Special Issue

AI in Game Theory: Theory and Applications

Message from the Guest Editors

In Game Theory, every agent tries to maximize their own profit (utility, payoff, ...), in possible competition (mutual dependence) with each other, and, therefore, optimal decisions occur in the presence of utility tradeoffs. In comparison to a simple multi-objective optimization problem, in Game Theory, the payoff functions of the players vary, showing an interdependence, a kind of indirect interaction, since the payoff of one player depends also upon the strategies of the other players; any player directly affects the payoffs of the others. Often, when binding agreements are allowed, the complex nature of the interaction does not allow us to find compromised solutions in closed-forms. In this case, solving the problem consists of computing (or approximating) a representative boundary of Pareto optimal solutions. In this Special Issue, we encourage submissions providing possible applications of AI in Game Theory. The topics of interest for this publication include, but are not limited to, the following: Artificial Intelligence in Game Theory.
Artificial Intelligence in decision-making.
Evolutionary algorithms in Game Theory.
Machine learning in Pareto fronts.

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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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