

基于决策论元胞自动机的网络舆情传播研究

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摘要：在舆情传播研究中，传统元胞自动机采用多数演变规则，以多数情感代表倾向度，忽略了舆情个体间的相互影响，会导致错误的预测结果，为此，将决策论结合元胞自动机应用于舆情传播问题中。首先介绍元胞自动机和决策论的基本概念及特点；然后建立基于决策论的元胞自动机模型，以相对收益模型作为演变规则，设计元胞状态演变的遍历算法；最后通过实例和模拟仿真表明算法可实现舆情传播倾向度趋向明显，结果验证了算法的有效性和可行性。

关键词：元胞自动机；舆情传播；决策论；竞争收益；演变规则

Research on Network Public Opinion Spread Based on

Decision Theory Cellular Automata

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Abstract: In the study of public opinion spread, the evolution rules of the traditional cellular automaton are the majority principle which provides most emotional represents the tendency, but ignoring public opinion between individuals influence each other, it can lead to wrong prediction results, therefore, this paper combines decision theory and cellular automata and applied to the public opinion spread. First of all, introduce the basic concept and characteristics of cellular automata and decision theory. Cellular automata model based on Decision theory is set up, the algorithm of cellular state evolution is designed with relative income model as the evolution rules. Finally examples and simulation indicates that algorithm can realize public opinion spread tendency obviously, the results verify the feasibility and effectiveness of the algorithm.

Key words: cellular automata; public opinion spread; decision theory; competitive benefits; evolution rules

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