Bachelor/Master Thesis

Explanation generation for Reinforcement Learning

Topic

Reinforcement Learning (RL) itself is not very explanatory. For a naïve user it can be difficult to understand an RL agent learning and acting in an environment to solve a task. We are developing an RL agent that is able to explain its decisions so that a user can understand the learning process and guide the agent to learn a task more quickly.

Tasks

- Find a knowledge representation to model the domain in
- Combine the knowledge representation with the state and action space representation of an RL algorithm
- Generate a "natural language" explanation based on the combination of domain knowledge and current state/action

Useful skills

- Experience in programming (preferably Python)
- Some experience with RL (optional)

Contact:
Sebastian Rottschafer
srottschafer@techfak.uni-bielefeld.de