
B351 AI Project: Texas Hold 'em

Steven Myers and Samuel Eleftheri

Indiana University, Bloomington, IN, USA

May 3, 2017

Pair $3\heartsuit, A\diamondsuit, 3\spadesuit, 4\clubsuit, K\heartsuit$

Our final project was to build a working Texas Hold'em Poker emulator, and an AI agent to play the game efficiently. Our approach was to accurately emulate poker as it is played professionally with realistic betting systems. We built an agent that can effectively determine the best move given its cards and river. It makes valid moves in every game state.

1 Introduction

Here are some cards:

Describe games in AI – generate interest here for the reader and give some background. This is a citation: (**Reference1**). This sentence requires multiple citations to imply that it is better supported (**Reference2**; **Reference3**). Finally, when conducting an appeal to authority, it can be useful to cite a reference in-text, much like **Reference1** do quite a bit. Oh, and make sure to check out the bear in Figure ??.

2 Playing Texas Hold 'em as an AI Problem

Describe how you've transformed this game to a purely AI agent. Explain your strategies and reasons for adopting them.

3 Code

Discuss how you coded your strategies, data structures, etc.

Table 1: Example table

Name		
First Card	Second Card	Probability
$A\heartsuit$	$A\clubsuit$	$P(A\clubsuit A\heartsuit)P(A\heartsuit)$

4 Results

Discuss the result of your project – what went right and what went wrong. For the former, what would you do to make it even better? For the latter, what would you do differently?