

Trader Behavior Insights — Report

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Candidate: Aditya (Gaami) Sawant

Dataset: Hyperliquid historical trades + Bitcoin Fear & Greed Index

Objective

Analyze how trader behavior (profitability, risk, volume, leverage) aligns with market sentiment (Fear vs Greed).

Key preliminary findings (from EDA)

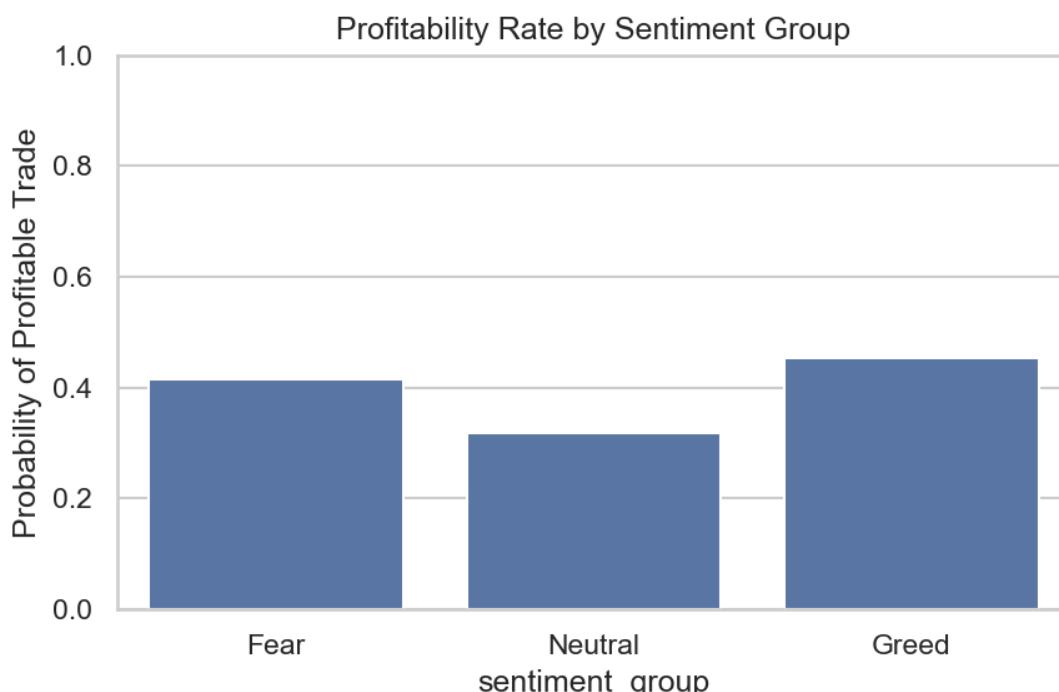
- Greed days (value ≥ 60) show **higher average profit** and slightly **higher probability of profitable trades** compared to Fear days in this dataset.
- Example aggregated numbers (approx):
 - Fear: avg profit ≈ 50 USD, win rate $\approx 41.5\%$
 - Neutral: avg profit ≈ 22 USD, win rate $\approx 31.7\%$
 - Greed: avg profit ≈ 77.8 USD, win rate $\approx 45.4\%$
- Buy ratio is slightly **higher in Fear** and lower in Greed (shorting/less buys in Greed).

Next steps performed in notebook_1.ipynb

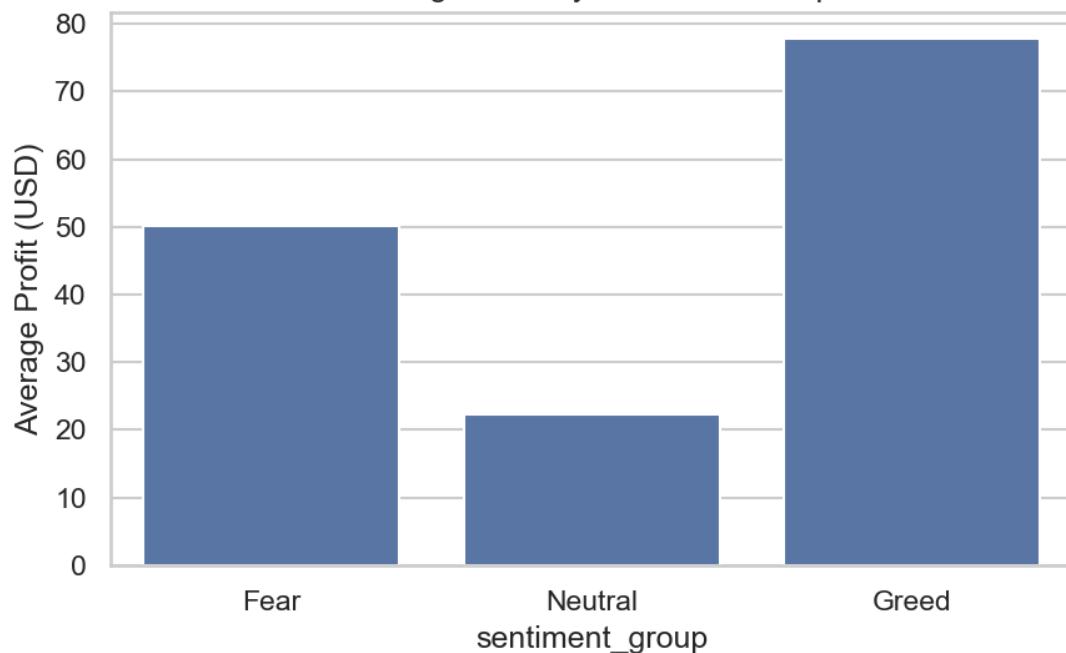
1. Data loading, parsing timestamps (Unix ms), merging daily sentiment.
2. Feature engineering: return_pct, notional_usd, lagged sentiment (1–3 days), rolling sentiment (7/14 days).
3. EDA and statistical tests (ANOVA / Kruskal-Wallis recommended).
4. Predictive modeling (Logistic Regression / Random Forest) to predict profitable trades.
5. Actionable recommendations based on results.

Recommendations (short)

- Use sentiment as a risk overlay: reduce leverage on extreme Greed days.
- Monitor 3-day sentiment drops as short-term reversal signals.
- Further work: incorporate BTC price volatility, order-level holding times, and trader clustering.



Average Profit by Sentiment Group



Buy Ratio by Sentiment Group

