

Q-Learning

Interface

- stringgame
- Implement LearningPlayer
- String sense(String state, double reward);
- void terminate(String state, double reward, bool writeData);
- State example “xoox__xo_”
- Action example “2,3” ;nr. in {1,2,3}
for place X in 2,3

Implementation

- Use full S,A representation for Q
- Use eps-greedy exploration
- Tune parameters by intuition
 - If it doesn't work it's probably a bug and not the parameters!
- Learning will learn quite fast, if it doesn't, there's a bug
- Do NOT use any assumptions about the game besides:
Put an X at a free spot and get any reward.
- Use RandomPlayer as opponent, if you're sure your code works, you can learn against yourself.