

The goal of this work was to create an artificial agent that is able to learn how to play Hearthstone with given deck of cards. We decided to use Q-learning algorithm to achieve it. The side effect of this work is the transformation of the simple simulator of Hearthstone into the framework for developing Artificial Intelligence in this game. For the purpose of training and evaluation, commonly played strategies served us as inspiration for the testing agents that we developed. This work contains comparison of the table representation of Q-function and the neural network approximation of it. The original goal was fulfilled partially. We were successful in the creation of the learning agent but he is only able to learn one specific strategy.