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国外协同信息检索系统比较分析

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摘要 【目的】协同信息检索系统是协同信息检索的工具, 本文为协同信息检索研究及系统开发提供参考。【方法】采用典型案例研究法和比较分析法, 分析Annotate!、Cerchiamo、CoSearch和SearchTogether等4个国外典型协同信息检索系统在框架结构、支撑技术、实现功能和性能评价方面的异同。【结果】显性协同信息检索系统支持同步检索, 采用用户界面调节, 多为C/S结构, 采用即时信息和自动分工技术, 功能较丰富; 而隐性协同信息检索系统支持异步检索, 采用深层算法调节, 多为多层次结构, 采用数据或代理技术, 功能较单一。【局限】由于协同信息检索系统目前还处于实验开发阶段, 未能对各系统进行体验式研究。【结论】协同信息检索系统开发没有固定模式, 需根据用户功能需求进行选择, 并采用相应支持技术。

关键词: [协同检索](#) [信息检索系统](#) [Annotate!](#) [Cerchiamo](#) [CoSearch](#) [SearchTogether](#)

Abstract: [Objective] Collaborative information search system is a tool for collaborative information retrieval. This paper provides references to its research and development. [Methods] Analysis methods such as typical case study and comparative study are adopted to analyze four foreign representative collaborative information search systems, which are Annotate!, Cerchiamo, CoSearch and SearchTogether, comparing in the frame structure, supporting technology, function and evaluation. [Results] Explicit collaborative search systems support synchronous retrieval, adjusting by user interface, mostly for C/S structure, using instant messaging and automatic division technologies, which are functional richer. While tacit collaborative search systems support asynchronous retrieval, adjusting by deep algorithm, mostly for multi-level structure, using data or agent technologies, which are functional simpler. [Limitations] Due to the experimental research stage, experience research method isn't adopted in this paper. [Conclusions] The development of collaborative search systems has no fixed way. User's functional requirements and corresponding supported technologies should be taken into consideration when designing.

Keywords: [Collaborative search](#), [Information search system](#), [Annotate!](#), [Cerchiamo](#), [CoSearch](#), [SearchTogether](#)

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[1] Morris M R. Collaborating Alone and Together: Investigating Persistent and Multi-User Web Search Activities[EB/OL]. [2013-03-21]. <http://research.microsoft.com/pubs/70402/tr-2007-11.pdf>.






[2] Wilson P. Computer Supported Cooperative Work: An Introduction[M]. Springer, 1991.

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- [3] 史美林. 计算机支持的协同工作[J]. 通信学报, 1995, 16 (1) : 55-61. (Shi Meilin. CSCW: Computer Supported Cooperative Work[J]. Journal of China Institute of Communications, 1995, 16 (1) : 55-61.) 
- [4] Johnson-Lenz P, Johnson-Lenz T. Rhythms, Boundaries, and Containers: Creative Dynamics of Asynchronous Group Life[M]. Lake Oswego: Awakening Technology, 1990.
- [5] Shah C. Lessons and Challenges for Collaborative Information Seeking (CIS) Systems Developers[C]. In: Proceedings of GROUP 2009 Workshop on Collaborative Information Behavior, Sanibel Island, Florida, USA, 2009.
- [6] Wu L, Menczer F. Diverse Peer Selection in Collaborative Web Search[C]. In: Proceedings of the 2009 ACM Symposium on Applied Computing. New York, NY, USA: ACM, 2009: 1709-1713.
- [7] Bradner E, Kellogg W A, Erickson T. The Adoption and Use of BABBLE: A Field Study of Chat in the Workplace [C]. In: Proceedings of the 6th European Conference on Computer Supported Cooperative Work. Amsterdam: Kluwer Academic Publishers, 1999: 139-158.
- [8] Altingovde I S, Subakan N, Ulusoy . Cluster Searching Strategies for Collaborative Recommendation Systems[J]. Information Processing & Management, 2013, 49 (3) : 688-697. 
- [9] Cernea D A, Del Moral E, Labra Gayo J E. SOAF: Semantic Indexing System Based on Collaborative Tagging[J]. Interdisciplinary Journal of Knowledge & Learning Objects, 2008 (4) : 137-149. 
- [10] Gonzales R, Shah C. Coagmento: A System for Supporting Collaborative Information Seeking[J]. Proceedings of the American Society for Information Science and Technology, 2011, 48 (1) : 1-4.
- [11] Amershi S, Morris M R. CoSearch: A System for Co-located Collaborative Web Search[EB/OL]. [2013-03-25]. <http://research.microsoft.com/~merrie/papers/cosearch.pdf>.
- [12] Krishnappa R. Multi-User Search Engine: Supporting Collaborative Information Seeking and Retrieval[D]. Rolla: University of Missouri-Rolla, 2005.
- [13] Morris M R, Horvitz E. SearchTogether: An Interface for Collaborative Web Search [EB/OL]. [2013-03-25]. http://research.microsoft.com/~horvitz/searchtogether_uist2007.pdf.
- [14] Resnick P, Iacovou N, Suchak M, et al. GroupLens: An Open Architecture for Collaborative Filtering of Netnews[C]. In: Proceedings of the 1994 ACM Conference on Computer Supported Cooperative Work (CSCW'94). New York: ACM, 1994: 175-186.
- [15] Smeaton A F, Lee H, Foley C, et al. DiamondTouch: Collaborative Video Searching on a Table[C]. In: Proceedings of SPIE Electronic Imaging - Multimedia Content Analysis, Management, and Retrieval, San Jose, CA, USA, 2006.
- [16] Maltz D, Ehrlich K. Pointing the Way: Active Collaborative Filtering[C]. In: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems. 1995: 202-209.
- [17] Ginsburg M. Annotate! A Tool for Collaborative Information Retrieval[EB/OL]. [2013-03-25]. http://pdf.aminer.org/000/592/326/info_a_simple_document_annotation_facility.pdf.
- [18] Lee Y J. VisSearch: A Collaborative Web Searching Environment[J]. Computers & Education, 2005, 44 (4) : 423-439. 
- [19] Golovchinsky G, Adcock J, Pickens J, et al. Cerchiamo: A Collaborative Exploratory Search Tool[EB/OL]. [2013-03-25]. <http://www.fxpal.com/publications/FXPAL-PR-08-470.pdf>.
- [20] Smyth B, Freyne J, Coyle M, et al. I-SPY: Anonymous, Community-based Personalization by Collaborative Meta-Search[C]. In: Proceedings of SGAI International Conference on Artificial Intelligence. 2003.
- [21] Morris M R, Horvitz E. S³: Storable, Shareable Search[C]. In: Proceedings of the 11th IFIP TC 13 International Conference on Human-Computer Interaction. 2007: 120-123.
- [22] Baecker R M, Grudin J, Buxton W, et al. Readings in Human-Computer Interaction: Toward the Year 2000[M]. Morgan Kaufmann, 1995.
- [23] Golovchinsky G, Pickens J, Back M. A Taxonomy of Collaboration in Online Information Seeking[EB/OL]. [2013-03-25]. <http://arxiv.org/ftp/arxiv/papers/0908/0908.0704.pdf>.
- [24] 吴丹, 邱瑾. 国外协同信息检索行为研究述评[J]. 中国图书馆学报, 2012, 38 (6) : 100-110. (Wu Dan, Qiu Jin. A Review on Foreign Studies of Collaborative Information Seeking Behavior[J]. Journal of Library Science in China, 2012, 38 (6) : 100-110.)
- [25] Rodden T, Blair G. CSCW and Distributed Systems: The Problem of Control[C]. In: Proceedings of the 2nd European Conference on Computer-supported Cooperative Work. 1991: 49-64.
- [26] Pickens J, Golovchinsky G, Shah C, et al. Algorithmic Mediation for Collaborative Exploratory Search[C]. In: Proceedings of the 31st Annual International ACM SIGIR Conference on Research and Development in Information Retrieval. New York, NY, USA: ACM, 2008: 315-322.
- [27] Twidale M B, Nichols D M, Paice C D. Browsing is a Collaborative Process[J]. Information Processing and Management, 1997, 33 (6) : 761-783. 
- [28] Microsoft SearchTogether (Beta) [EB/OL]. [2013-03-25]. <http://research.microsoft.com/en-us/um/redmond/projects/searchtogether/>.
- [29] Microsoft MultiPoint [EB/OL]. [2013-04-16]. <http://www.ceta.pku.edu.cn/view/research/jiaoshizhuangbeizhuantizu/zhuantiziyuan/Windows%20Multipoint%20-%20UPG.pdf>.
- [30] Microsoft MultiPoint Server [EB/OL]. [2013-09-21]. <http://www.microsoft.com/china/windows/multipoint/default.aspx>.

[31] Ginsburg M, Kambil A. Annotate: A Web-based Knowledge Management Support System for Document Collections [C]. In: Proceedings of the 32nd Annual Hawaii International Conference on Systems Sciences. IEEE, 1999. DOI: 10.1109/HICSS.1999.772797.

- [1] 成颖. 基于相关性判据的学术信息检索系统成功模型建构[J]. 现代图书情报技术, 2011, 27(9): 46-53
- [2] 成颖. 基于相关性判据的学术信息检索系统成功模型实证分析[J]. 现代图书情报技术, 2011, 27(10): 45-53
- [3] 吴丹. 英汉交互式跨语言检索系统设计及实现*[J]. 现代图书情报技术, 2009, 3(2): 89-95
- [4] 窦永香, 赵捧未, 秦春秀. 基于本体的对等网语义检索系统[J]. 现代图书情报技术, 2007, 2(12): 25-29
- [5] 谢志耘. 光盘网络信息检索系统的发展趋势[J]. 现代图书情报技术, 2000, 16(3): 31-33
- [6] 陈豫, 杨洪陶. 网络化BDSIRS全文信息检索系统的开发研究[J]. 现代图书情报技术, 1998, 14(1): 6-11
- [7] 曾民族. 文本信息检索技术进展和性能评价框架[J]. 现代图书情报技术, 1997, 13(3): 14-18
- [8] 任安良, 潘一辅. 基于XBASE语言的通用信息检索系统的实现[J]. 现代图书情报技术, 1996, 12(2): 31-33
- [9] 张承庆. 中国专利信息检索系统的实现[J]. 现代图书情报技术, 1995, 11(5): 3-6