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 Patision76, Athens.
- Demetrios 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.
- Nicolaapos;s 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.

Index Terms

Computer Science  Emerging Trends in Technology

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