

User Modeling in Exploratory Search

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ABSTRACT

This is abstract.

Author Keywords

Exploratory Search; Information Retrieval; User Modeling.

ACM Classification Keywords

H.5.m. Information Interfaces and Presentation (e.g. HCI):
Miscellaneous

General Terms

Human Factors; Design; Measurement.

INTRODUCTION

This is the introduction.

USER MODELING

Shortish explanation of user modeling key concepts. [10], [4]

Stereotypes

Modeling stereotypes. HCI reference needed. [2]

Personalization

Individualization of user models, Adaptive/Adaptable User Interfaces, intelligent user interfaces [1], [3]

EXPLORATORY SEARCH IS A SUBTOPIC OF INFORMATION RETRIEVAL

Information retrieval

There are many goals in information retrieval and exploratory search is one of them. [5], [6]

Exploratory Search

Introduction to exploratory search. [8], [15], [12]

USER MODELING IN EXPLORATORY SEARCH

How has user modeling been used in supporting exploratory search, example cases? What challenges have emerged? [9], [11], [13]

Evaluation of Exploratory Search Systems

What are the challenges in evaluating Exploratory Search Systems? [14], [7]

CONCLUSION

Here are the conclusions.

WHO ADDED WHAT REFERENCES?

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[13] Ilkka
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REFERENCES

1. Bunt, A., Conati, C., and McGrenere, J. What role can adaptive support play in an adaptable system? In *Proceedings of the 9th international conference on Intelligent user interfaces*, ACM (2004), 117–124.
2. Dillon, A., and Watson, C. User analysis in hci the historical lessons from individual differences research. *International Journal of Human-Computer Studies* 45, 6 (12 1996), 619–637.
3. Findlater, L., and McGrenere, J. A comparison of static, adaptive, and adaptable menus. In *Proceedings of the SIGCHI conference on Human factors in computing systems*, ACM (2004), 89–96.
4. Fischer, G. User modeling in human–computer interaction. *User modeling and user-adapted interaction* 11, 1-2 (2001), 65–86.
5. Hearst, M., Elliott, A., English, J., Sinha, R., Swearingen, K., and Yee, K.-P. Finding the flow in website search. *Communications of the ACM* 45, 9 (2002), 42–49. cited By (since 1996) 110.

6. Kuhlthau, C. C. Inside the search process: Information seeking from the user's perspective. *JASIS* 42, 5 (1991), 361–371.
7. Kules, B., and Shneiderman, B. Users can change their web search tactics: Design guidelines for categorized overviews. *Information Processing and Management* 44, 2 (2008), 463–484. Cited By (since 1996): 27.
8. Marchionini, G. Exploratory search: From finding to understanding. vol. 49, Affiliation: School of Information and Library Science, University of North Carolina, Chapel Hill, United States (2006), 41–46. Cited By (since 1996): 260.
9. O'Connor, B., Krieger, M., and Ahn, D. Tweetmotif: Exploratory search and topic summarization for twitter. *Proceedings of ICWSM* (2010), 2–3.
10. Rich, E. Users are individuals: individualizing user models. *International Journal of Human-Computer Studies* 51, 2 (8 1999), 323–338.
11. Sugiyama, K., Hatano, K., and Yoshikawa, M. Adaptive web search based on user profile constructed without any effort from users. In *Thirteenth International World Wide Web Conference Proceedings, WWW2004* (2004), 675–684. Cited By (since 1996): 165.
12. Tvarožek, M. Exploratory search in the adaptive social semantic web. *Information Sciences and Technologies Bulletin of the ACM Slovakia* 3, 1 (2011), 42–51.
13. White, R. W., Drucker, S. M., Marchionini, G., Hearst, M., and Schraefel, M. C. Exploratory search and hci: Designing and evaluating interfaces to support exploratory search interaction. In *Conference on Human Factors in Computing Systems - Proceedings* (2007), 2877–2880. Cited By (since 1996): 3.
14. White, R. W., Marchionini, G., and Muresan, G. Evaluating exploratory search systems. introduction to special topic issue of information processing and management. *Information Processing and Management* 44, 2 (2008), 433–436.
15. White, R. W., and Roth, R. A. Exploratory search: Beyond the query-response paradigm. *Synthesis Lectures on Information Concepts, Retrieval, and Services* 1, 1 (2009), 1–98.