

TRADER BEHAVIOR INSIGHTS – DATA SCIENCE ASSESSMENT

ANALYZING THE IMPACT OF FEAR & GREED
SENTIMENT ON TRADER PERFORMANCE

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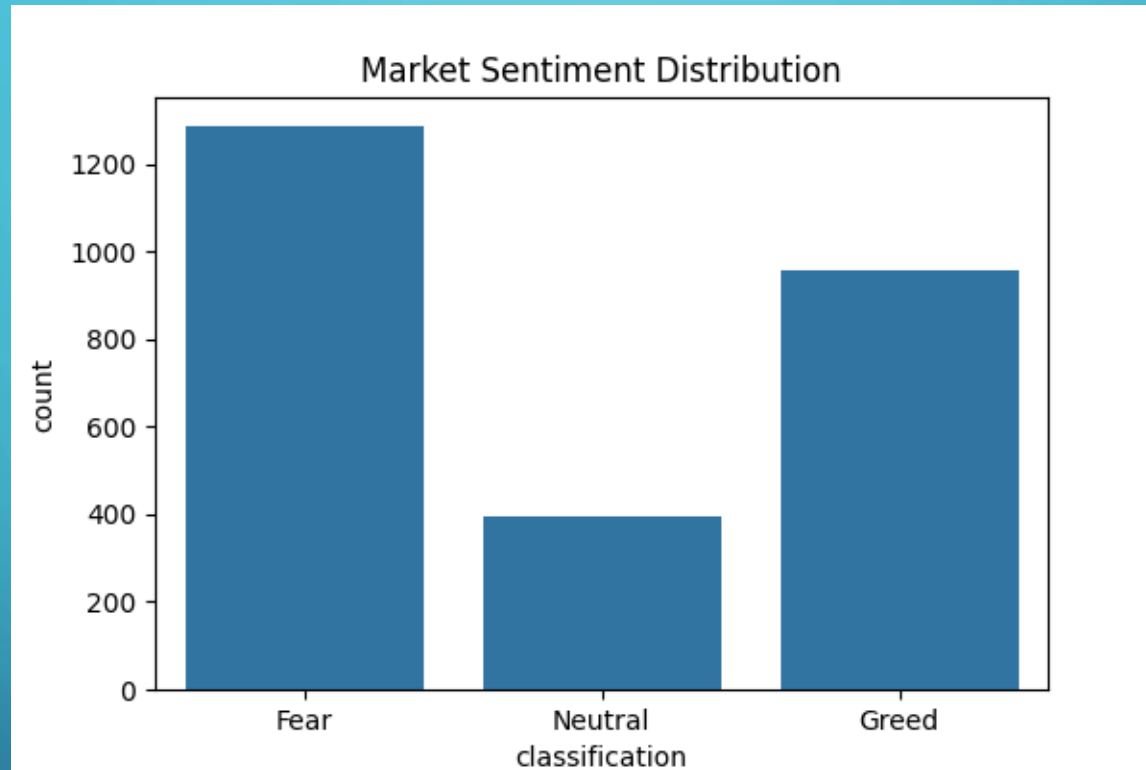
INTRODUCTION

- This assessment analyzes the relationship between Bitcoin market sentiment (Fear vs Greed) and trader performance using two datasets:
- 1. Fear & Greed Index – date, classification.
- 2. Historical Trader Data – trade details, PnL, size.
- Objective: Find patterns that can guide better trading strategies.

METHODOLOGY

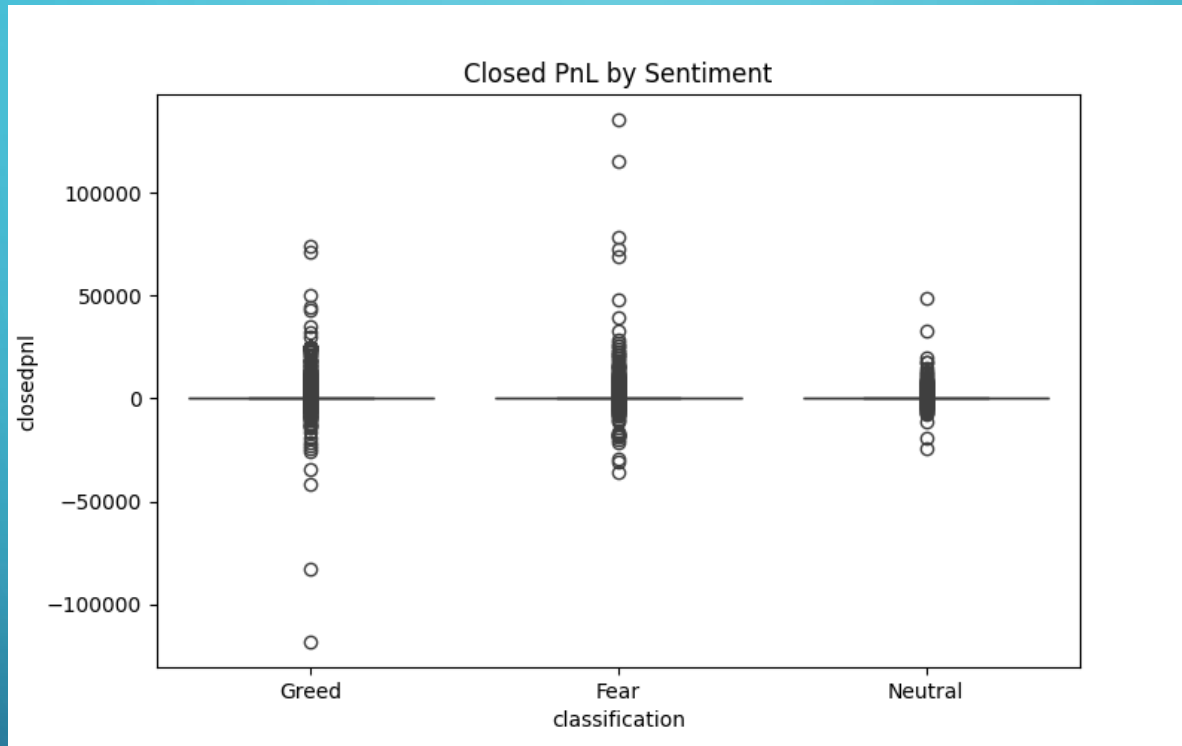
- Steps followed for analysis:
- Standardized column names and formats.
- Converted timestamps to dates.
- Merged datasets on date.
- Grouped Extreme Fear → Fear, Extreme Greed → Greed.
- Conducted EDA to explore patterns in PnL, trade size, and win rate.

SENTIMENT DISTRIBUTION



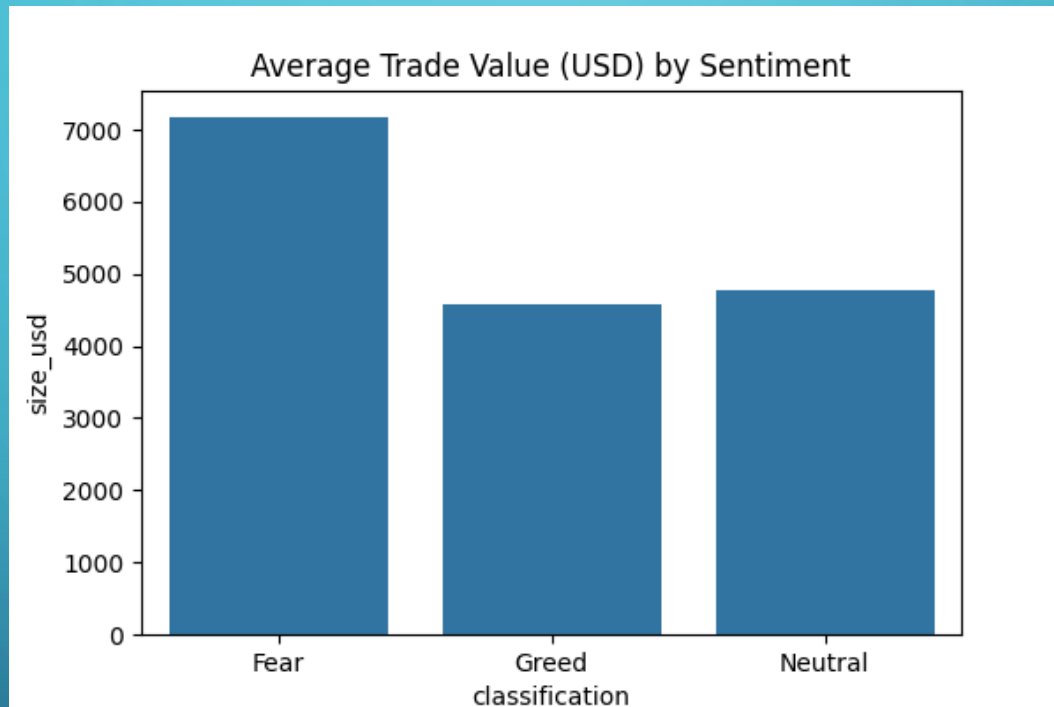
- Fear days: ~45%
- Greed days: ~55%
- Market shows slightly more Greed days than Fear.

CLOSED PNL BY SENTIMENT



- Median Closed PnL higher on Fear days.
- Traders tend to perform better in lower sentiment conditions.

TRADE VALUE BY SENTIMENT



- Bigger trades during Greed do not guarantee higher profitability.
- Greed days have larger average trade values.

WIN RATE BY SENTIMENT

classification	win_rate(%)
Fear	40.78714994533681
Greed	42.03112021706628
Neutral	39.69909250119408

- Fear days win rate: **40.7%**
- Greed days win rate: **42%**
- Fear days show better performance despite smaller trades.

KEY INSIGHTS

- Key observations from the analysis:
- 1. Higher win rates during Fear periods.
- 2. Larger trades in Greed days but less profitability.
- 3. Sentiment influences both trading behavior and performance.

CONCLUSION

- Market sentiment impacts trader outcomes significantly.
- Incorporating Fear & Greed analysis can enhance decision-making, improve win rates, and manage risk effectively.

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THANKYOU