基于动态聚类分析的网络用户相似性特征搜索研究

马杰 (南京审计大学 实验中心, 江苏 南京 211815)

摘要: 网络用户的相似性特征体现了用户的偏好,为了提高网络信息的自适应推荐能力,提出一种基于动态聚类分析的网络用户相似性特征搜索算法.采用非平稳随机序列分析方法构建网络用户信息传递模型,提取反映网络用户行为特征的关联规则特征量,采用关联信息标注方法进行网络用户相似性行为特征信息检索,对提取的网络用户相似性特征信息进行动态聚类分析,采用模糊聚类方法进行相似性行为特征信息的自适应归类识别,提高网络用户相似性特征的自适应搜索和信息处理能力.仿真结果表明,采用该方法进行网络用户相似性特征搜索的准确性较高,对网络用户的相似性行为特征信息的聚类识别能力较好,从而提高了网络信息的优化推荐能力.

关键词: 动态聚类; 网络用户; 特征搜索; 特征提取; 信息处理

Research on Similarity Feature Search of Network Users Based on Dynamic Clustering Analysis

MA Jie

(Experiment center, Nanjing Audit University, Nanjing, 211815 China)

Abstract: The similarity features of network users reflect the preferences of users, in order to improve the adaptive recommendation ability of network information, A similarity feature search algorithm for network users based on dynamic clustering analysis is proposed. Non-stationary random sequence analysis method is used to construct the network user information transfer model, and the association rule feature quantity which reflects the network user behavior feature is extracted, and the association information annotation method is used to retrieve the network user similarity behavior characteristic information. Based on the dynamic clustering analysis of the extracted network users' similarity feature information, the fuzzy clustering method is used for adaptive classification and recognition of the similarity behavior feature information, so as to improve the ability of adaptive searching and information processing of the network users' similarity features. The simulation results show that the proposed method is more accurate in searching network users' similarity features, and it has a better ability of clustering and recognition of network users' similarity behavior information, thus improving the ability of optimizing and recommending network information.

Key words: dynamic clustering; Network users; feature search; feature extraction; Information processing

作者简介:

马杰男,(1977-),硕士,实验师.研究方向为计算机技术应用、网络与信息处理、信息化教学设计.E-mail: majie@nau.edu.cn.