

Genetic Algorithms for Solving Graphical Games*

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ABSTRACT

Finding equilibria is a core task for graphical games. A genetic algorithm is presented for computing an exact equilibrium of graphical games with arbitrary graphical structure through exploiting structural properties of graphical games. Our algorithm has capability of global optimization and converges to a Nash equilibrium with much more probability than previous approach. Experiment results show our algorithm can find a high-quality Nash equilibrium in much larger games.

Keywords: Genetic Algorithms, Graphical Games, Nash equilibrium

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