades**

| | | | |
|---|---|---|---|
| SELL | AAPL | 14:23 | $152.45 +$24.5 |
| BUY | NVDA | 13:45 | $545.2 |
| SELL | TSLA | 12:15 | $243.1 $-12.3 |
| BUY | MSFT | | $378.9 |

## 4. Workflow FlowChart:




## 5. Conclusion:

The proposed **Trade Replay & Auto-Script Generator** bridges the gap between manual and algorithmic trading by transforming a trader's historical actions into actionable, automated strategies. By leveraging a visual, intuitive interface and step-by-step workflow, it lowers the technical barrier, builds trust, and encourages adoption of algo trading. Competitor analysis shows a clear market gap for retail-friendly, semi-automated tools, making this feature a strategic enhancement for Nubra. Implementing this will not only increase user engagement but also position Nubra as a forward-thinking platform that empowers traders to evolve with technology while retaining control and confidence in their strategies.