Comparing game tree search techniques for general videogame AI (GVGAI) Literature Review

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Abstract—The abstract goes here.

I. INTRODUCTION

THIS Literature review will cover what questions I will be asking for my dissertation topic as well all the literature I have found that is related to my research questions.

II. RESEARCH QUESTIONS

- How does game tree search techniques compare for GVGAI?
- Where does GVGAI succeed best in set games?
- Where does each tree search technique do well in each game?
- What are the most challenging areas for GVGAI in the GVGAI competition?

III. LITERATURE REVIEW

A. What is General Video Game AI (GVGAI)?

GVGAI is an AI competition framework, in which AI controllers are designed to be able to play any game it is given, even when it has never played that game before [1], [2]. The framework contains a library of Java based video games.

B. Goal Orientation

This paper [3]

C. Analyzing the Robustness of General Video Game Playing Agents

This paper [4]

IV. CONCLUSION

The conclusion goes here.

REFERENCES

[1] D. Perez-Liebana, S. Samothrakis, J. Togelius, S. M. Lucas, and T. Schaul, "General video game ai: Competition, challenges and opportunities," in *Thirtieth AAAI Conference on Artificial Intelligence*, 2016.
[2] D. Perez, "The general video game ai competition," http://http://www.gvgai.net/, 2017.
[3] B. Ross, "General video game playing with goal orientation," 2014.
[4] D. Pérez-Liébana, S. Samothrakis, J. Togelius, T. Schaul, and S. M. Lucas, "Analyzing the robustness of general video game playing agents," in *Computational Intelligence and Games (CIG), 2016 IEEE Conference on*. IEEE, 2016, pp. 1–8.

APPENDIX A
FIRST APPENDIX

Appendices are optional. Delete or comment out this part if you do not need them.