Abstract

One of the most promising and potent remedies against information overload comes in the form of personalization. It aims to customize the interactions on a website depending on the user's explicit and/or implicit interests and desires. User profiling is a fundamental component of any personalization applications. In this paper, the focus is on search engine personalization and to develop concept-based user profiling methods. The research results show that the profile which capture and utilize both of the users' positive and negative preferences perform the best by means of p-Click and SpyNB-c method. To improve the quality of information access and infer users' intentions for personalization using concept based user profile, collaborative filtering will be used. Finally, the concept-based user profiles can be integrated into the ranking algorithms of search engine.
References

- Burcu et. al, "Guided Navigation Using Query Log Mining through Query Expansion", Anadolu University, Turkey.
- Pin-Yu Pan et. al, "Wireless and Mobile Communication Laboratory, The Development of An Ontology-based Adaptive Personalized Recommender System", Department of Computer Science and Information Engineering National Cheng Kung University, Taiwan.
- Christos Bouras, "Personalized News Search in WWW: Adapting on user's behavior", Professor Research Academic Computer Technology Institute, MsC Research Academic Computer Technology Institute, Greece.
- Fang Liu et. al, "Personalized Web Search by Mapping User Queries to Categories", Department of Computer Science, University of Illinois at Chicago, IL 60607, (312) 996-4881, fliu1@cs.uic.edu.
- Thorsten, Cornell University, "Optimizing Search Engines using Click through Data", Department of Computer Science, Ithaca, NY 14853, USA, tj@cs.cornell.edu.
- Mirco Speretta, "Personalizing Search Based on User Search Histories", Electrical Engineering and Computer Science, University of Kansas Lawrence.
- Magdalini Teriyaki et. al, "Web Mining for Web Personalization", Department of Informatics, Athens University of Economics and Business Patission 76, Athens.
- Demetrius Pierrakos et. al, "Personalizing Web Directories with the Aid of Web Usage Data", IEEE Transactions on Knowledge and Data Engineering, vol. 22, No. 9, Sep 2010.
- Nicola and Mathis, "Personalizing web search using Long Term Browsing History", feb9-12, 2011, copyright 2011 ACM.
- Kenneth Wai-Ting Leung et. al, "Personalized Concept-Based Clustering of Search Engine Queries", IEEE Transactions on Knowledge and Data Engineering vol. 20, No. 11, Nov 2008.
- Daniela Godoy and Anglia, "User profiling for Web Page Filtering", IEEE
Transactions on Knowledge and Data Engineering vol. 20, No. 11, August 2005.
- Fang Liu et. al, "Personalized Web search for improving Retrieval Effectiveness", IEEE Transactions on Knowledge and Data Engineering, vol no. 16, No. 1 Jan 2004.

Index Terms

Computer Science
Emerging Trends in Technology

Keywords
Positive Preference; Negative Preferences; Clickthrough Data; Collaborative Filtering