

Trader Behavior vs Market Sentiment

Objective

The objective of this assignment is to analyze the relationship between trader behavior and Bitcoin market sentiment using historical trading data and the Bitcoin Fear & Greed Index.

Datasets Used

1. Bitcoin Market Sentiment Dataset (Fear & Greed Index)
2. Historical Trader Data from Hyperliquid

Methodology

Data cleaning, date alignment, and merging were performed in Google Colab. BTC-related trades were filtered, and key performance metrics such as PnL, win rate, risk (trade size), and trading frequency were analyzed across sentiment regimes.

Key Findings

- Fear regimes showed higher win rates and disciplined trading.
- Extreme Greed resulted in the lowest win rates and negative average PnL.
- Risk-taking increased significantly during Greed phases.
- Market sentiment strongly influenced trader behavior.

Conclusion

The analysis highlights the importance of sentiment-aware trading strategies. Incorporating market psychology can improve risk management and trading performance.

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