Research in Applied Economics (EC331)

Assignment 3 Final Project

Feedback for 2100397

Mark: 88%

Grade: 1

Feedback on your submission

Comments from the first marker: A really fascinating project and one of the best pieces of undergraduate work I have read in recent years. The project develops an approach for approximating optimal strategies for five-card draw poker. This is a rare piece of work for an undergraduate that combines superb knowledge of the topic leading to a really excellent application of the MCCFR algorithm to approximate a Nash equilibrium for the game of poker. The simulation setup is excellent and even though the MCCFR model had subpar performance relative to heuristic models, the MCCFR model has a lot of sophistication, including the incorporation of deception elements that mirror actual professional poker playing. I agree with the author that the results are promising and continued refinement and eventual convergence could lead to further performance improvements and open up avenues for informing optimal decision making. The dissertation is well-written and includes a good mix of tables and figures. Some of the figure labels could have been made clearer. Also, the objective of the research could have been explicitly mentioned much earlier in the paper (instead of Section 3.3). The literature review is solid and connections between the results and literature are nicely covered in the discussion. This project is excellent and it was a pleasure to read.

Comments from the second marker: This is an exceedingly clever RAE project. I think that the project deserves a particularly high marks as it involves data science techniques at a graduate level. The aim of the project is to approximate a Nash equilibrium for the Five-Card-Draw poker. Despite the complexity of the task, the author communicates with the reader with high clarity. The paper is well-organized and contains plenty of supplementary materials. For example, I found it particularly helpful to look at the pseudocode of the algorithms in the Appendix. Lastly, I would like to highlight that the student demonstrates a good understanding of the limitations of their own work, which is very important in an academic project. I wish the student success and determination in pursuing this topic further.

About your grade

High 1st

Very high quality work demonstrating excellent knowledge and understanding, analysis, organisation, accuracy, relevance, presentation and appropriate skills. Work which may extend existing debates or interpretations.