

Report Title: Trader Performance & Market Sentiment Analysis

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◆ 1. Objective

To analyze the relationship between trader performance and Bitcoin market sentiment (Fear/Greed) using two datasets:

- Fear-Greed Index
- Hyperliquid Historical Trading Data

The goal is to uncover hidden patterns and recommend sentiment-driven trading strategies.

◆ 2. Methodology

- Cleaned and merged datasets on common date field.
 - Analyzed:
 - Trade frequency
 - Closed PnL (Profit & Loss)
 - Volume in USD
 - Buy/Sell trends
 - Grouped and visualized results by market sentiment (e.g., Fear, Greed).
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◆ 3. Key Observations

Insight Area	Observation
Sentiment Distribution	Most trades occurred during Fear and Extreme Fear days.
Profitability	Highest average PnL was seen during Greed sentiment.
Trade Volume	Traders invested the most (in USD) during Neutral and Greed periods.
Buy/Sell Behavior	More Buy trades happened in Fear, while Sell trades rose in Greed.
Losses	Losses were more frequent during Extreme Fear days.

◆ 4. Suggested Trading Strategies

1. Be Conservative During Fear

- Reduce position size and use tighter stop-loss orders.
- Avoid overtrading when sentiment is “Extreme Fear”.

2. Take Advantage of Greed Trends

- Use trend-following strategies (e.g., moving averages).
- Scale positions when sentiment shifts to “Greed”.

3. Sentiment-Based Filtering

- Combine technical indicators with market sentiment for trade entry/exit.
- Avoid buying during “Extreme Fear” unless strong confirmation exists.

4. Volume & Panic Monitoring

- High volume during Fear may signal a reversal or overreaction zone.

5. Bias Toward Long Positions

- Initiate long trades when sentiment turns from Neutral → Greed.
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◆ 5. Conclusion

This analysis clearly shows that **trader performance is linked to market sentiment**.

Using sentiment as a trading signal — along with technical analysis — can:

- Improve profitability
 - Reduce emotional trading
 - Adapt strategies to market psychology
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◆ 6. Tools Used

- Python (pandas, seaborn, matplotlib)
- Jupyter Notebook