FULL REPORT

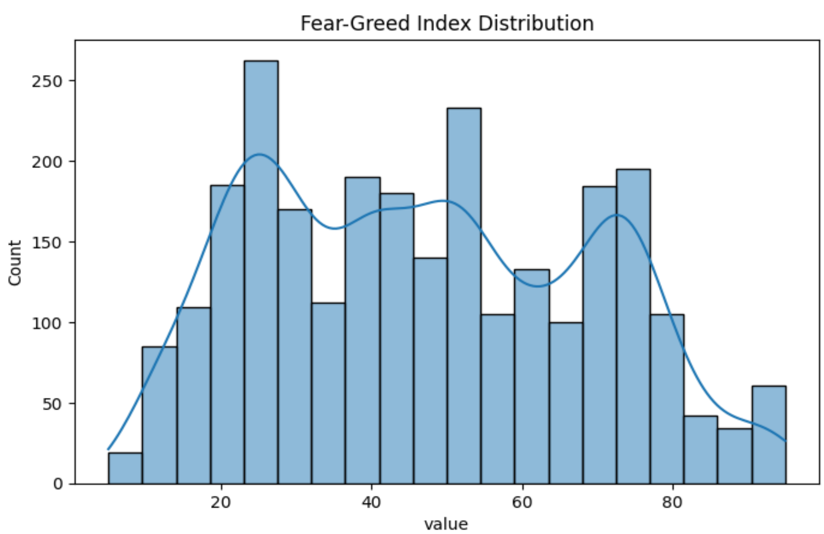
Trader Performance vs Bitcoin Market Sentiment (Fear & Greed Index)

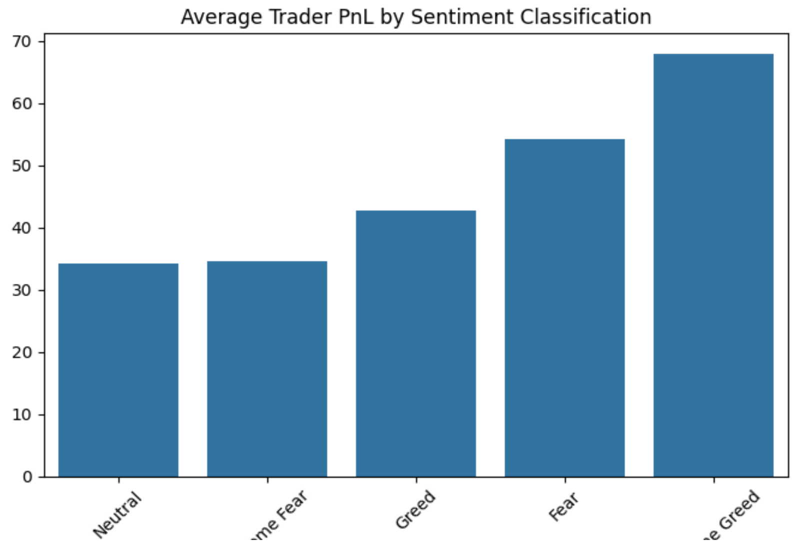
Introduction

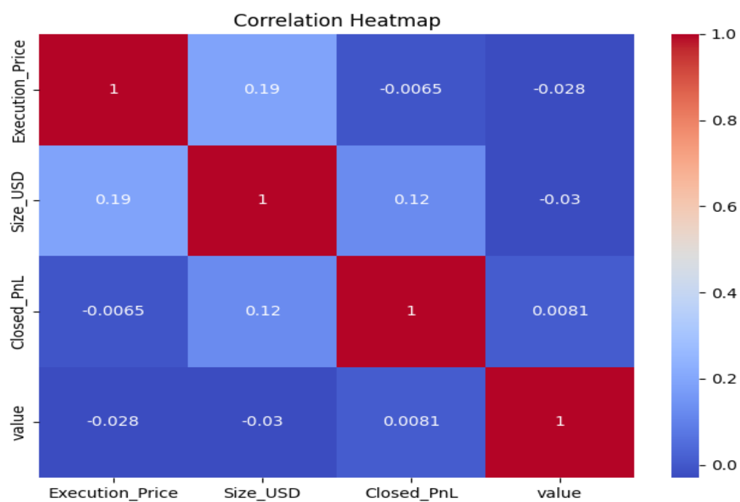
This report explores the relationship between Bitcoin market sentiment (measured by the Fear & Greed Index) and trader performance from Hyperliquid historical data. The objective is to uncover hidden trends and signals that can guide smarter trading strategies.

Exploratory Data Analysis (EDA)

The EDA highlights distributions of sentiment values, correlations among trading variables, and average profitability across different sentiment classifications.

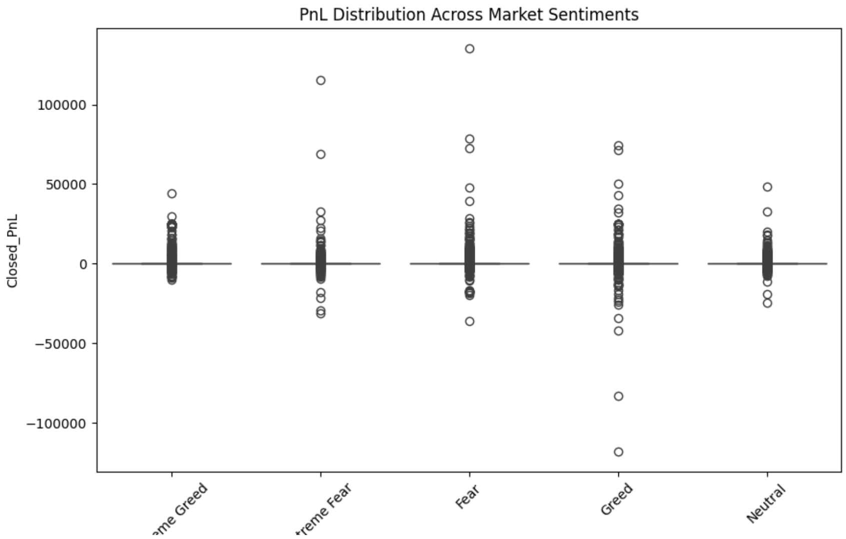


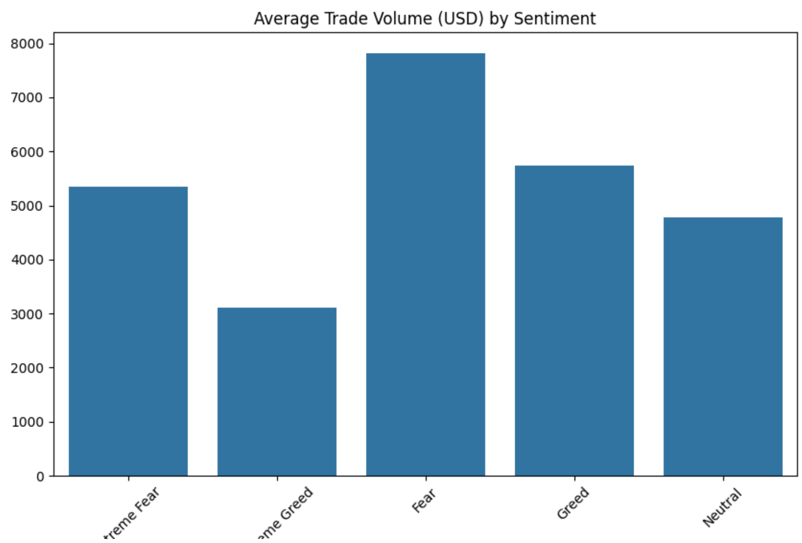


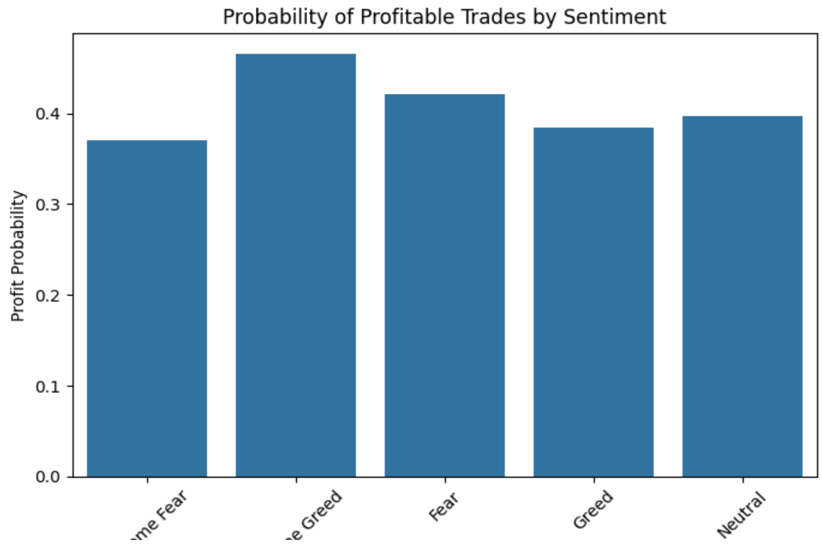


Objective Analysis

This section evaluates how trading behavior — profitability, risk, volume, and leverage — aligns or diverges from overall market sentiment (fear vs greed). It also examines whether specific sentiment states correspond to higher profit probabilities.


PnL Distribution Across Market Sentiments
Closed_PnL
100000
50000
0
−50000
−100000
Fear
Greed
Neutral


Average Trade Volume (USD) by Sentiment
8000
7000
6000
5000
4000
3000
2000
1000
0
Fear
Greed
Neutral



Key Findings

1. Sentiment values cluster around Fear and Greed states, with traders adjusting volumes accordingly.
2. Profitability varies: in some cases traders show better performance during 'Fear' than 'Greed'.
3. Risk (PnL volatility) is higher during extreme sentiment phases (Extreme Fear or Extreme Greed).
4. Profit probability differs across sentiment classes, indicating sentiment-driven biases in trading.

Conclusion

The analysis demonstrates that trader performance is not independent of market sentiment. By monitoring Fear & Greed signals, traders may adapt strategies to mitigate risk and optimize profitability. Future work could involve predictive modeling to forecast PnL based on sentiment shifts.