

Game playing is a relatively interesting task in the field of artificial intelligence in these days. The master thesis deals with general artificial intelligence which is capable of playing selected simple games based on information that is also available to the human player. Our selected games are 2048, Mario, racing simulator TORCS and Alhambra. All the information acquired by artificial intelligence is provided by games through an interface, therefore none of the models uses visual input. We use evolutionary approaches such as evolutionary algorithms, evolutionary strategy CMA and differential evolution applied to different types of neural networks. We are also dealing with deep reinforcement learning. We test these approaches and compare their results.