

SAARLAND UNIVERSITY DEPARTMENT OF COMPUTATIONAL LINGUISTICS

SOFTWARE PROJECT: Neural Networks

Tetris AI

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Abstract

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1 Our initial plan

1.1 Reinforcement learning

Describe RL generally.

1.2 Reinforcement learning for Tetris

Describe how RL would work for Tetris.

1.3 Computer Vision

Describe CV.

1.4 Computer Vision for Tetris

Describe why to use CV for Tetris. How to combine RL and CV.

2 Implementing RL with CV

2.1



Figure 1. The saarland uni logo.

3 DQN

3.1

4 PPO

4.1 Citation example

Within a text, you can say that Lin and Pantel (2001) found out something. Or you can just state the thing, and then put the author in parentheses (see Szpektor et al., 2004).

References

- Lin, D. and Pantel, P. (2001). DIRT Discovery of Inference Rules from Text. In *Proceedings of the ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD-01)*, pages 323–328, San Francisco, CA.
- Szpektor, I., Tanev, H., Dagan, I., and Coppola, B. (2004). Scaling web-based acquisition of entailment relations. In *Conference on Empirical Methods in Natural Language Processing (EMNLP-04)*, pages 41–48, Barcelona, Spain.