1

1 Introduction

The question of whether machines could develop human-like skills and capabilities has fascinated many great thinkers. One of the founders of computer science, Alan Turing, explored this question in great detail. Many are aware of the famous Turing Test, a thought-provoking hypothetical game in which a machine attempts to exhibit behavior indistinguishable from a human. While the development of such an Artificial Intelligence is still elusive, many great advancements have been made in matching or surpassing human abilities in more simplified domains. In particular, games provide a simplified domain that can serve as a benchmark for advancements in Artificial Intelligence. One of Alan Turings lesser-known but fascinating contributions to the field was a simple chess-playing program. Computers in Turings time lacked the computational power to play chess, so Turing demonstrated this achievement by calculating each move using his program on paper, which took half an hour per move. Less than fifty years later, the famous victory of IBMs Deep Blue chess computer against Kasparov captured the worlds imagination. In recent years, new advancements in Machine Learning have enabled computers to excel at games with even higher complexity, notably, the success of Google Deepminds AlphaGo at the game of Go. Nevertheless, both Go, Chess, and many of the other games which computers have traditionally excelled are all perfect information games, which means that the full state of the game is visible to the players at all times. This success of artificial intelligence in perfect-information games stands in stark contrast to the real-world environments where humans have to make decisions, where managing and adapting to uncertainty is a defining characteristic. As a result, the development of artificial intelligence for imperfect information games is a critical step towards creating human-like machines. Furthermore, several key advancements in recent years have led to breakthroughs in this field. Perhaps the most famous of all imperfect-information games is Poker and its many variants.

The game of Poker has been of significant interest to AI researchers because of its ubiquity, and also the availability of professional human poker players to test their algorithms against. Two of

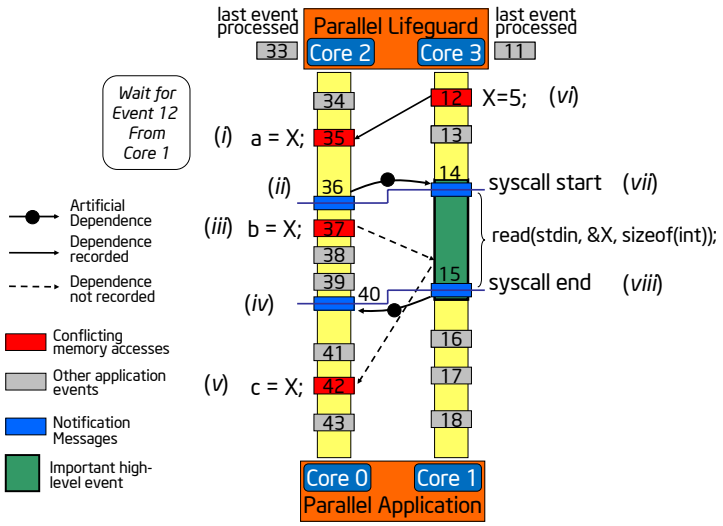

Figure 1: Illustration, reproduced from AuthorA *et al.* [**?**].

2 Summary of Paper 1

Here is an example of how we cite a conference paper by Author1 *et al.* [**?**].

2.1 Approach to solving the problem

2.2 Summary of results

3 Summary of Paper 2

Here is an example of how we cite a journal paper by AuthorA *et al.* [**?**].

3.1 Approach to solving the problem

You may want to include illustrations from the papers, if they are helpful, such as the example shown in Figure 1.

3.2 Summary of results

4 Summary of Paper 3

4.1 Approach to solving the problem

4.2 Summary of results

5 Comparison of the Three Papers

Here you should compare the papers that were discussed earlier in Sections 2, 3, and 4. You may want to refer back to specific details in the results sections. For example, how do the results by Author1 *et al.* [**?**] (summarized earlier in Section 3.2) compare with the results by AuthorA *et al.* [**?**] (summarized above in Section 2.2), etc.

6 Conclusions

What can you conclude from your study?