Trading Strategy Report
Building a Multi-Product Algorithmic Trading System

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1 What I Built

Over the past two weeks, I developed an algorithmic trading system that trades across eight different financial products simultaneously. The system uses various trading strategies—from market making to statistical arbitrage—and processed over 10,001 trading timestamps. While the journey had its ups and downs (literally, with some significant drawdowns), the portfolio ended up making $3,388.50, which I'm pretty happy with considering the complexity involved.

The most exciting part was seeing how different strategies performed under various market conditions. Some strategies absolutely crushed it while others taught me valuable lessons about risk management.

2 PnL Chart Overview

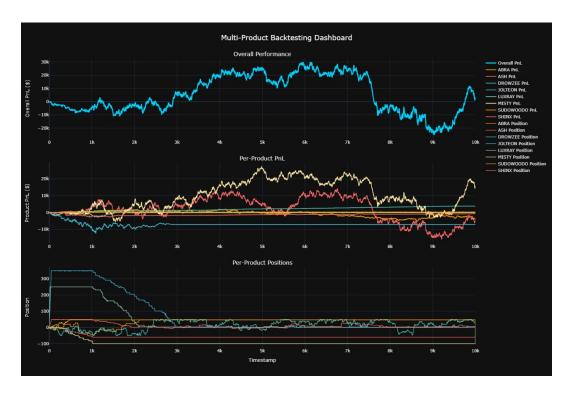Below is a snapshot of the portfolio's cumulative PnL over time:

Figure 1: Cumulative Portfolio PnL Over 10,001 Timestamps

3   How My Trading Strategies Work

3.1   Market Making on SUDOWOODO

I built a market making strategy that's basically like running a mini exchange. The idea is simple: I constantly quote both buy and sell prices around what I think the fair value should be (around $10,000 for this product). Here's how it works:

- When the market spread is wide, I jump in between the existing bids and asks to capture the spread

- When it's tight, I widen my quotes slightly to avoid getting picked off

- I scale down my position sizes as I get closer to my risk limits—no point in going all-in on one trade

The math behind position sizing is pretty straightforward:

$$\text{My Order Size} = \text{Base Size} \times \left(1 - \frac{|\text{Current Position}|}{\text{Position Limit}}\right) \tag{1}$$

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4 How Did I Do?

4.1 The Big Picture

What I Measured	Result
Products I Traded	8
Final Profit	$3,388.50
Best Day	$30,038.00
Worst Day	-$25,239.50
Biggest Drawdown	$55,277.50

Table 1: Overall Performance Summary

4.2 Product-by-Product Breakdown

Product	Final P&L	Best	Worst	Drawdown
ABRA	-$3,619.50	$2,114.50	-$4,982.50	$7,097.00
ASH	-$4,983.00	$14,277.00	-$15,873.00	$30,150.00
DROWZEE	$3,841.50	$3,866.50	$0.00	$3,866.50
JOLTEON	-$7,077.00	$448.00	-$12,513.00	$12,961.00
LUXRAY	-$114.50	$595.00	-$2,674.50	$3,269.50
SHINX	-$717.00	$242.00	-$2,801.00	$3,043.00
MISTY	$15,822.00	$27,422.00	-$5,478.00	$32,900.00
SUDOWOODO	$236.00	$400.50	-$39.00	$439.50

Table 2: Individual Product Performance

4.3 Position Limits

Product	Position Limit
SHINX	±50
LUXRAY	±250
JOLTEON	±350
ASH	±60
MISTY	±100
SUDOWOODO	±50
ABRA	±50
DROWZEE	±50

Table 3: Product-Specific Position Limits