

研究、探讨

基于随机对策的团队CGA学习

郑延斌, 牛丽平

河南师范大学 计算机与信息技术学院, 河南 新乡 453007

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摘要 分布式虚拟环境中, 个体CGA通过学习来适应环境和团队中其他CGA, 从而增强团队求解问题的能力, 提高团队的适应性和鲁棒性。当基于随机对策的团队CGA学习出现多个平衡解时, 必须解决平衡的选择问题。提出了一种团队CGA学习方法TCCLA, 该方法把团队CGA的学习分为两个层次: 管理成员的学习和非管理成员的学习, 团队中所有成员根据偏好选择最优行为, 非管理成员在管理成员的引导下学习到最优平衡, 解决了平衡的选择问题, 改进了IPL算法, 实验表明TCCLA算法的高效性。

关键词 [团队CGA](#) [学习](#) [对策](#) [平衡](#) [偏好](#)

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Research on team CGA learning based on stochastic game

ZHENG Yan-bin, NIU Li-ping

College of Computer and Information, Henan Normal University, Xinxiang, Henan 453007, China

Abstract

In distributed virtual environment, through learning, individual CGA can adapt environment and other CGA in team, so the capability of team problems solving, the adaptability and robust of CGA team have been increased. When the learning based on random games of team CGA has much equilibrium, the equilibrium selection problem of every member in team must be solved. This paper gives a learning method for team CGA called TCCLA. It divides the learning into two levels: manager learning and non manager learning. Every member in team selects its optimization actions according to its preference. Non-manager learns the optimization equilibrium under the direction of manager. So the problem of equilibrium selection has been solved. The IPL algorithm has been improved. The efficiency of TCCLA has been validated through experimentation.

Key words [team CGA \(Computer Generated Actor\)](#) [learn](#) [game](#) [equilibrium](#) [preference](#)

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通讯作者 郑延斌 zybcgf@163.com

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