



## Reinforcement Learning Playground

Google Deepmind and OpenAI have just open-sourced their Deep (Reinforcement) Learning Simulation environments: DeepMind Lab and Universe. These tools can be used to simulate relatively complex environments, such as walking through a maze and picking up the right kinds of fruits to reach some objective. The motivation behind using such environment is the notion that if humans lived in a cardboard box they would not learn to do much at all. Only because we are exposed to a very complex world can we learn many different tasks. Therefore, in order to get one step closer to general purpose AI, we need to simulate more complex environments as playgrounds for our learning algorithms.

In this thesis we would like to explore the capabilities of DeepMind Lab and Universe. The possibilities are almost endless. If this sounds interesting to you, do not hesitate to contact us so that we can have a chat. We would like to hear about your ideas!

**Requirements:** Interest in and willingness to study Machine Learning and Deep Learning. There will be weekly meetings with your supervisors to discuss progress and open questions.

**Interested? Please contact us for more details!**

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