Review for the report: Adversarial Search problem on the example of FAUhalma

1 Summary

In this report, one key thing to appreciate is the structure of the report as it is written in a particular flow with sub sections added to it. The author investigates a board game problem that needs to be solved with the help of symbolic AI approach. In my opinion, the content of few subsections exceeded the normal length. This creates an impression in the readers' mind that there is some vague or redundant information. The best written subsection of the report is where the author discusses the results and compares it with the real rating from the server.

2 Critical Evaluation

As one starts to read the report, the reader is quite well motivated to deep dive into the further sections as the research question and the contribution is pinned effectively. According to me, the abstract could have been more self-explanatory. In the introduction section, I would skip the trivial part where the author has mentioned some previous games, their corresponding states and compared it with say Chinese checkers as it does not hold much relevance to the topic. It would be better to discuss what are adversarial problems in general – May be one doesn't know that? I found the definitions in the second section quite intriguing because they are supported with a visual example which facilitates better understanding for the reader. It also gave me a basic understanding what to expect further in the report. The author discusses the problem description in a very concise manner. Although the moves could be explained more in a visual manner rather than in a text form. Coming to the strategies section, I found it very lengthy as it had some redundant information and was a bit scattered. The author has described the strategies very well and again written down a similar information in form of a flow chart which is not required as each of them are quite explainable. The author can decide to keep either of them which I found sufficient to get an overview. Also, it would be a better idea to club the strategies and mention them in a single section. The code snippet complements the content and is helpful in the readers' perspective. The comparison of the approaches is the best written section of the report as it summarizes all the strategies and their corresponding numerical results. Again, the scatter plot is a redundant information. In the conclusion, the author discusses heuristic to be followed based on difficulty level of the opponent, but it is not very clear which of them was actually used or this is to be perceived as an improvement to the currently implemented solution.

3 Conclusion

Majorly, the report explains the topic very well and the structure of the report helps the reader visualize from basic terms, the problem to the solution. It is a very detailed report which is an advantage. However, as mentioned earlier, if some sections are kept concise and short the report would be more attractive to the reader and it would make the report more self-explanatory.

4 Technical notes to the author

Some abbreviations are not mentioned. For example: UCT,UCB in the section 2.4

only for a scenario when we have two players only … typo here "only" added two times in 4.2.2

In future work, may be the author missed to complete the sentence: Combining the existing methods with neural networks would potentially.