



## Deep Reinforcement Learning

Google Deepmind and OpenAI have 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.

There are many interesting problems in Deep Reinforcement Learning that are yet to be solved. We have already done some work with DeepMind Lab which could be extended; we taught an agent to read a map in order to find the exit in a maze<sup>1</sup>. There is still a lot of room for improvements and extension, such as adding traps, enemies, multiple agents, and so on. We are also open for new ideas, for example using the Atari game suite, OpenAI Gym or OpenAI Universe. If this sounds interesting to you, do not hesitate to contact us so that we can have a chat. We would like to hear your ideas!



**Requirements:** Knowledge in Machine and Deep Learning. Implementation experience is an advantage.

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

### Contacts

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<sup>1</sup><https://arxiv.org/abs/1711.07479>