

- Mdnates File Name: [undefined](#)

Extracted Annotations (2021-12-25)

"Two requirements for a satisfactory multiagent learning algorithm are that it 1. learns to play optimally against stationary opponents and 2. converges to a Nash equilibrium in self-play." ([Conitzer and Sandholm 2006:83](#))

"AWESOME ()" ([Conitzer and Sandholm 2006:83](#))

is to try to adapt to the others' strategies when they appear stationary, but otherwise to retreat to a precomputed equilibrium strategy.

"First, it only deals with repeated games|that is, stochastic games with a single state. Second, it assumes that the structure of the game is known (has already been learned). This assumption is made in much (though not all) of the game theory literature on learning (for a review, see (Fudenberg & Levine, 1998)), but a significant amount of other research in multiagent learning in computer science does attempt to have the agents learn the game as well (Littman, 1994; Littman & Szepesvári, 1996; Hu & Wellman, 1998; Claus & Boutilier, 1998; Brafman & Tennenholtz, 2000; Banerjee et al., 2001; Littman, 2001; Pivazyan & Shoham, 2002; Wang & Sandholm, 2002; Brafman & Tennenholtz, 2003; Greenwald & Hall, 2003; Conitzer & Sandholm, 2003a; Wang & Sandholm, 2003; Conitzer & Sandholm, 2004). However, so far this research has not been able to make claims of the kind made in this paper." ([Conitzer and Sandholm 2006:85](#))

"If the game is not known initially, but the agents can observe the realized payoffs of all agents, then, given that all the agents are using the same learning algorithm, they could conceivably collaboratively explore the game and learn the game structure, and then learn how to play." ([Conitzer and Sandholm 2006:85](#))

"The third assumption is that the agents" ([Conitzer and Sandholm 2006:85](#))

"can compute a Nash equilibrium." ([Conitzer and Sandholm 2006:86](#))

"The basic idea behind AWESOME (Adapt When Everybody is Stationary, Otherwise Move to Equilibrium) is to try to adapt to the other agents' strategies when they appear stationary, but otherwise to retreat to a precomputed equilibrium strategy." ([Conitzer and Sandholm 2006:86](#))

"As usual, we assume that the agents observe each others' actions." ([Conitzer and Sandholm 2006:87](#))