

Comp320 Literature Review

Alastair Rayner

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- ▶ Arcade Learning Environment (ALE) is based of the Atari 2600.
 - ▶ In ALE the controller is presented with the raw screen capture of the game.
 - ▶ As well as a score counter.
 - ▶ ALE provides an interface for domain-independent agents to try hundreds of Atari 2600 game environments.

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- ▶ However it does not cover the challenges faced by each game, and where each controller succeed/failed.
- ▶ The potential of finding out where each AI algorithm succeeds best in what situation, could lead to the development of a hyper/meta heuristic that is able to select what algorithm to use when it gets into a certain situation.

Research Questions

My Research questions I aim to answer

- ▶ How does game tree search techniques compare for GVGAI?
- ▶ Where does each tree search technique do well in each game?
- ▶ What are the strengths and weaknesses of different search techniques and how can they be improved?