

Weekly Report 1
Yiduo Ke
CS 4999 supervised by Professor Halpern

What I did

I did part of the assigned reading; I read chapters 1 – 3 of Bonanno’s textbook on game theory.

What I thought about it

I really enjoyed it. The book is written very well, and everything is thoroughly explained. I was never confused about anything.

I’m taking CS 6817 analysis of Boolean functions this semester and couldn’t help but notice a connection between the pivotal mechanism (2.4) and something known as “influence” in a 2-candidate election represented by a function $f: \{-1, +1\}^n \rightarrow \{-1, +1\}$, except that for influence in a Boolean function, you don’t exclude the voter, you just consider how likely the result of the election will flip if that voter flips.

Another connection I made was how the backward induction algorithm was kind of similar to the minimax algorithm, which I learned in CS 4700 Artificial Intelligence.

What I will do next week

I will finish the rest of the assigned reading (chapters 4—7) and do some exercises at the end of each chapter.