

## Introduction

The goal of this analysis is to understand how Bitcoin market sentiment (Fear or Greed) influences trader performance on the Hyperliquid platform. By combining trading history with the Fear & Greed Index, we aim to find simple patterns that can support smarter trading decisions.

## Datasets Used

### 1. Historical Trader Data (211,224 rows)

Contains trade details such as account, coin, execution price, size, direction, timestamp, fee, and closed PnL.

### 2. Fear & Greed Index (2,644 rows)

Provides daily market sentiment values and classification (Fear or Greed) with a corresponding date.

## Method (Simple Steps)

1. Loaded both datasets into Python/Colab.
2. Converted timestamps into readable dates.
3. Grouped trades by account and by day.
4. Calculated simple metrics like:
  - Total PnL per day
  - Win rate per day
  - Total traded volume
5. Merged daily performance with market sentiment using the date column.
6. Compared performance during Fear vs Greed days.

## Findings (Simple & Clear)

- **Greed days generally show slightly better trader performance** compared to Fear days.
- **Win rates are often higher on Greed days**, suggesting traders perform more confidently when market sentiment is positive.
- **Fear days show more negative PnL**, indicating cautious behavior or higher losses.
- The Fear & Greed score is a **useful signal** that can help identify good or risky trading conditions.

## Key Insights

- Traders tend to perform better when overall market sentiment is positive.
- Fear periods may require reduced risk, smaller position sizes, or tighter stop-loss strategies.
- Basic sentiment data can help guide trading strategies even without advanced models.

## **Conclusion**

This analysis shows a simple but meaningful connection between market sentiment and trader performance. Using sentiment data can help traders manage risk and make more informed decisions. The results provide a foundation for more detailed analysis or algorithmic trading improvements.