Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Distributed Computing

Prof. R. Wattenhofer

Investigating Reinforcement Learning Algorithms

Reinforcement Learning (RL) has already had a lot of success in solving complex problems, from board/video game AIs over neural architecture design algorithms all the way to robot control systems. With the hype, a lot of different algorithms as well as benchmarks have been proposed. However, while benchmark performances give insight into the overall performance of the algorithm they mostly don't reveal *why* the performance of a particular agent is good or bad on specific games.

In this theses, we aim to evaluate the performance of popular RL agents more comprehensibly by designing investigatory environments showing the agents strengths and weaknesses.

Requirements: Interest and prior knowledge in deep learning and reinforcement learning.

Interested? Please contact us for more details!

Contact

- Oliver Richter: orichter@ethz.ch, ETZ H93

- Damian Pascual Ortiz: dpascual@ethz.ch, ETZ H93