

Assignment: Sentiment vs Trader Performance

Datasets used: Bitcoin Fear & Greed Index, Hyperliquid Trading Log

1. Dataset overview

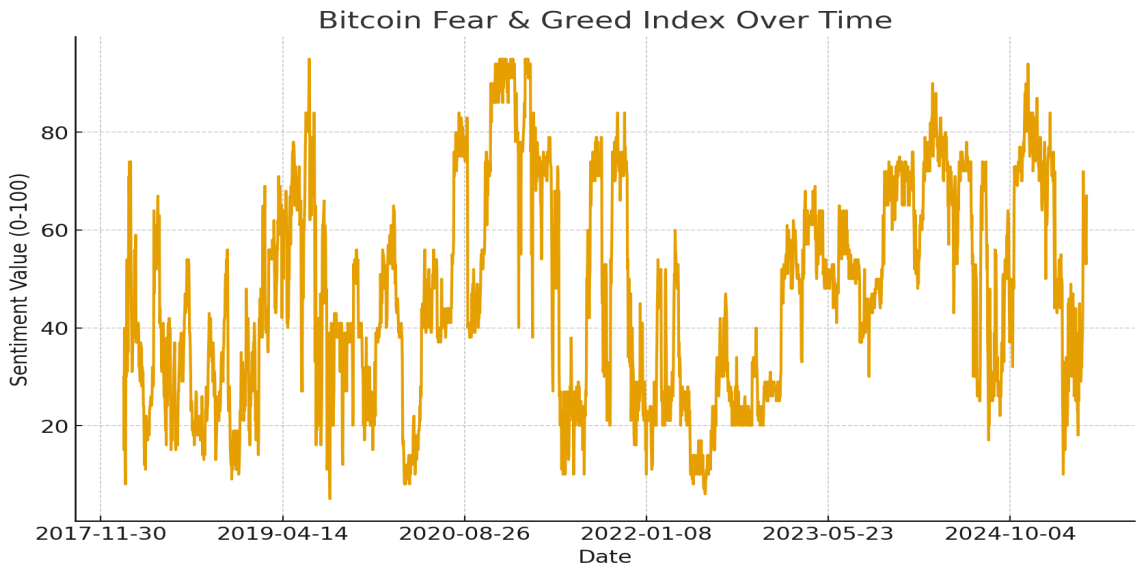
Fear dataset columns: timestamp, value, classification, date
Hyper dataset columns (sample): Account, Coin, Execution Price, Size Tokens, Size USD, Side, Timestamp IST, Start Position, Direction, Closed PnL, Transaction Hash, Order ID ...

2. Key metrics by sentiment

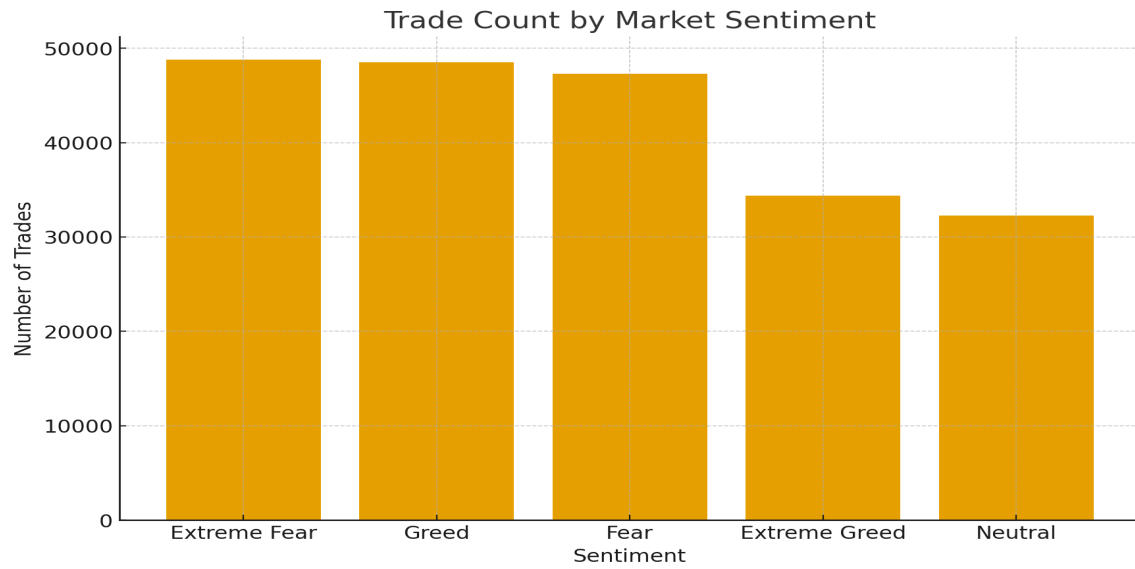
Sentiment	Trades	Total PnL	Avg PnL	Win Rate	Avg Leverage
Extreme Fear	48778	2353360.50	48.2464	0.4143	0.0000
Extreme Greed	34393	2515642.63	73.1440	0.4587	0.0000
Fear	47315	2675413.42	56.5447	0.3879	0.0000
Greed	48492	1728845.71	35.6522	0.4031	0.0000
Neutral	32246	1023696.68	31.7465	0.4026	0.0000

3. Charts

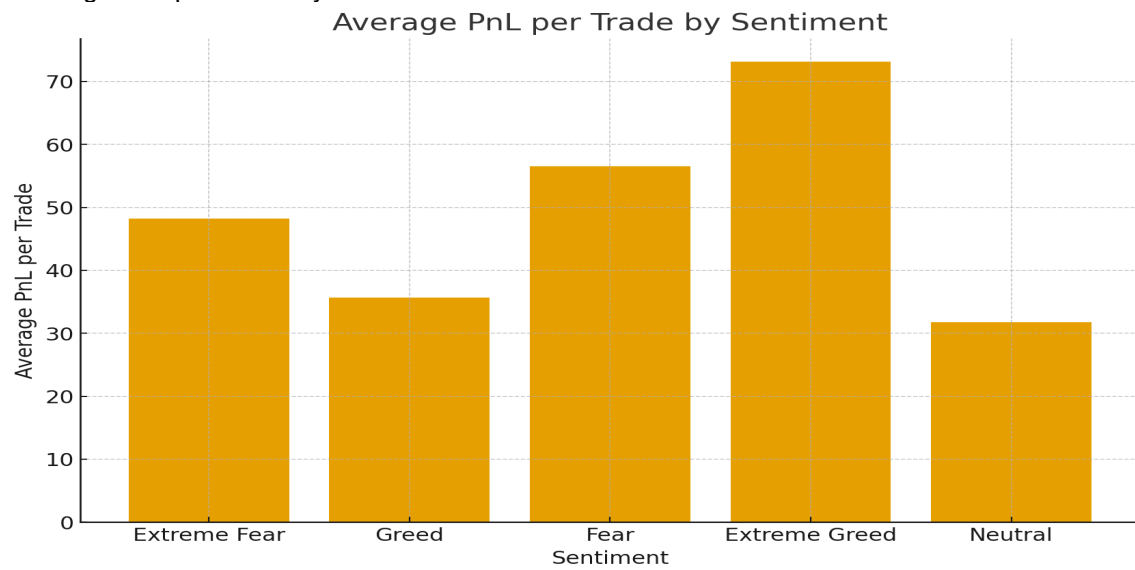
3.1 Bitcoin Fear & Greed Index Over Time



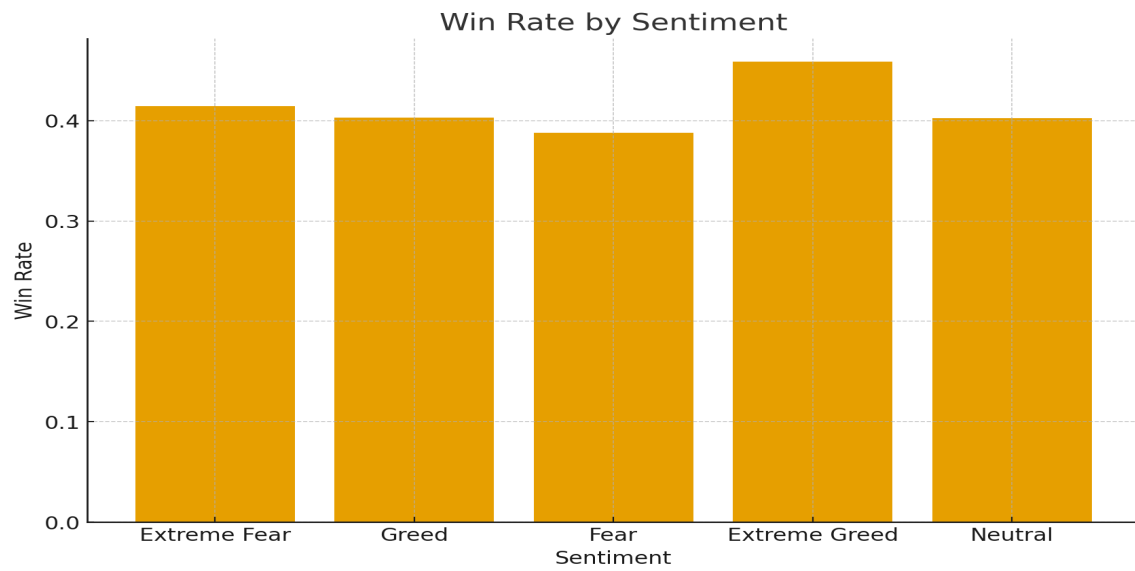
3.2 Trade Count by Sentiment



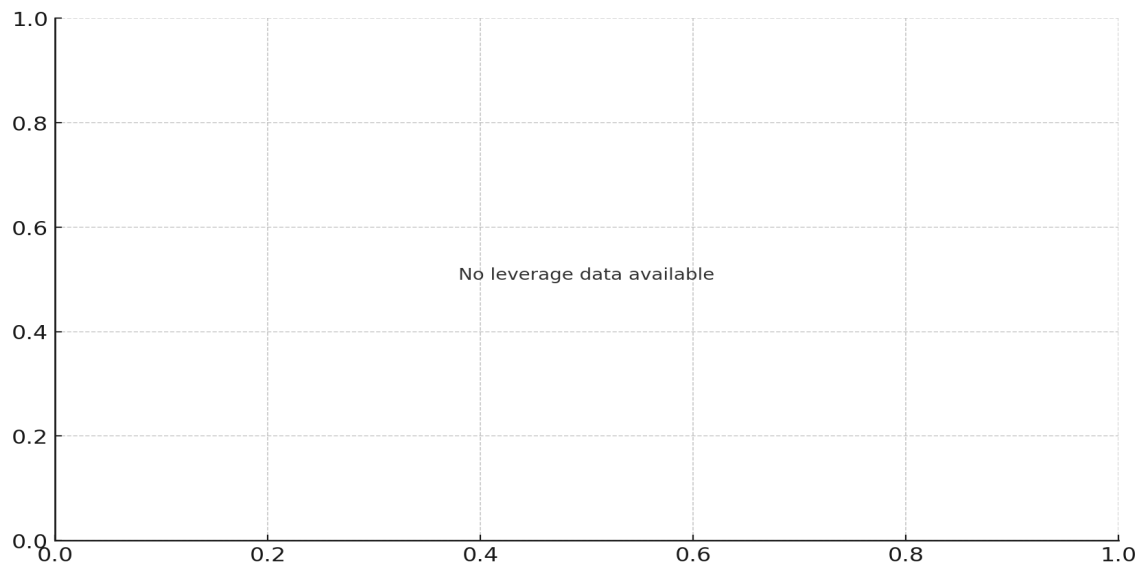
3.3 Average PnL per Trade by Sentiment



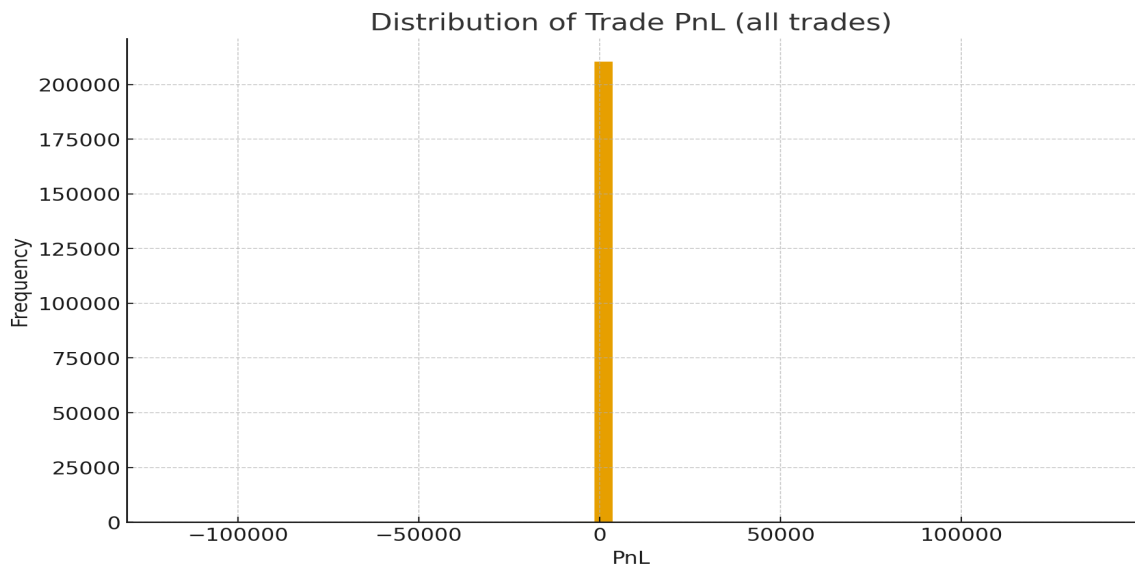
3.4 Win Rate by Sentiment



3.5 Leverage Distribution by Sentiment



3.6 PnL Distribution (All Trades)



4. Insights & Recommendations

The Fear & Greed Index contains many Fear periods — these may offer entry points for long strategies.

Trade count and avg PnL differ by sentiment; consider using sentiment as a filter for entries.

If leverage data is present, leverage distribution shows whether traders take more risk during specific sentiment phases.

High trade frequency with small average PnL suggests fees are important — reduce micro-trades or aggregate orders to lower cost.

5. Appendix: Data notes

Detected columns: fear_columns (4), hyper_columns_sample (16).

Some columns required heuristics to identify (timestamp, pnl, leverage). Missing values may affect aggregated metrics.