

PokerBot Analysis Report 2.0

Major Improvements Since Version 1

- Preflop crash resolved using Monte Carlo evaluation.
- Adaptive bluffing depends on opponent fold rate.
- Aggressive opponents now suppress bluffing correctly.
- Statistical summaries available for quantitative analysis.

System Performance Overview

Strong hands consistently raise with high win probability (>0.93).
Weak hands correctly fold when pot odds are unfavorable.
Cheap calls are handled properly based on EV.
Opponent modeling influences bluff frequency appropriately.

Quantitative Observations

Strong Hand: 100% raise frequency.
Cheap Weak: 100% call.
Expensive Weak: ~90% fold.
Medium Strength: ~10% raise (too passive).
Bluff Opportunity: ~10% raises.
Fold-heavy Opponent: ~65% raises.
Aggressive Opponent: 0% bluff.

Remaining Weaknesses

1. Medium-strength value betting under-aggressive.
2. No positional awareness.
3. Bluff sizing predictable.
4. Preflop lacks heuristics.
5. No long-term opponent memory.

Recommended Next Improvements

1. Medium-strength aggression tuning.
2. Position-aware strategy.
3. Dynamic raise sizing.
4. Persistent opponent modeling.
5. Range-based reasoning.

Conclusion

The PokerBot has progressed from a rule-based prototype to a probabilistic decision system with opponent adaptation. With further tuning, it can reach strong competitive level.