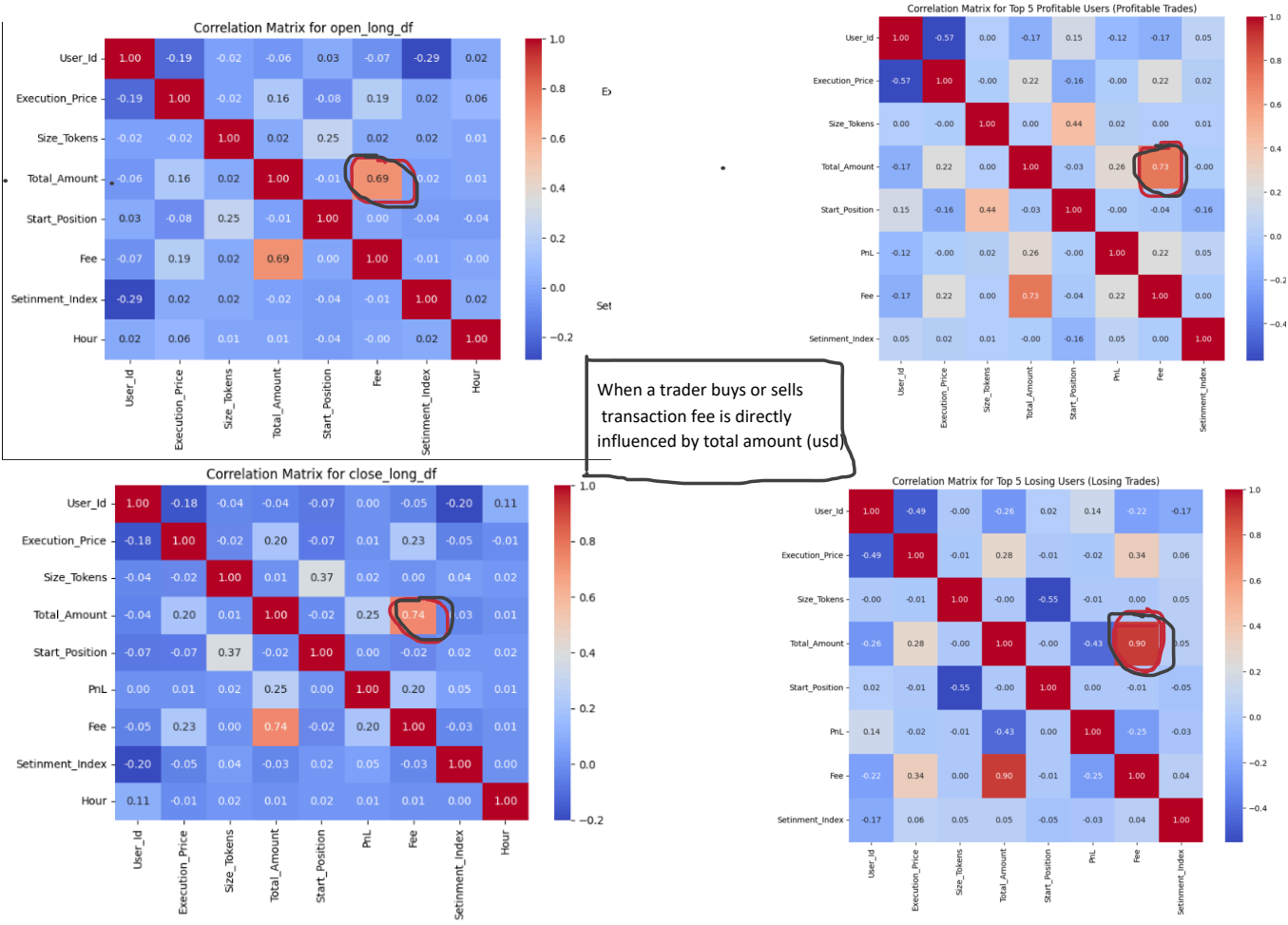
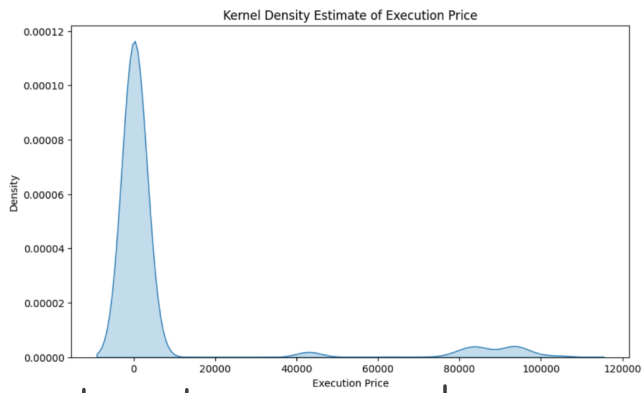
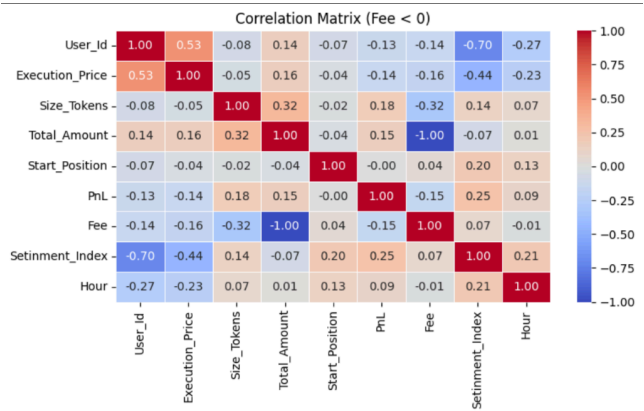


Important Graphs

Thursday, June 26, 2025 6:19 PM

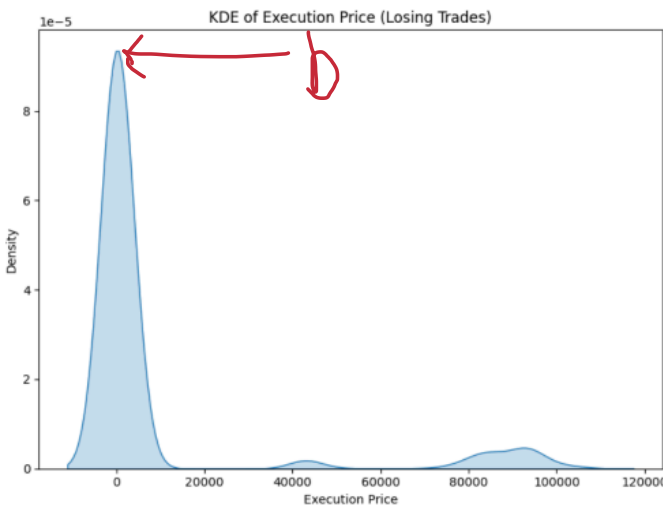
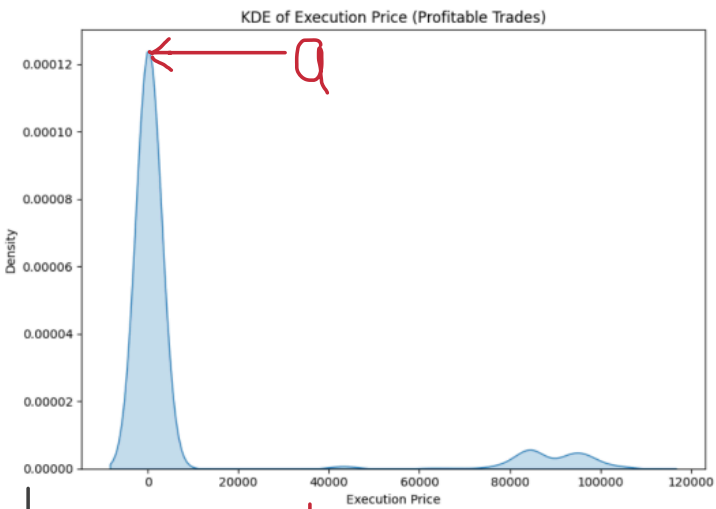


When a trader buys or sells transaction fee is directly influenced by total amount (usd)



This shows most of the trades are of penny coins that has low execution price, suggesting that traders prefer to bet more on penny coins as their price changes a lot

This shows that very less no. of traders choose expensive coins in their trade

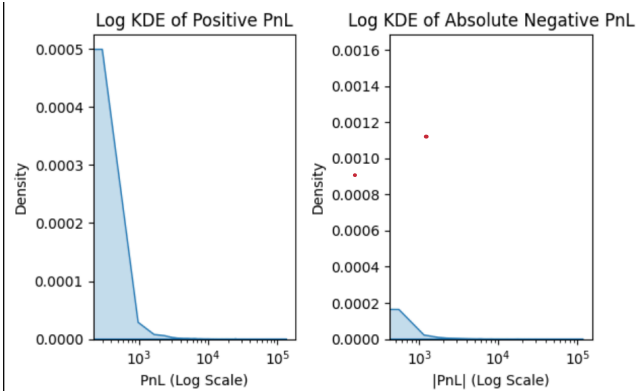


Insights from KDE Plots of Execution Price:

- 1. Majority of trades, both profitable and losing, occur at lower execution prices, clustered heavily near the left side of the plot (close to zero). This suggests that most trading activity is concentrated around low-priced assets.
- 2. The density peak is higher for profitable trades, indicating that profitable trades are more concentrated within a tighter range of execution prices.
- 3. Losing trades show a wider spread of execution prices, especially with notable bumps in density at higher price levels (e.g., 40,000 to 100,000). This suggests traders tend to lose more often when trading higher-priced assets.

a > b

a > c



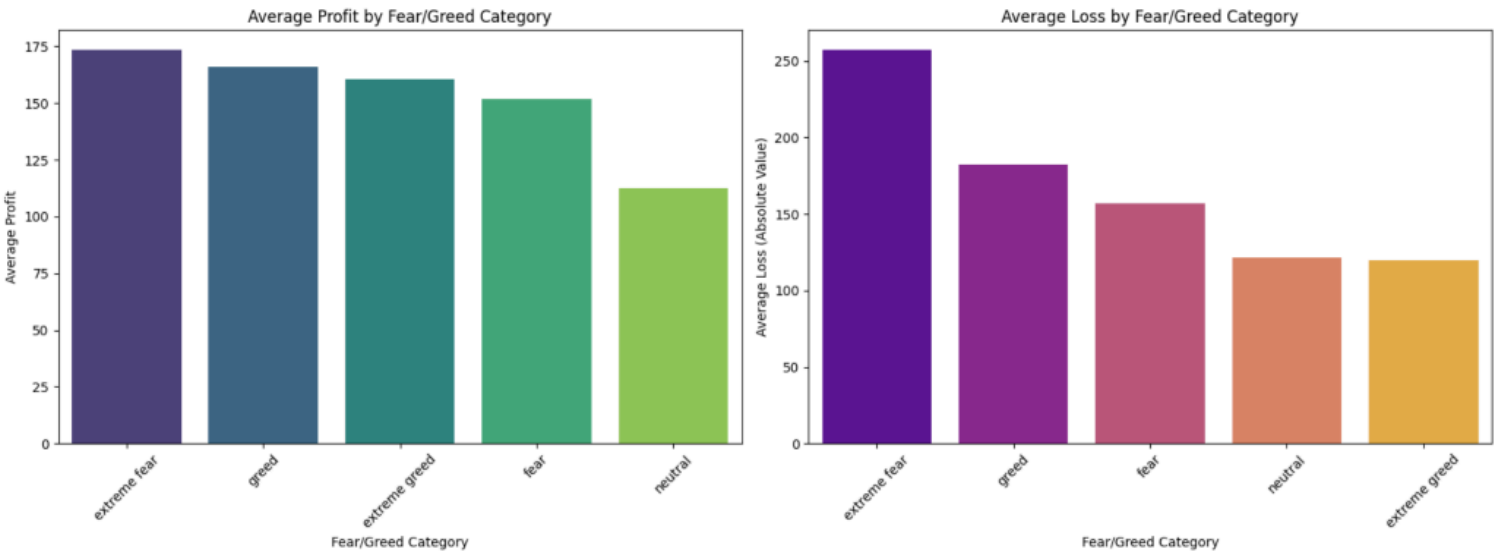
Log-Scale KDE of Positive and Negative PnL (Profit and Loss)

Left Chart: Positive PnL (Log KDE)

- Most profitable trades have small gains.
- As PnL increases, the density drops sharply, indicating that high profits are rare.
- This is a typical long-tail distribution, where a few trades yield outsized profits, but most are modest.

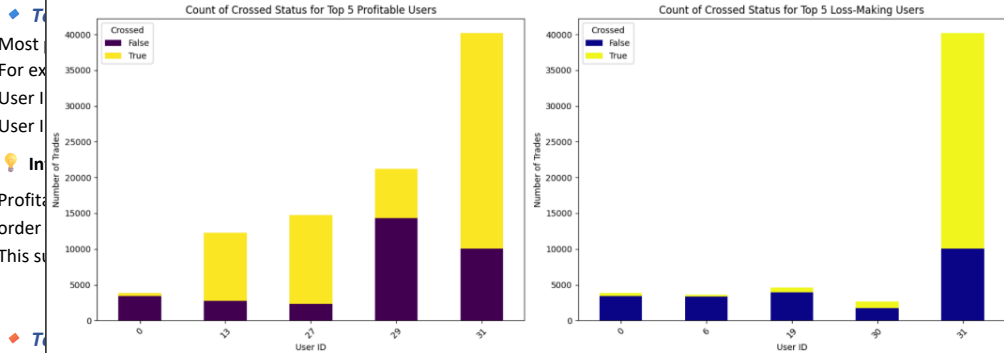
Right Chart: Absolute Negative PnL (Log KDE)

- Similar long-tail shape but with slightly denser low-loss frequency than profits.
- However, heavy losses, while less frequent, still span similar extreme ranges (up to 10^5).



Avg profit and avg loss is highest during extreme fear suggesting that majority of traders are bearish and sells more, some traders close short(buys at low price)

Behavioral Insight: Crossed vs. Non-Crossed (Calm vs. Aggressive) Trades



- Loss-makers show a dominance of crossed (True) trades, especially User ID 31.
- Most have fewer calm, non-crossed trades, with yellow bars (crossed = True) overtaking.

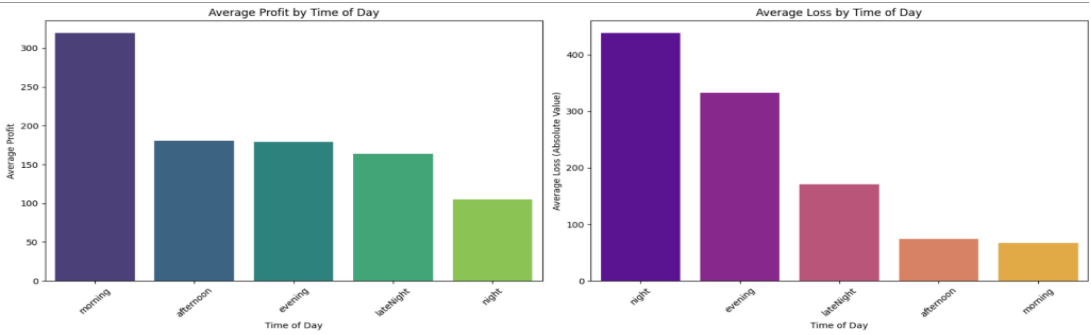
Inference:

Loss-making traders tend to be more impulsive or execution-focused, crossing to accept the best available price, often at the cost of strategy quality.

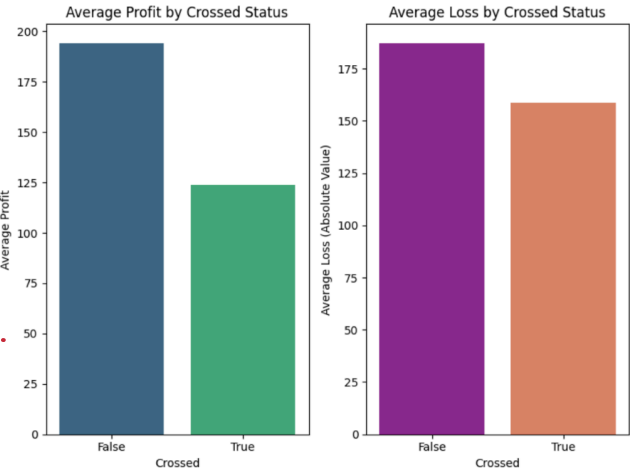
Summary: Calm vs Aggressive Trade Behavior

Behavior Type	Crossed Status	Traits	Observed Impact
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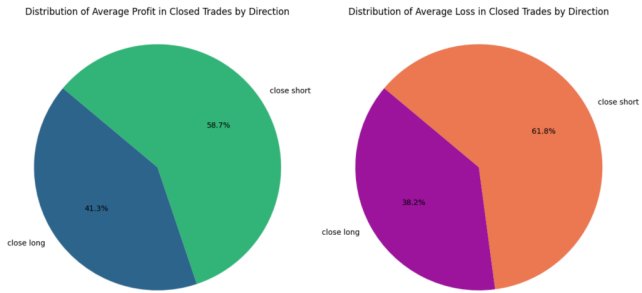
Calm / Strategic	False	Patience, confidence in entry	Higher profits on average
Aggressive / Reactive	True	Accepting market conditions, faster fills	Lower average outcomes



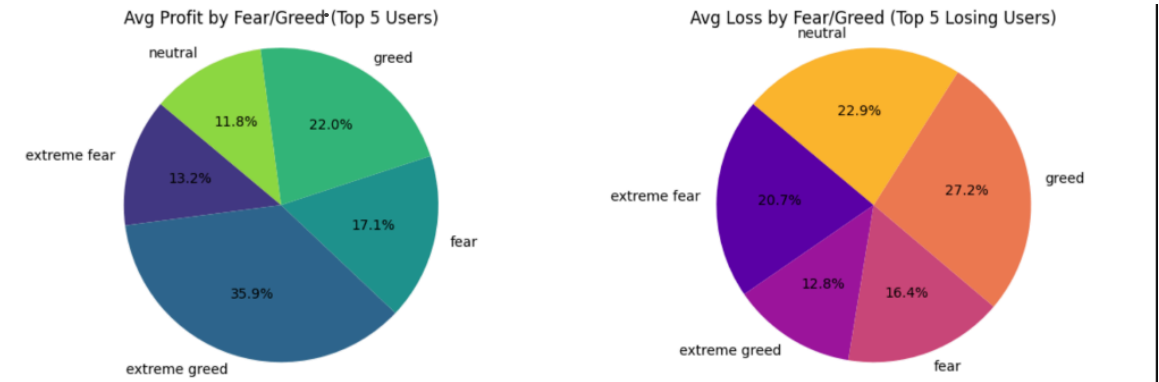
We can see here ,avg profit is made at morning and avg loss is incurred at night ,this means we can study difference in morning trades and night trades



Crossed Status	Style	Avg Profit	Avg Loss	Behavioral Insight
False	<div></div> Calm / Strategic	Higher	Higher	Trader sticks to their strategy and avoids compromising for available counterorders. They show patience and discipline , trusting that their original plan will yield returns — even if it means waiting longer.
True	<div></div> Aggressive / Reactive	Lower	Lower	Trader is willing to compromise , possibly accepting immediate matches at less optimal prices. Indicates urgency or risk aversion , preferring quicker execution over optimal positioning.



- 📉 Closing short positions dominates profit generation, but it also leads to greater losses — consistent with the riskier nature of shorting, where timing and price swings can be brutal.
- 📈 Closing long positions is relatively safer but less lucrative on average — fitting for trend-following or defensive traders.



State Level	Avg Profit % (Top 5 Profitable Users)	Avg Loss % (Top 5 Losing Users)
Greed	35.9%	12.8%
	22.0%	27.2%
	17.1%	16.4%
Fear	13.2%	20.7%
	11.8%	22.9%

Insights

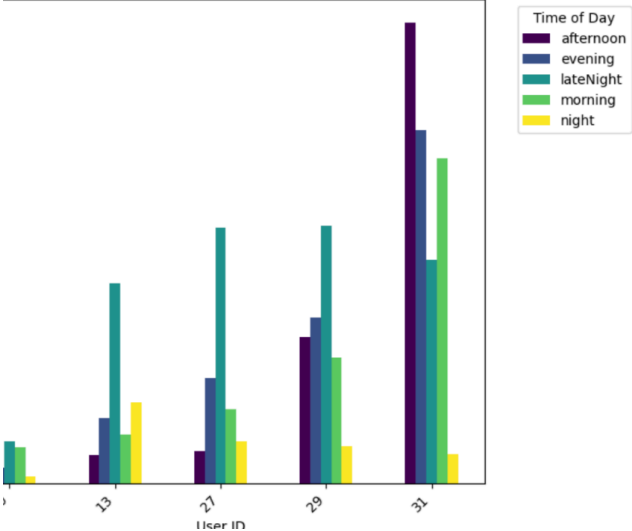
Top profitable users benefit the most during Extreme Greed

✖ Greed sentiment is dangerous for losing users, with 27.2% of their losses occurring in this state

✔ Fear and Extreme Fear are handled much better by profitable traders (only ~30% total impact) but account for 37% of losses for poor performers — possibly due to panic selling or risky decisions.

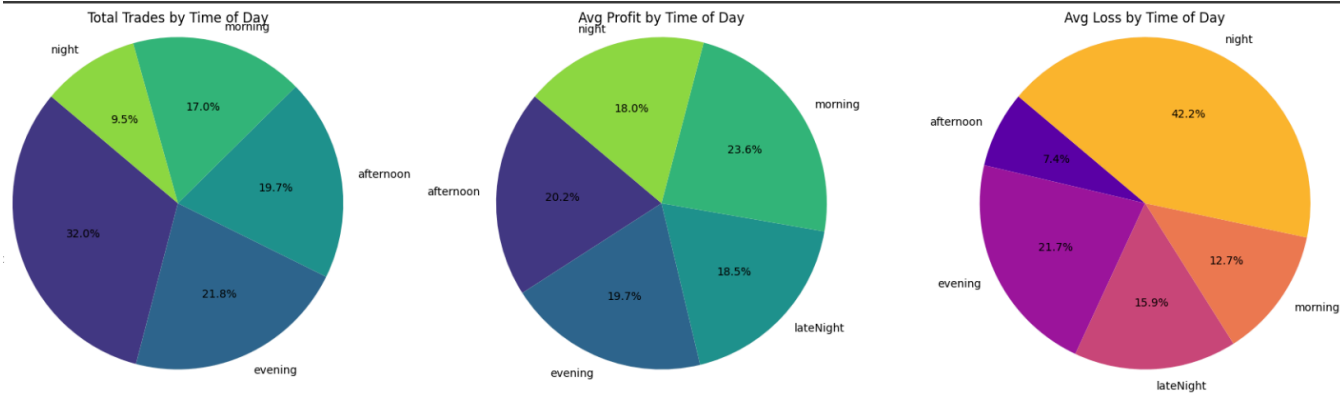
- 🕒 Neutral conditions are not necessarily "safe": losing users still incur 22.9% of their losses here, while profitable users earn just 11.8% — indicating that passivity or indecision might still lead to poor outcomes.

Number of Trades of Top 5 Profitable Users by Time of Day



Summary: Trading Behavior of Top Profitable Users by Time of Day

- Late Night is the Most Traded Period**
Among the top-performing traders, **late night hours consistently see the highest trading volume**, suggesting that this period offers favorable conditions—possibly due to lower competition, volatility patterns, or personal trading preferences.
- Afternoon and Evening Are Also Popular**
Both **afternoon and evening** show high trade counts, indicating that top traders are actively engaged during traditional peak hours when market activity is typically high.
- Night and Morning Have Relatively Lower Activity**
Night and morning hours see fewer trades in comparison, implying that these periods may be less favorable or simply less preferred by top traders.
- High Trade Volume May Contribute to Profitability**
The most successful traders tend to engage in a **high number of trades across multiple time blocks**, suggesting that **consistent participation and market exposure** could be key factors in driving long-term profitability.
- Diverse Time-of-Day Strategies**
While late night is common, top traders don't restrict themselves to one time slot—they diversify across the day. This may reflect adaptability to different market conditions and opportunities at various times.



Insights

"Total Trades, Average Profit, and Average Loss by Time of Day"

1. 🔄 Total Trades by Time of Day

- Late Night** has the highest share of total trades (32%)
- Followed by **Evening (21.8%)** and **Afternoon (19.7%)**
- Morning (17%)** and **Night (9.5%)** see relatively fewer trades
- 🔴 **Insight:** Traders are most active during late night, suggesting a strategic or behavioral preference.

2. 📈 Average Profit by Time of Day

- Morning** contributes the highest share of average profit (23.6%)
- Followed by **Afternoon (20.2%)** and **Evening (19.7%)**
- Late Night (18.5%)** and **Night (18%)** lag slightly
- 🔴 **Insight:** Despite fewer trades, **Morning trades yield the highest average profit**, possibly due to clearer market conditions or better decision-making early in the day.

3. 📉 Average Loss by Time of Day

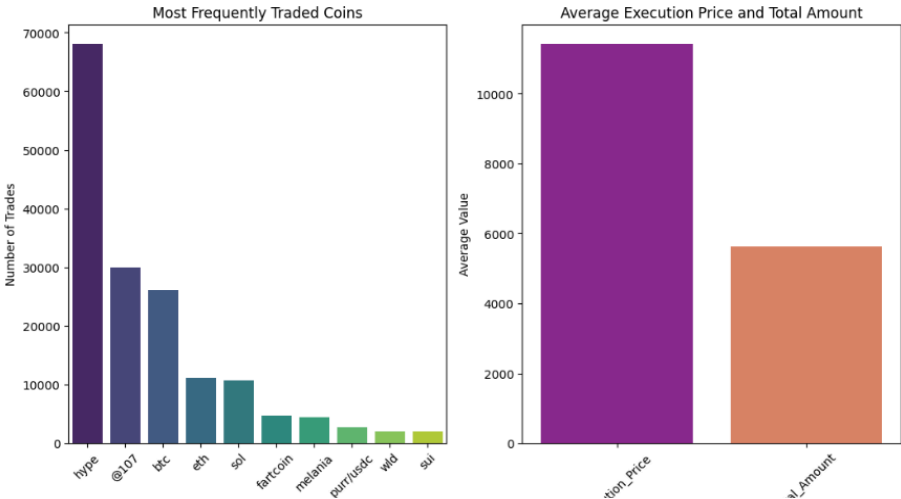
- Night** accounts for a large portion of average losses (42.2%)
- Followed by **Evening (21.7%)** and **Late Night (15.9%)**
- Morning (12.7%)** and **Afternoon (7.4%)** show the lowest average losses
- 🔴 **Insight:** **Night-time trading is riskier**, with a significantly higher share of losses, suggesting this period may be less favorable or more volatile.

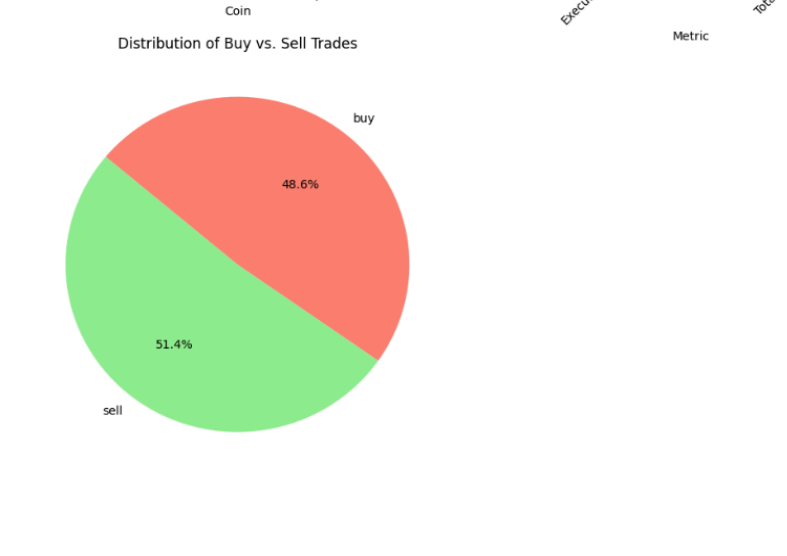
Overall Takeaways

- Traders prefer **late night**, but **morning offers better profitability and lower loss**.
- Night is risky:** high losses despite fewer trades — it may be wise to avoid or manage exposure during this time.
- Time-of-day clearly influences **performance**, not just trade volume — reinforcing the importance of time-based strategy.

Time of Day	Avg Profit (Top 5 Traders)	Avg Profit (All Traders)	Avg Loss (Top 5 Traders)	Avg Loss (All Traders)
Morning	High	Highest (23.6%)	Low	Low (12.7%)
Afternoon	High	Medium (20.2%)	Very Low	Lowest (7.4%)
Evening	Medium	Medium (19.7%)	Medium	High (21.7%)
Late Night	High	Medium (18.5%)	Medium	Medium (15.9%)
Night	Low	Low (18.0%)	Very High	Highest (42.2%)

Analysis of coins





 **Summary:**

Most Frequently Traded Coins

- **HYPE** is the clear leader in trade volume, with nearly 70,000 trades — suggesting it is the most actively speculated or accessible coin.
- Other high-volume coins include **@107, BTC, ETH, and SOL**, showing popularity in both mainstream and niche tokens.
- **Less traded coins** like **wd, sui, purrrisc** indicate either low volatility, newer listings, or limited trader interest.

🌟 **Insight:** The trading ecosystem is heavily skewed towards a few dominant coins, likely due to liquidity and market hype

Average Execution Price vs. Total Amount

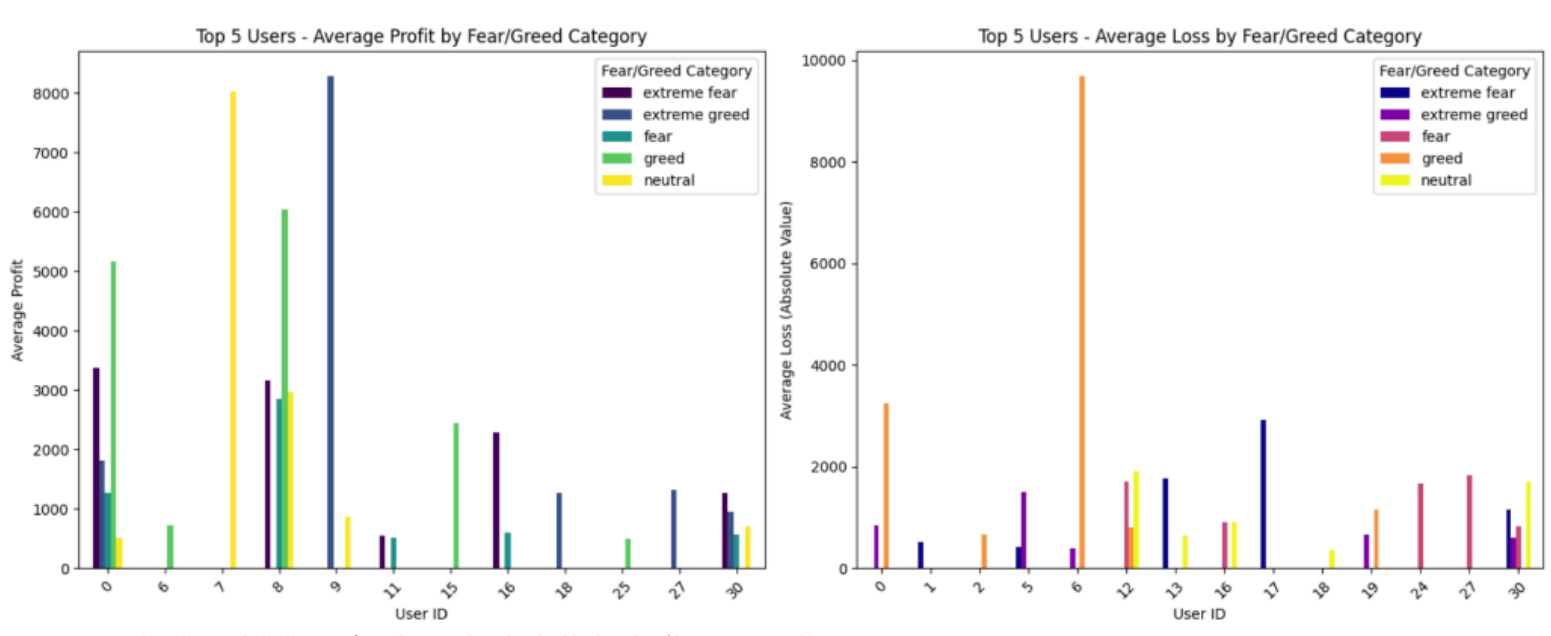
- The **average Execution Price** is nearly **double** the **average Total Amount**.
- This implies that while prices per unit are high, **traders might be dealing in smaller token quantities per transaction**, possibly due to price sensitivity or portfolio sizing.

🌟 **Insight:** Traders prefer **lower exposure per trade**, especially when dealing with high-priced assets.

Buy vs. Sell Distribution

- **Slightly more Sell trades (51.4%)** than Buy trades (48.6%), indicating:
- A nearly balanced market with frequent entry-exit activity.
- Possibly short-term strategy patterns (buy-then-sell quickly or scalp trading).
- A reactive market posture where users close positions frequently.

🌟 **Insight:** The ecosystem maintains a **healthy trading rhythm**, with marginally more exits — suggesting active portfolio rebalancing or short-term strategies.



Top traders that made highest profit and top traders that had highest loss(here account address is converted to number using label encoder)

Key notes -

1— in both graphs only few bars are high and other were pretty low, suggesting that only few top traders can benefit from market sentiments with proper strategy.

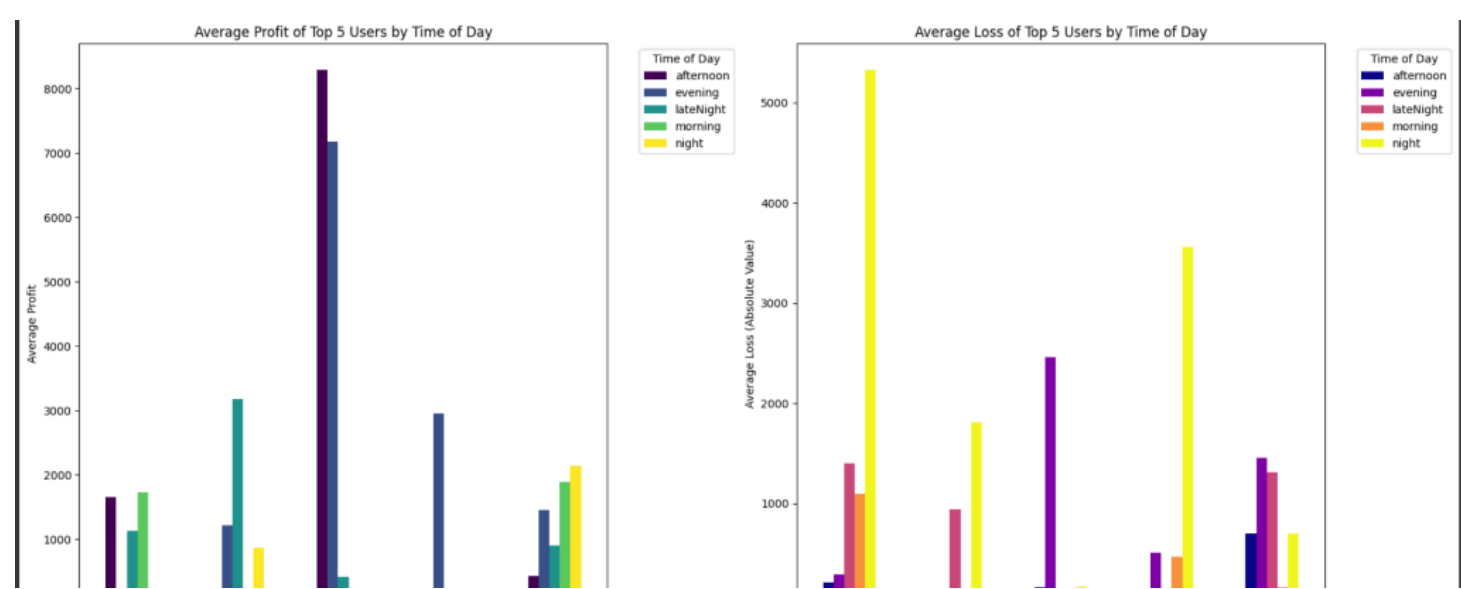
And top traders that had highest loss basically make bad trades irrespective of market sentiments.

2— common users from both graphs are 0,6,16,27,30

3- user 0 had highest profit and highest loss when sentiment was greed -> when market was bullish suggesting this user is not reliable for our analysis because -

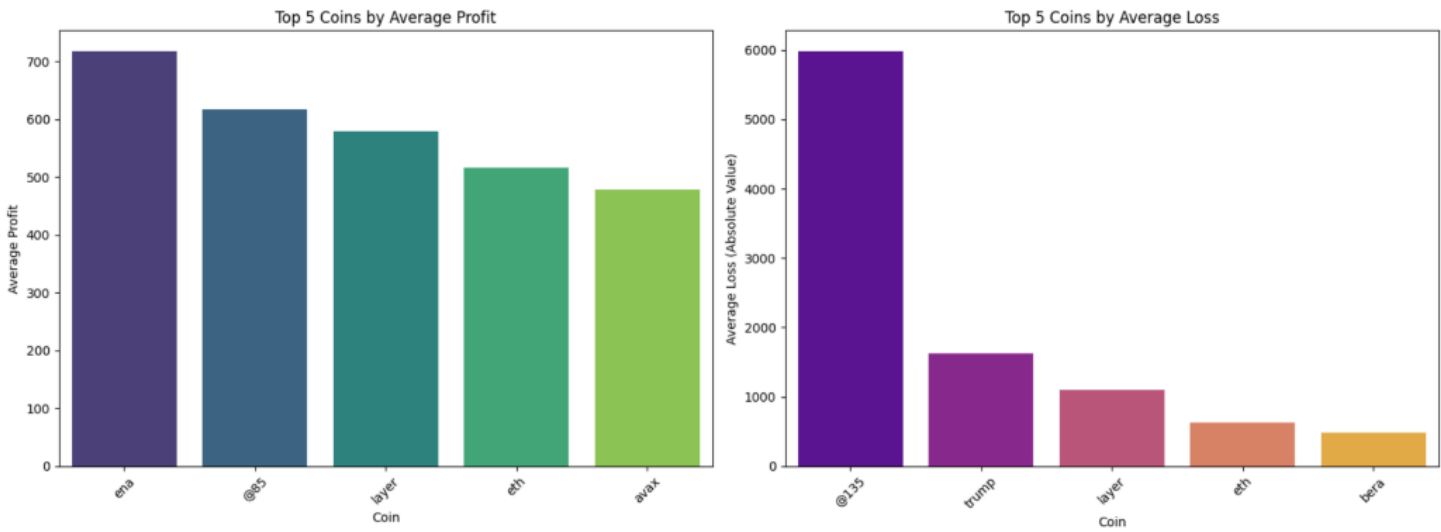
For profit he close long when the price was up but at the same time he open short hoping price will go down thus makes loss trades, this suggests that user does not rely on his own strategy.

4— in a second graph of top traders that had highest loss (avg loss), when we exclude user 0 ,6 ,17 we can see all the bars are balanced suggesting that all these traders had highest loss because they did not take the benefit of market sentiments thus made loss.



Here trader with user id 0 had more loss then profit , this confirms our previous assumption that , this trader is unreliable for our analysis

- **Night-time trading appears risky(second graph)** for several users, especially those with high losses.



- 🔄 **ETH and LAYER** appear in **both** profit and loss charts — indicating that they’re widely traded but **outcomes depend heavily on timing**.
- ⚠️ **@135** is the riskiest coin based on average loss magnitude — may require tighter risk controls.
- ✅ **ENA** leads in average profit — may indicate a favorable trading setup or trader preference.

