COMP30024 Artificial Intelligence Project Part B Report

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May 2020

1   Action Selection

Describe the approach your game-playing program uses for deciding on which actions to take throughout the game. Comment on your choice of search algorithm, and on any modifications you have made, and why. Explain your evaluation function and its features, including their strategic motivations.

2   Machine Learning

If you have applied machine learning, discuss how it fits into your program's overall game-playing approach, and discuss the learning methodology you followed for training and why you followed this methodology. Discuss treestrap here, or below?

3   Overall Effectiveness

Comment on the overall effectiveness of your game-playing program. If you have created multiple game- playing programs using different techniques, compare their relative effectiveness, and explain how you chose which program to submit for performance assessment.

4   Additional Areas of Note

Include a discussion of any other important creative or technical aspects of your work, such as: algorithmic optimisations, specialised data structures, any other significant efficiency optimisations, alternative or en- hanced algorithms beyond those discussed in class, other significant ideas you have incorporated from your independent research, and any supporting work you have completed to assist in the process of developing an Expendibots-playing program.

4.1   Move ordering

4.2   Opening book

4.3   Endgame

4.4   Memoisation

Made sense during training, not for final player

4.5   Zobrist Hashing