

A brief overview of social dilemmas: from social sciences to multiagent based simulations

CHEANG, R. M.⁸¹; BRANDÃO, A. A. F.⁸²; SICHMAN, J. S.⁸³

Social dilemma is the name given to a set of games with conflicting individual and communal incentives and characterized by the existence of deficient equilibria. This area of research has for a long time drawn the attention of the social sciences, but not as much from the multiagent community. This paper aims to introduce this multidisciplinary area of research to computer scientists and engineers with a particular interest in multiagent systems. To this end, we present an overview of how the field has evolved over the last 40 years that includes: an introduction, key learning points coming from the social sciences, how social dilemmas are being simulated in multiagent Markov game settings, and the road ahead; difficulties and perspectives.

Keywords: Social Dilemma; Agent-based Simulation; Reinforcement Learning.

Referência:

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⁸¹ Laboratório de Técnicas Inteligentes, Escola Politécnica da Universidade de São Paulo; Centro de Ciência de Dados da Universidade de São Paulo. E-mail: rafael cheang@usp.br

⁸² Laboratório de Técnicas Inteligentes, Escola Politécnica da Universidade de São Paulo. E-mail: anarosa.brandao@usp.br

⁸³ Laboratório de Técnicas Inteligentes, Escola Politécnica da Universidade de São Paulo. E-mail: jaime.sichman@usp.br