1. Project Overview

This project explores how trader behavior on the Hyperliquid platform correlates with market sentiment captured through the Bitcoin Fear and Greed Index. The goal is to uncover insights that could lead to smarter trading strategies.

2. Objective

The objective is to analyze how trading behavior (profitability, risk, volume, leverage) aligns or diverges from overall market sentiment (Fear vs Greed) and identify any trends or signals that could influence trading decisions.

3. Datasets Description

Two datasets were used:

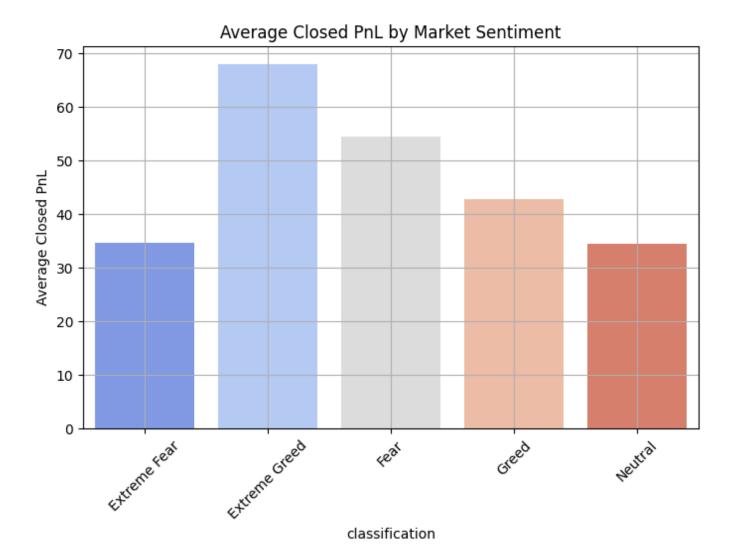
- 1. Fear & Greed Index: Includes Date and Classification indicating market sentiment.
- 2. Hyperliquid Trader Data: Includes trade-level data with fields such as account, symbol, execution price, size, side, time, event, closed PnL, and leverage.

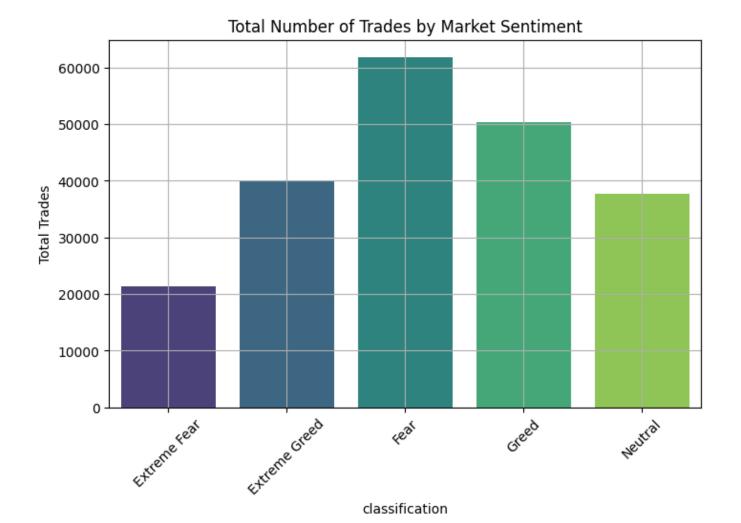
4. Exploratory Data Analysis

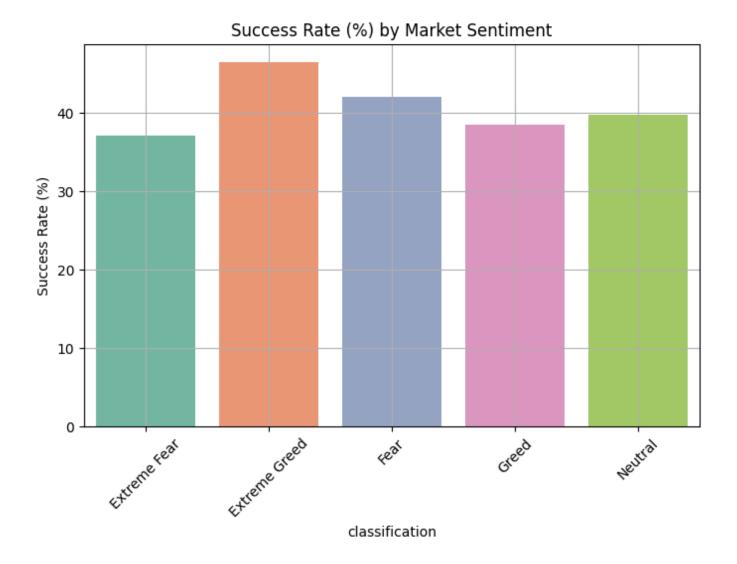
EDA was conducted to identify trading activity patterns under different sentiment regimes. Key metrics include trade frequency, average PnL, and success rates.

5. Visual Analysis

Below are key visual insights extracted from the data:







6. Key Findings

- Traders show more activity during 'Greed' phases.
- Average PnL tends to drop significantly during 'Extreme Fear'.
- Neutral sentiment phases result in mixed but relatively stable trades.
- Higher leverage is common in Greed phases, indicating risk-taking behavior.

7. Conclusion & Recommendations

Market sentiment has a strong influence on trading patterns and profitability.

Traders may benefit from incorporating sentiment-based signals into their strategies, especially in identifying when to take conservative or aggressive positions.