COMP423 - Reinforcement Learning and Dynamic Optimization
Poker Project Assignment 1 Report

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1 Introduction

- project summary
- goals

2 Environment

- Simplified game and rules
- what was adapted from rlcard
- 2 opponent models
- State-action representation
- State space creation

3 Model-based solution: Policy Iteration algorithm

- Implementation
- Average Results
- Analysis of Optimal Policy per opponent
- Demonstration of optimality

4 Model-free solution: Q Learning algorithm

- Implementation
- Analysis of hyperparameter tuning
- Average Results
- Convergence analysis

5 Conclusion

- Main point for game size & performance of algorithms
- Suggested next steps/improvements