Abstract:

Dota 2 is one of the most popular strategic computer games of the Multiplayer Online Battle Arena (MOBA) genre. MOBA games are based on teamwork and tactical thinking. That makes them an interesting platform for the artificial intelligence (AI) research, that aims to create artificial agents capable of playing the game. However, there does not exist any framework, that would allow the development of complex agents. First, we developed a framework that allows the creation of agents for Dota 2 in Java. Second, we implemented an agent above the framework, that is capable of playing the game. We have divided the work into two parts. First, we have analyzed requirements for our framework and described its architecture. Second, we have analyzed Dota 2 from the AI perspective and implemented agents above our framework. Our agents were capable of playing the game. The framework can be used for further research.