

Abstract: General game playing is an area of artificial intelligence which focuses on creating agents capable of playing many games from some class. The agents receive the rules just before the match and therefore cannot be specialized for each game. Deepstack is the first artificial intelligence to beat professional human players in heads-up no-limit Texas hold'em poker. While it is specialized for poker, at its core is a general algorithm for playing two-player zero-sum games with imperfect information – continual resolving. In this thesis we introduce a general version of continual resolving and compare its performance against Online Outcome Sampling Monte Carlo Counterfactual Regret Minimization in several games.