# RSI Trading Strategy on Gold Futures **Developed by Saad Haouzia**

## Introduction

This is my first trading strategy as I begin my journey in algorithmic trading. The goal is to test a simple, rules-based system using the Relative Strength Index (RSI) indicator on Gold futures (GC=F). The strategy is meant to help me understand how to build, test, and evaluate trading strategies step by step

**Indicator Used:** Relative Strength Index (RSI) with a period of 14.

**Buy Rule:** Enter a trade when RSI falls below 30 (oversold condition). **Sell Rule**: Exit the trade when RSI rises above 70 (overbought condition). **Trade Direction:** Long-only strategy (buy → sell).

**Data Used:** Gold Futures (GC=F) with a 1-hour timeframe over the past 60 days.

### Why RSI?

The RSI is a momentum oscillator that measures the speed and change of price movements.

Values below 30 suggest that the market may be oversold, and a reversal to the upside could occur.

Values above 70 suggest that the market may be overbought, and a reversal to the downside could occur.

This makes RSI a simple but effective tool to identify possible entry and exit points.

# Backtest Results

**Total Trades**: [ 16 ]

**Winning Trades**: [ 12 ]

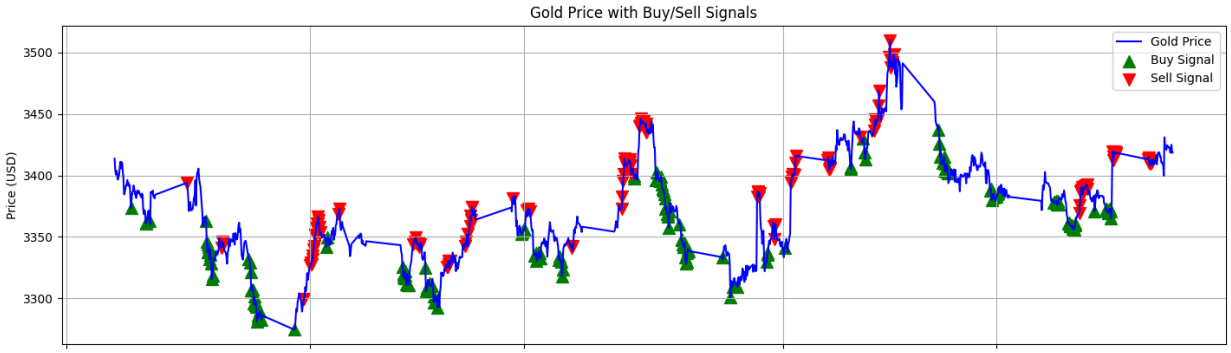
**Losing Trades**: [ 4 ]

**Win Rate**: [ 75.00 %]

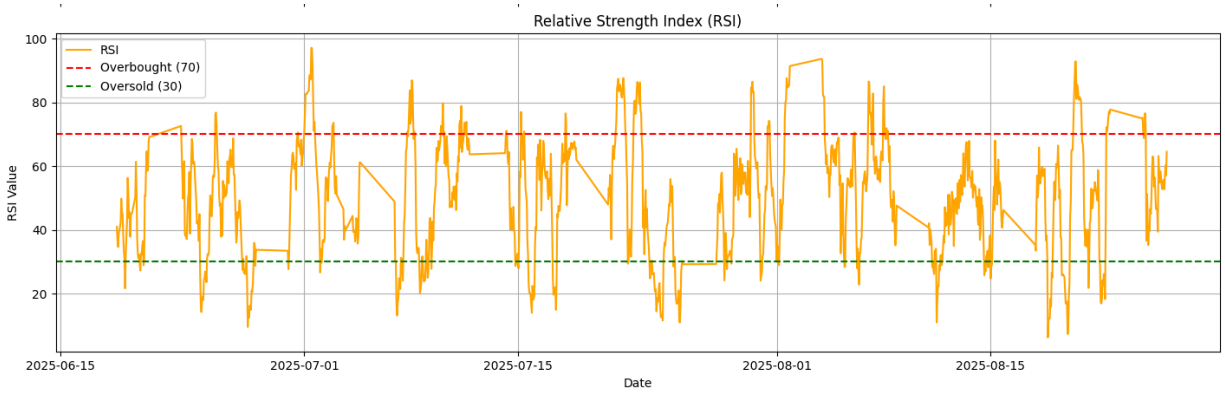
**Average Profit per Trade:** [ 0.30 %]

## Gold Price with Buy/Sell Signals

**The chart below shows Gold price movements with green arrows for buy signals and red arrows for sell signals.**



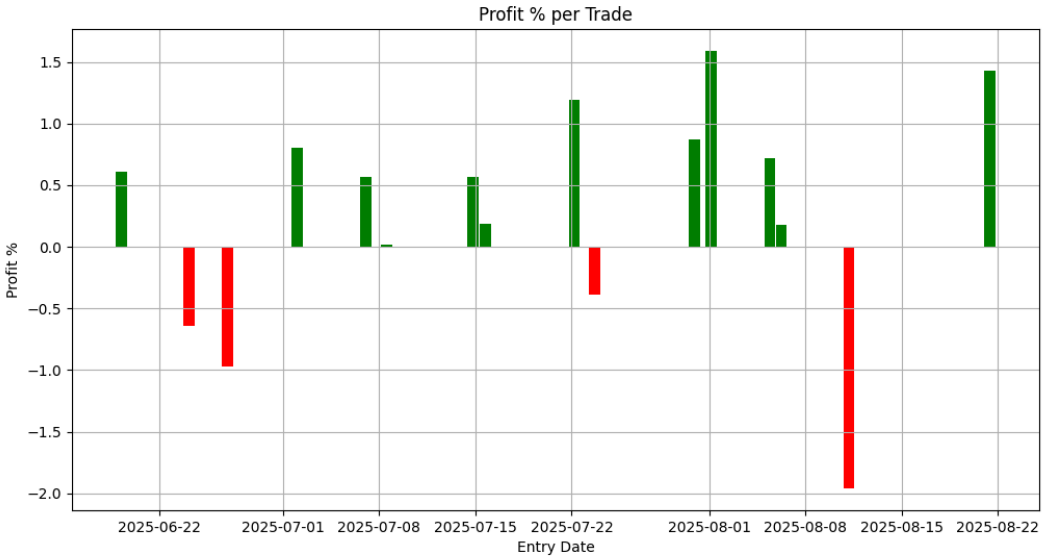

**The RSI indicator fluctuates between 0 and 100. Horizontal dashed lines mark the 30 (oversold) and 70 (overbought) lev**




**els.**

## Profit per Trade

The chart below shows the profit percentage for each trade. **Green bars** represent winning  trades, and **red bars** represent losing trades.




## Observations

The strategy generates multiple trades, but not all are profitable.

**Many small profits accumulate, but there are also losing trades when the RSI stays in oversold/overbought zones for long periods.**

Win rate and average profit per trade give a first idea of performance, but risk management (like stop-loss and take-profit rules) is missing.

# Conclusion

This simple RSI strategy is my first step in building systematic trading strategies. It allowed me to practice:

**Downloading financial data with Python**

**Calculating technical indicators**

**Generating buy/sell signals**

**Simulating trades and analyzing results**

**Visualizing performance with charts**

Even though the strategy is basic it provides a strong foundation for learning and improving  in algorithmic trading .