RL Project Template

Alireza Samar, Arnold Gomes, Danny Demarco,
Department of Computer Science
University of Bath
Bath, BA2 7AY
{as4731, ag2342, dd480, rdw41}@bath.ac.uk

1 Problem Definition

A clear, precise and concise description of your chosen problem, including the states, actions, transition dynamics, and the reward function. You will lose marks for an unclear, incorrect, or incomplete problem definition.

2 Background

A discussion of reinforcement learning methods that may be effective at solving your chosen problem, their strengths and weaknesses for your chosen problem, and any existing results in the scientific literature (or publicly available online) on your chosen problem or similar problems.

3 Method

A description of the method(s) used to solve your chosen problem, an explanation of how these methods work (in your own words), and an explanation of why you chose these specific methods.

4 Results

A presentation of your results, showing how quickly and how well your agent(s) learn (i.e. improve their policies). Include informative baselines for comparison (e.g. the best possible performance, the performance of an average human, or the performance of an agent that selects actions randomly).

5 Discussion

An evaluation of how well you solved your chosen problem.

6 Future Work

A discussion of potential future work you would complete if you had more time.

7 Personal Experience

A discussion of your personal experience with the project, such as difficulties or pleasant surprises you encountered while completing it.

References

Appendices

If you have additional content that you would like to include in the appendices, please do so here. There is no limit to the length of your appendices, but we are not obliged to read them in their entirety while marking. The main body of your report should contain all essential information, and content in the appendices should be clearly referenced where it's needed elsewhere.

Appendices should include (1) a detailed description of the problem domain, including the states, actions, reward function, and transition dynamics; (2) all experimental details so that the reader can fully replicate your experiments; and (3) how you selected your hyperparameters (if applicable).

Appendix A: Example Appendix 1

Appendix B: Example Appendix 2