Why I Let a Robot Manage My Money

Building an Automated Trading System

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The Problem: Humans Are Terrible Investors

In early 2024, I watched my stock drop **15% in one day**.

I panicked. I sold everything.

Next week? It bounced back **20%**.

Why do we do this? Because we're human:

- We **panic** when prices drop
- We get **greedy** when prices rise
- We chase trends and follow tips

Most individual investors underperform a simple index fund.

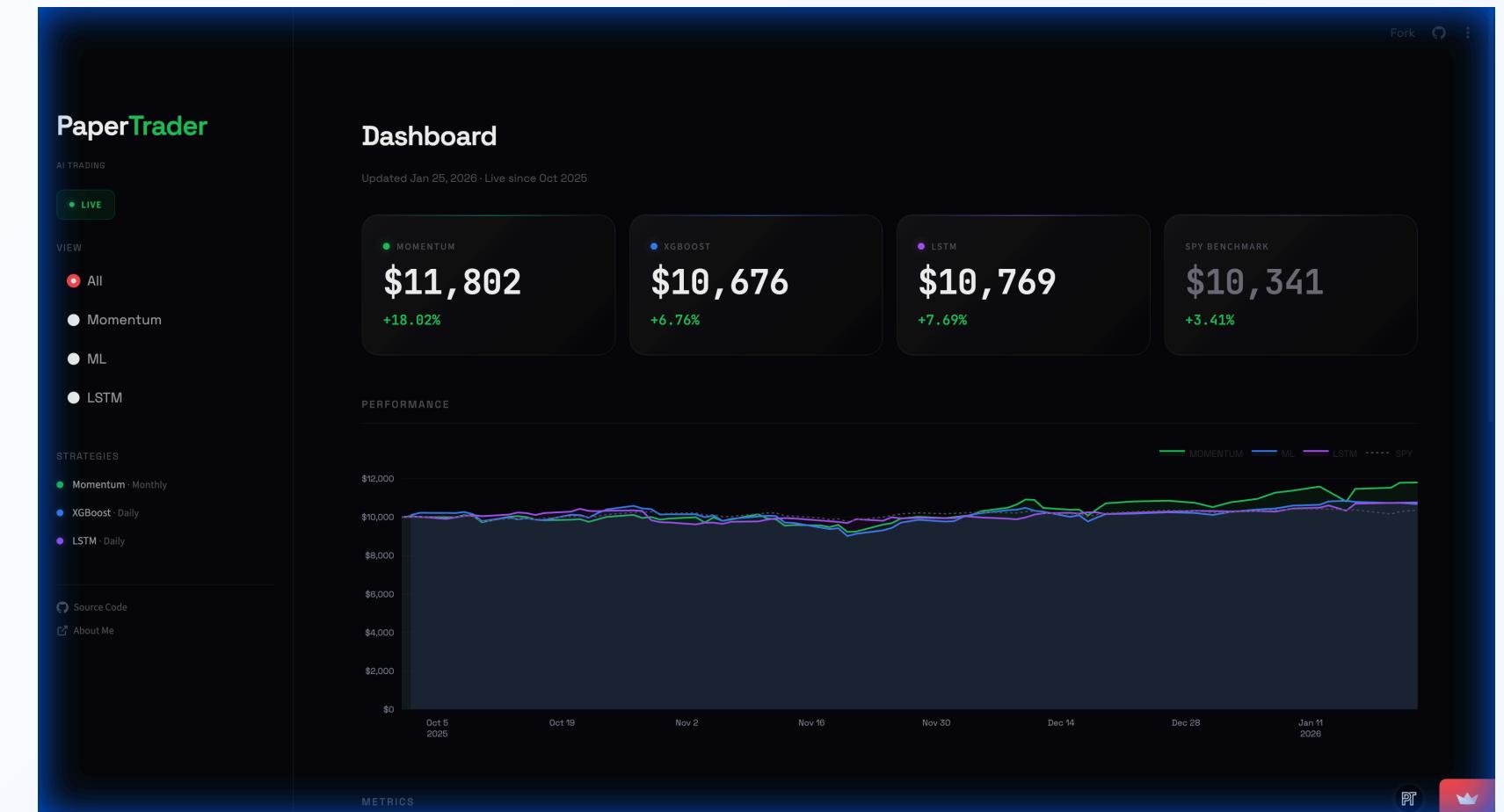# The Solution: Let a Robot Decide

What I Built

Paper Trader AI - Three strategies competing head-to-head:

1. **Momentum** - Follow the trend

2. **XGBoost** - ML pattern recognition

3. **LSTM** - Deep learning predictions

All trading S&P 500 stocks with fake money, real prices.

Think of it as a flight simulator for investing.

Live Dashboard

Paper Trader Dashboard

The Results: Simple Beats Complex

Key Performance

Strategy	Return
Momentum	**+18.0%**
XGBoost (ML)	+6.8%
LSTM	+7.7%
SPY Benchmark	+3.4%

The Hidden Lesson: XGBoost made **576 trades** vs Momentum's **50 trades**. More trades = more fees = lower returns. Simple wins.

Key Takeaways

1. Automation removes emotion, but not risk

    • The bot won't panic sell, but markets still change

2. Simple strategies often beat complex ones

    • My basic momentum strategy outperformed fancy ML models

3. Transaction costs are the silent killer

    • That "great" strategy might just be feeding the brokers

💡 The Bottom Line

Now when my portfolio drops, I remind myself:

The robot wouldn't care. Maybe I shouldn't either.

Thank You!

Questions?

🔗 **Live Dashboard:** paper-trader-ai.streamlit.app

📂 **GitHub:** github.com/PAT0216/paper-trader