

## Ryen W. White, Ph.D.

Microsoft  
ryenw@microsoft.com

One Microsoft Way  
Redmond, WA 98052 USA

Web: <http://research.microsoft.com/~ryenw>  
Telephone: +1 425 707 1051

### Biography

Ryen White leads Cortana Research. Previously, he was CTO, Health Intelligence at Microsoft Health and a Principal Researcher at Microsoft Research. Ryen's research has historically been focused on understanding search interaction and on developing tools to help people search more effectively. He received his Ph.D. in Computer Science from University of Glasgow, United Kingdom, in 2004. Ryen has published many conference papers and journal articles in Web search, log analysis, and user studies of search systems. Ryen has received more than ten best-paper awards in conferences and journals, including at ACM SIGIR (2007, 2010, 2013), ACM CIKM (2014, 2015), ACM SIGCHI (2011), and in JASIST (2010). His doctoral research received the British Computer Society's (BCS) *Distinguished Dissertation Award* for the best Computer Science Ph.D. dissertation in the United Kingdom in 2004/2005. In 2014, Ryen received the *Microsoft BCS/BCS IRSG Karen Spärck Jones Award* for contributions to Information Retrieval. His new book, entitled *Interactions with Search Systems*, was published in 2016 by Cambridge University Press. Ryen has led many initiatives on search interaction, especially exploratory search, including an NSF-sponsored invitational workshop and special issues of Communications of the ACM and IEEE Computer, and other journals. From 2008-2013, Ryen co-organized the HCIR Symposium, and subsequently served as the founding steering committee chair for ACM SIGIR's Conference on Human Information Interaction and Retrieval (CHIIR). He has served as area chair for many prestigious conferences including SIGIR, WSDM, WWW, and SIGCHI, and serves on the editorial board of ACM TOIS, ACM TWEB, the Information Retrieval Journal, and other journals. Ryen was short papers co-chair of SIGIR 2015 and he is PC co-chair of SIGIR 2017. Technology derived from his research has shipped in many Microsoft products, including Bing, Xbox, Internet Explorer, Skype, and Cortana. Ryen is a Fellow of the BCS.

### Professional Experience

<b>Applied Science Manager</b> Microsoft Cortana, Bellevue, USA	2017 – present
<b>CTO, Health Intelligence</b> Microsoft Health, Redmond, USA [Joined Senior Leader program (aka "bench") for high-potential leaders at Microsoft]	2015 – 2017
<b>Principal Researcher</b> Microsoft Research, Redmond, USA	2015 – 2017
<b>Senior Researcher</b> Microsoft Research, Redmond, USA	2012 – 2015
<b>Researcher</b> Microsoft Research, Redmond, USA	2006 – 2012
<b>Faculty Research Associate</b> Institute for Advanced Computer Studies, University of Maryland, College Park, USA	2004 – 2006
<b>Visiting Research Scientist</b> Information School, University of Washington, Seattle, USA	Fall 2003

## Education

<b>Ph.D.</b>	Computer Science, University of Glasgow, UK Advisors: Joemon M. Jose, Ian Ruthven, C.J. van Rijsbergen Dissertation: "Implicit Feedback for Interactive Information Retrieval"	2004
<b>B.Sc. (Hons)</b>	Computer Science and Management Studies, University of Glasgow, UK	2001

## Honors and Awards

- **Best Student Paper Award**  
For "Analyzing and Predicting Task Reminders"  
ACM UMAP Conference on User Modeling Adaptation and Personalization (UMAP 2016)
- **Editors' Choice Award**  
For "Early Identification of Adverse Drug Reactions from Search Log Data"  
Journal of Biomedical Informatics (JBI)
- **Best Student Paper Award**  
For "Struggling and Success in Web Search"  
ACM CIKM Conference on Information and Knowledge Management (CIKM 2015)
- **Microsoft BCS/BCS IRSG Karen Spärck Jones Award 2014**  
For contributions to information retrieval, specifically "*to a better understanding of search interaction, e.g., through novel and creative analyses of vital and as of yet unexplored aspects of searcher behavior, closely coupled with the development of models and applications for improving the search experience*".
- **Best Paper Award**  
For "Cross-Device Search"  
ACM CIKM Conference on Information and Knowledge Management (CIKM 2014)
- **Best Paper Award**  
For "Beliefs and Biases in Web Search" [Sole Author]  
ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2013)
- **Best Paper Award**  
For "Effects of Community Size and Contact Rate in Synchronous Social Q&A" [First Author]  
ACM SIGCHI Conference on Human Factors in Computing Systems (SIGCHI 2011)
- **Best Paper Award**  
For "Assessing the Scenic Route: Measuring the Value of Search Trails in Web Logs" [First Author]  
ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2010)
- **Best Paper Award**  
For "Evaluating Advanced Search Interfaces Using Established Information-Seeking Models"  
Journal of the American Society for Information Science and Technology (JASIST 2010)
- **Best Paper Award**  
For "Studying the Use of Popular Destinations to Enhance Web Search Interaction" [First Author]  
ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2007)
- **BCS/CPHC Distinguished Dissertation Award**  
For "Implicit Feedback for Interactive Information Retrieval"  
Best Computer Science Ph.D. dissertation in the United Kingdom for 2004/2005
- **Best Student Paper Award**  
For "A Simulated Study of Implicit Feedback Models" [First Author]  
European Conference on Information Retrieval (ECIR 2004)

- **Best Paper Award**  
For “A Granular Approach to Web Search Result Presentation” [First Author]  
IFIP TC13 International Conference on Human-Computer Interaction (INTERACT 2003)
- **UNISYS Executive of Interest Project Prize**  
Best Undergraduate Computing Science Thesis, University of Glasgow (2000/2001)

## Honorable Mentions and Best Paper Finalists

- **Honorable Mention Award**  
For “Exploring Time-Dependent Concerns about Pregnancy and Childbirth from Search Logs”  
ACM SIGCHI Conference on Human Factors in Computing Systems (SIGCHI 2015)
- **Honorable Mention Award**  
For “No Clicks, No Problem: Using Cursor Movements to Understand and Improve Search”  
ACM SIGCHI Conference on Human Factors in Computing Systems (SIGCHI 2011)
- **Best Paper Finalist**  
For “Evaluating Search Systems Using Result Page Context”  
Symposium on Information Interaction in Context (IiX 2010)
- **Best Paper Finalist**  
For “Modeling Long-Term Search Engine Usage” [First Author]  
International Conference on User Modeling, Adaptation and Personalization (UMAP 2010)

## Editorial Board Memberships

- Journal of Information Retrieval (2009 – present)
- ACM Transactions on Information Systems (TOIS) (2010 – present) [Senior Associate Editor]
- ACM Transactions on the Web (TWEB) (2011 – present) [Associate Editor]
- Foundations and Trends in Information Retrieval (FnTIR) (2014 – present)
- Information Processing and Management (IP&M) (2014 – 2016)

## Track/Area Chairing and Senior Program Committee Memberships

- AAAI: 2017, 2018
- ACM CHIIR: 2016, 2017
- ACM CIKM: 2010-2012, 2014, 2015-2017
- ACM SIGIR: 2010-2014, 2016
- ACM WSDM: 2012, 2016, 2017, 2018
- WWW: 2010, 2011, 2015

## Other Organizational Roles

- Program co-chair for ACM SIGIR 2017.
- Chair, Steering Committee for ACM SIGIR Conference on Human Information Interaction and Retrieval.
- Short papers co-chair for ACM SIGIR 2015.
- Guest co-editor of *ACM Transactions on Information Systems* special issue: “Contextual Search and Recommendation” (2013).

- Co-chair of Human Computer Interaction and Information Retrieval Symposium (2008 - 2013).
- Co-chair of ACM SIGIR workshop: “Health Search and Discovery” (2013).
- Guest co-editor of *Information Processing and Management* special issue: “Human-Computer Information Retrieval” (2013).
- Guest co-editor of *IEEE Computer* special issue: “Information Seeking Support Systems” (2009).
- Treasurer of ACM Conference on Information and Knowledge Management (2008).
- Posters chair of European Conference on Information Retrieval (2008).
- Co-chair of National Science Foundation Invitational workshop: “Information Seeking Support Systems” (2008).
- Co-chair of ACM SIGIR workshop: “Web Information Seeking and Interaction” (2007).
- Co-chair of ACM SIGCHI workshop: “Exploratory Search and HCI” (2007).
- Guest co-editor of *Information Processing and Management* special issue: “Evaluating Exploratory Search Systems” (2008).
- Co-chair of ACM SIGIR workshop: “Evaluating Exploratory Search Systems” (2006).
- Guest co-editor *Communications of the ACM* special issue: “Supporting Exploratory Search” (2006).

## Professional Memberships

- Fellow of the British Computer Society: 2016 – Present
- Member of the ACM and ACM SIGIR: 2005 – Present

## Publications

### BOOKS

1. **Ryen W. White.** (2016). *Interactions with Search Systems*. Cambridge University Press: New York, NY.
2. **Ryen W. White** and Resa A. Roth. (2009). Exploratory Search: Beyond the Query-Response Paradigm. *Synthesis Lectures on Information Concepts, Retrieval, and Services*, 1(1): pp. 1-98. Morgan and Claypool.

### BOOK CHAPTERS

1. **Ryen W. White** (2011). Interactive techniques. In Ian Ruthven and Diane Kelly (Eds.), *Interactive Information Seeking, Behaviour and Retrieval*. Facet Publishing: London, UK.

### INVITED EDITORIALS

1. Eric Horvitz and **Ryen W. White** (2017). Making connections: Advancing healthcare research via consumer mobile devices. *Circulation: Cardiovascular Quality and Outcomes*, 10(3).

### EDITOR (\* JOURNAL SPECIAL ISSUES)

1. \*Paul N. Bennett, Kevyn Collins-Thompson, Diane Kelly, **Ryen W. White**, and Yi Zhang. (2015). Overview of the Special Issue on contextual search and recommendation. *ACM Transactions on Information Systems*, 33(1), 1e.
2. \***Ryen W. White**, Rob Capra, Gene Golovchinsky, Bill Kules, Daniel Tunkelang, and Catherine Smith. (2013). Human-Computer Information Retrieval. *Information Processing and Management*, 49(5).
3. Rob Capra, Bill Kules, Daniel Tunkelang, and **Ryen W. White**. (2010). *Proceedings of the Fourth Workshop on Human-Computer Information Retrieval (HCIR 2010)*.

4. Bill Kules, Daniel Tunkelang, and **Ryen W. White**. (2009). *Proceedings of the Third Workshop on Human-Computer Information Retrieval (HCIR 2009)*.
5. \*Gary Marchionini and **Ryen W. White**. (2009). Information-seeking support systems. *IEEE Computer*, 42(3).
6. **Ryen W. White**, Daniel Tunkelang, and Bill Kules. (2008). *Proceedings of the Second Workshop on Human-Computer Information Retrieval (HCIR 2008)*.
7. Craig Macdonald, Iadh Ounis, Vassilis Plachouras, Ian Ruthven, and **Ryen W. White**. (2008). Advances in Information Retrieval: *Proceedings of the 30th European Conference on IR Research*.
8. \***Ryen W. White**, Gheorghe Muresan, and Gary Marchionini. (2008). Evaluating exploratory search systems. *Information Processing and Management*, 44(2).
9. Kerry Rodden, Ian Ruthven, and **Ryen W. White**. (2007). *Web Information Seeking and Interaction: Proceedings of SIGIR 2007 workshop*.
10. **Ryen W. White**, Steven M. Drucker, Gary Marchionini, Marti Hearst, and m.c. schraefel. (2007). *Exploratory Search and HCI: Proceedings of SIGCHI 2007 Workshop*.
11. **Ryen W. White**, Gheorghe Muresan, and Gary Marchionini. (2006). *Evaluating Exploratory Search Systems: Proceedings of SIGIR 2006 Workshop*.
12. \***Ryen W. White**, Bill Kules, Steven Drucker, and m.c. schraefel. Supporting exploratory search. *Communications of the ACM*, 49(4).

#### REFEREED JOURNAL ARTICLES

1. Tim Althoff, **Ryen W. White**, and Eric Horvitz (2016). Influence of Pokémon Go on physical activity: study and implications. *Journal of Medical Internet Research*, in press.
2. **Ryen W. White**, Fernando Diaz, and Qi Guo (2016). Search result prefetching on desktop and mobile. *ACM Transactions on Information Systems*, in press.
3. **Ryen W. White** and Eric Horvitz (2016). Early signs of lung carcinoma in web search logs: Findings and implications. *JAMA Oncology*, in press.
4. John Paparrizos, **Ryen W. White**, and Eric Horvitz (2016). Screening for pancreatic adenocarcinoma using signals from web search logs: Feasibility study and results. *Journal of Oncology Practice*, 12(8): 737-744.
5. Michael J. Paul, **Ryen W. White**, and Eric Horvitz. (2016). Search and breast cancer: On episodic shifts of attention over life histories of an illness. *ACM Transactions on the Web*, 10(2): 13.
6. **Ryen W. White**, Sheng Wang, Apurv Pant, Rave Harpaz, Pushpraj Shukla, Walter Sun, William DuMouchel, and Eric Horvitz. (2016). Early identification of adverse drug reactions from search log data. *Journal of Biomedical Informatics*, 59: 42-48. [EDITORS' CHOICE AWARD]
7. **Ryen W. White** and Eric Horvitz. (2015). Belief dynamics and biases in web search. *ACM Transactions on Information Systems*, 33(4): 18.
8. Roberto González-Ibáñez, Chirag Shah, and **Ryen W. White**. (2015). Capturing collaboration opportunities: A method to evaluate collaboration opportunities in information search using pseudo-collaboration. *Journal of the American Society for Information Science and Technology*, 66(9): 1897-1912.
9. Rave Harpaz, David Odgers, Greg Gaskin, William DuMouchel, Rainer Winnenburger, Olivier Bodenreider, Anna Ripple, Ana Szarfman, Alfred Sorbello, Eric Horvitz, **Ryen W. White**, and Nigam Shah. (2014). A time-indexed reference standard of adverse drug reactions. *Nature Scientific Data*, 1.
10. **Ryen W. White** and Ahmed Hassan. (2014). Content bias in online health search. *ACM Transactions on the Web*, 8(4): 25.
11. **Ryen W. White\***, Rave Harpaz\*, Nigam Shah, William DuMouchel, and Eric Horvitz. (2014). Toward enhanced pharmacovigilance using patient-generated data on the Internet. *Nature Clinical Pharmacology and Therapeutics (Nature CPT)* (\* = shared first authorship), 96(2): 239-246.

12. Elad Yom-Tov, **Ryen W. White**, and Eric Horvitz. (2014). Seeking insights about cycling mood disorders via anonymized search logs. *Journal of Medical Internet Research*, 16(2).
13. **Ryen W. White**. (2014). Belief dynamics in Web search. *Journal of the American Society for Information Science and Technology*, 65(11): 2165-2178.
14. Jaime Teevan, Kevyn Collins-Thompson, **Ryen W. White**, and Susan Dumais. (2014). Slow search. *Communications of the ACM*, 57(8), 36-38.
15. **Ryen W. White** and Eric Horvitz. (2014). From health search to health care: explorations of intention and utilization via query logs and user surveys. *Journal of the American Medical Informatics Association*, 21(1): 49-55.
16. **Ryen W. White** and Eric Horvitz. (2013). Captions and biases in diagnostic search. *ACM Transactions on the Web*, 7(4): 23.
17. **Ryen W. White**, Nicholas P. Tatonetti, Nigam H. Shah, Russ B. Altman, and Eric Horvitz. (2013). Web-scale pharmacovigilance: listening to signals from the crowd. *Journal of the American Medical Informatics Association*, 20(3): 404-408.
18. **Ryen W. White** and Eric Horvitz. (2013). From web search to healthcare utilization: privacy-sensitive studies from mobile data. *Journal of the American Medical Informatics Association*, 20(1): 61-68.
19. Peter Bailey, **Ryen W. White**, Han Liu, and Giridhar Kumaran. (2010). Mining past query trails to label long and rare search engine queries. *ACM Transactions on the Web*, 4(4): 15.
20. Max Wilson, m.c. schraefel, and **Ryen W. White**. (2010). Evaluating advanced search interfaces using established information-seeking models. *Journal of the American Society for Information Science and Technology*, 60(7): 1407-1422. [BEST PAPER AWARD]
21. **Ryen W. White** and Eric Horvitz. (2009). Cyberchondria: studies of the escalation of medical concerns in web search. *ACM Transactions on Information Systems*, 27(4): 23.
22. **Ryen W. White**, Mikhail Bilenko, and Silviu Cucerzan. (2008). Leveraging popular destinations to enhance web search interaction. *ACM Transactions on the Web*, 2(3): 16.
23. Andy Edmonds, **Ryen W. White**, Dan Morris, and Steven M. Drucker. (2007). Instrumenting the dynamic web. *Journal of Web Engineering*, 6(3): 243-260
24. Gary Marchionini and **Ryen W. White**. (2007). Find what you need, understand what you find. *International Journal of Human-Computer Interaction*, 23(3): 205-237.
25. **Ryen W. White** and Gary Marchionini. (2007). Examining the effectiveness of real-time query expansion. *Information Processing and Management*, 43(3): 685-704.
26. **Ryen W. White**. (2006). Using searcher simulations to redesign a polyrepresentative implicit feedback interface. *Information Processing and Management*, 42(5): 1185-1202.
27. **Ryen W. White** and Ian Ruthven. (2006). A study of interface support mechanisms for interactive information retrieval. *Journal of the American Society for Information Science and Technology*, 57(7): 933-948.
28. **Ryen W. White**, Ian Ruthven, Joemon M. Jose, and C. J. van Rijsbergen. (2005). Evaluating implicit feedback models using searcher simulations. *ACM Transactions on Information Systems*, 23(3): 325-361.
29. **Ryen W. White**, Joemon M. Jose, and Ian Ruthven. (2005). Using top-ranking sentences to facilitate effective information access. *Journal of the American Society for Information Science and Technology*, 56(10): 1113-1125.
30. **Ryen W. White**, Joemon M. Jose, and Ian Ruthven. (2004). An implicit feedback approach for interactive information retrieval. *Information Processing and Management*, 42(1): 166-190.

31. **Ryen W. White**, Joemon M. Jose, and Ian Ruthven. (2003). A task-oriented study on the influencing effects of query-biased summarisation in web searching. *Information Processing and Management*, 39(5): 707-733.

## REFEREED CONFERENCE PAPERS

1. Tim Althoff, Eric Horvitz, **Ryen W. White**, and Jamie Zeitzer. (2017). Population-scale study of sleep and performance. *Proc. 26th International World Wide Web Conference*, in press.
2. Adam Fourney, Meredith Ringel Morris, and **Ryen W. White**. (2017). Web search as a linguistic tool. *Proc. 26th International World Wide Web Conference*, in press.
3. John Paparrizos, **Ryen W. White**, and Eric Horvitz. (2016). Detecting devastating diseases in search logs. *Proc. 22nd ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, 559-568.
4. David Graus, Paul N. Bennett, **Ryen W. White**, and Eric Horvitz. (2016). Analyzing and predicting task reminders. *Proc. 24th Annual ACM UMAP Conference on User Modeling, Adaptation and Personalization*, 7-15. [BEST STUDENT PAPER AWARD]
5. Fernando Diaz, Qi Guo, and **Ryen W. White**. (2016). Search result prefetching using cursor movement. *Proc. 39th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 609-618.
6. Sandro Bauer, Filip Radlinski, and **Ryen W. White**. (2016). Where can I buy a boulder? Searching for offline retail locations. *Proc. 25th International World Wide Web Conference*, 1225-1235.
7. Daan Odijk, **Ryen W. White**, Ahmed Hassan Awadallah, and Susan Dumais. (2015). Struggle and success in web search. *Proc. 24th ACM International Conference on Information and Knowledge Management*, 1551-1560. [BEST STUDENT PAPER AWARD]
8. **Ryen W. White** and Ahmed Hassan Awadallah. (2015). Personalizing search on shared devices. *Proc. 38th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 523-532.
9. Adish Singla, Eric Horvitz, Pushmeet Kohli, **Ryen W. White**, and Andreas Krause. (2015). Information gathering in networks via active exploration. *Proc. International Joint Conferences on Artificial Intelligence*, in press.
10. Michael Paul, **Ryen W. White**, and Eric Horvitz. (2015). Diagnoses, decisions, and outcomes: Web search as medical decision support for cancer. *Proc. 24th International World Wide Web Conference*, 831-841.
11. Adam Fourney, **Ryen W. White**, and Eric Horvitz. (2015). Exploring time-dependent concerns about pregnancy and childbirth from search logs. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 737-746. [BEST PAPER HONORABLE MENTION]
12. Jiepu Jiang, Ahmed Hassan, Xiaolin Shi, and **Ryen W. White**. (2015). Understanding and predicting graded search satisfaction. *Proc. 8th Annual International ACM WSDM Conference on Web Search and Data Mining*, 57-66.
13. George Montanez, **Ryen W. White**, and Xiao Huang. (2014). Cross-device search. *Proc. 23rd ACM CIKM Conference on Information and Knowledge Management*, 1669-1678. [BEST PAPER AWARD]
14. Ahmed Hassan, **Ryen W. White**, Patrick Pantel, Susan Dumais, and Yi-Min Wang. (2014). Supporting complex search tasks. *Proc. 23rd ACM CIKM Conference on Information and Knowledge Management*, 829-838.
15. Georg Schoenherr and **Ryen W. White**. (2014). Interactions between health searchers and search engines. *Proc. 37th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 143-152.

16. Jinyun Yan, Wei Chu, and **Ryen W. White**. (2014). Cohort modeling for enhanced personalized search. *Proc. 37th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 505-514.
17. Nina Mishra, **Ryen W. White**, Samuel leong, and Eric Horvitz. (2014). Time-critical search. *Proc. 37th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 747-756.
18. Hongning Wang, Yang Song, Ming-Wei Chang, Xiaodong He, Ahmed Hassan, and **Ryen W. White**. (2014). Modeling action-level satisfaction for search task satisfaction prediction. *Proc. 37th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 123-132.
19. Yang Song, Xiaolin Shi, **Ryen W. White**, and Ahmed Hassan. (2014). Context-aware web search abandonment prediction. *Proc. 37th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 93-102.
20. Adish Singla, Ece Kamar, **Ryen W. White**, and Eric Horvitz. (2014). Stochastic privacy. *Proc. 28th AAAI Conference on Artificial Intelligence*, in press.
21. **Ryen W. White**, Ahmed Hassan, Adish Singla, and Eric Horvitz. (2014). From devices to people: Attribution of search activity in multi-user settings. *Proc. 23rd International World Wide Web Conference*, 431-442.
22. Munmun De Choudhury, Meredith Ringel Morris, and **Ryen W. White**. (2014). Seeking and sharing health information online: Comparing search engines and social media. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 1365-1376.
23. Carsten Eickhoff, Jaime Teevan, **Ryen W. White**, and Susan Dumais. (2014). Lessons from the journey: A query log analysis of within-session learning. *Proc. 7th Annual International ACM WSDM Conference on Web Search and Data Mining*, 223-232.
24. Ahmed Hassan, **Ryen W. White**, Susan Dumais, and Yi-Min Wang. (2014). Struggling or exploring? Disambiguating long search sessions. *Proc. 7th Annual International ACM WSDM Conference on Web Search and Data Mining*, 53-62.
25. Youngho Kim, Ahmed Hassan, **Ryen W. White**, and Imed Zitouni. (2014). Modeling dwell time to predict click-level satisfaction. *Proc. 7th Annual International ACM WSDM Conference on Web Search and Data Mining*, 193-202.
26. Jaime Teevan, Kevyn Collins-Thompson, **Ryen W. White**, Susan Dumais, and Yubin Kim. (2013). Slow search: information retrieval without time constraints. *Proc. 7th Symposium on Human-Computer Interaction and Information Retrieval*, article 1.
27. Ahmed Hassan and **Ryen W. White**. (2013). Personalized models of search satisfaction. *Proc. 22nd ACM International Conference on Information and Knowledge Management*, 2009-2018.
28. Fernando Diaz, **Ryen W. White**, Dan Liebling, and Georg Buscher. (2013). Robust models of mouse movement on dynamic web search results pages. *Proc. 22nd ACM International Conference on Information and Knowledge Management*, 1451-1460.
29. **Ryen W. White**. (2013). Beliefs and biases in web search. *Proc. 36th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 3-12. [BEST PAPER AWARD]
30. Milad Shokouhi, **Ryen W. White**, Paul Bennett, and Filip Radlinski. (2013). Fighting search engine amnesia: reranking repeated results. *Proc. 36th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 273-282.
31. Hongning Wang, Xiaodong He, Ming-Wei Chang, Yang Song, **Ryen W. White**, and Wei Chu. (2013). Personalized ranking model adaptation for web search. *Proc. 36th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 323-332.



32. Ahmed Hassan, **Ryen W. White**, and Yi-Min Wang. (2013). Toward self-correcting search engines: using underperforming queries to improve search. *Proc. 36th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 263-272.
33. Robert West, **Ryen W. White**, and Eric Horvitz. (2013). From cookies to cooks: insights on dietary patterns via analysis of web usage logs. *Proc. 22nd International World Wide Web Conference*, 1399-1410.
34. **Ryen W. White**, Wei Chu, Ahmed Hassan, Xiaodong He, Yang Song, and Hongning Wang. (2013). Enhancing personalized search by mining and modeling task behavior. *Proc. 22nd International World Wide Web Conference*, 1411-1420.
35. Hongning Wang, Yang Song, Ming-Wei Chang, Xiaodong He, **Ryen W. White**, and Wei Chu. (2013). Learning to extract cross-session search tasks. *Proc. 22nd International World Wide Web Conference*, 1353-1364.
36. Henry Feild, **Ryen W. White**, and Xin Fu. (2013). Supporting orientation during search result examination. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 2999-3008.
37. Yu Wang, Xiao Huang, and **Ryen W. White**. (2013). Characterizing and supporting cross-device search tasks. *Proc. 6th Annual International ACM WSDM Conference on Web Search and Data Mining*, 707-716.
38. Youngho Kim, Ahmed Hassan, **Ryen W. White**, and Yi-Min Wang. (2013). Playing by the rules: mining query associations to predict search performance. *Proc. 6th Annual International ACM WSDM Conference on Web Search and Data Mining*, 133-142.
39. Abdigani Diriye, **Ryen W. White**, Georg Buscher, and Susan Dumais. (2012). Leaving so soon? understanding and predicting web search abandonment. *Proc. 21st ACM International Conference on Information and Knowledge Management*, 1025-1034.
40. Ahmed Hassan and **Ryen W. White**. (2012). Task tours: helping users tackle complex search tasks. *Proc. 21st ACM International Conference on Information and Knowledge Management*, 1885-1889.
41. **Ryen W. White** and Eric Horvitz. (2012). On the onset and persistence of medical concerns in search logs. *Proc. 35th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 265-274.
42. Jeff Huang, **Ryen W. White**, Georg Buscher, and Kuansan Wang. (2012). Improving searcher models using mouse cursor activity. *Proc. 35th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 195-204.
43. Paul N. Bennett, **Ryen W. White**, Wei Chu, Susan Dumais, Peter Bailey, Fedor Borisyuk, and Xiaoyuan Cui. (2012). Modeling the impact of short and long-term behavior on search personalization. *Proc. 35th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 185-194.
44. Eugene Agichtein, **Ryen W. White**, Susan Dumais, and Paul N. Bennett. (2012). Search, interrupted: understanding and predicting search task continuation. *Proc. 35th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 315-324.
45. Xiaojun Yuan and **Ryen W. White**. (2012). Building the trail best traveled: effects of domain knowledge on web search trailblazing. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 1795-1804
46. Jeff Huang, **Ryen W. White**, and Georg Buscher. (2012). User see, user point: gaze and cursor alignment in web search. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 1341-1350.
47. Scott Bateman, Jaime Teevan, and **Ryen W. White**. (2012). The search dashboard: how reflection and comparison impact search behavior. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 1785-1794.

48. **Ryen W. White** and Georg Buscher. (2012). Characterizing local interests and local knowledge. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 1607-1610.
49. Jeff Huang, Tom Lin, and **Ryen W. White**. (2012). No search result left behind: branching behavior with browser tabs. *Proc. 5th Annual International ACM WSDM Conference on Web Search and Data Mining*, 203-212.
50. David Sontag, Kevyn Collins-Thompson, Paul Bennett, **Ryen W. White**, Susan Dumais, and Bodo Billerbeck. (2012). Probabilistic models for personalizing web search. *Proc. 5th Annual International ACM WSDM Conference on Web Search and Data Mining*, 433-442.
51. Georg Buscher, **Ryen W. White**, Susan Dumais, and Jeff Huang. (2012). Large-scale analysis of individual and task differences in search result page examination strategies. *Proc. 5th Annual International ACM WSDM Conference on Web Search and Data Mining*, 373-382.
52. Victor Hu, Maria Stone, Jan Pedersen, and **Ryen W. White**. (2011). Effects of search success on search engine re-use. *Proc. 20th ACM International Conference on Information and Knowledge Management*, 1841-1846.
53. Kevyn Collins-Thompson, Paul N. Bennett, **Ryen W. White**, Sebastian de la Chica, and David Sontag. (2011). Personalizing web search results by reading level. *Proc. 20th ACM International Conference on Information and Knowledge Management*, 403-412.
54. Marc-Allen Cartright, **Ryen W. White**, and Eric Horvitz. (2011). Intentions and attention in exploratory health search. *Proc. 34th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 65-74.
55. Alex Kotov, Paul Bennett, **Ryen W. White**, Susan Dumais, and Jaime Teevan. (2011). Modeling and analysis of cross-session search tasks. *Proc. 34th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 5-14.
56. Paul Bennett, Filip Radlinski, **Ryen W. White**, and Emine Yilmaz. (2011). Inferring and using location metadata to personalize web search. *Proc. 34th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 135-144.
57. Qi Guo, **Ryen W. White**, Yunqiao Zhang, Blake Anderson, and Susan Dumais. (2011). Why searchers switch: understanding and predicting engine switching rationales. *Proc. 34th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 335-344.
58. **Ryen W. White**, Matthew Richardson, and Yandong Liu. (2011). Effects of community size and contact rate in synchronous social Q&A. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 2837-2846. [BEST PAPER AWARD]
59. Jeff Huang, **Ryen W. White**, and Susan Dumais. (2011). No clicks, no problem: using cursor movements to understand and improve search. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 1225-1234. [BEST PAPER HONORABLE MENTION]
60. Matthew Richardson and **Ryen W. White**. (2011). Supporting synchronous social Q&A throughout the question lifecycle. *Proc. 20th International World Wide Web Conference*, 755-764.
61. Pavel Serdyukov, Mike Taylor, Vishwa Vinay, Matthew Richardson, and **Ryen W. White**. (2011). Automatic people tagging for expertise profiling in the enterprise. *Proc. 33rd European Conference on Information Retrieval*, 399-410.
62. Paul André, m.c. schraefel, Alan Dix, and **Ryen W. White**. (2011). Expressing well-being online: towards self-reflection and social awareness. *Proc. iConference*, 114-121.
63. **Ryen W. White** and Eric Horvitz. (2010). Web to world: predicting transitions from self-diagnosis to the pursuit of local medical assistance in web search. *Proc. Annual Symposium of the American Medical Informatics Association*, 882-886.

64. **Ryen W. White**, Paul Bennett, and Susan Dumais. (2010). Predicting short-term interests using activity-based search context. *Proc. 19th Annual ACM CIKM Conference on Information and Knowledge Management*, 1009-1018.
65. Peter Bailey, Nick Craswell, **Ryen W. White**, Liwei Chen, Ashwin Satyanarayana, and S.M.M. Tahaghoghi. (2010). Evaluating search systems using result page context. *Proc. 3rd Symposium on Information Interaction in Context*, 105-114. [BEST PAPER FINALIST]
66. Adish Singla, **Ryen W. White**, and Jeff Huang. (2010). Studying trailfinding algorithms for enhanced web search. *Proc. 33rd Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 443-450.
67. Chao Liu, **Ryen W. White**, and Susan Dumais. (2010). Understanding web browsing behaviors through Weibull analysis of dwell time. *Proc. 33rd Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 379-386.
68. **Ryen W. White** and Jeff Huang. (2010). Assessing the scenic route: measuring the value of search trails in web logs. *Proc. 33rd Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 587-594. [BEST PAPER AWARD]
69. Jeff Huang and **Ryen W. White**. (2010). Parallel browsing behavior on the web. *Proc. 21st ACM Conference on Hypertext and Hypermedia*, 13-17.
70. **Ryen W. White**, Susan Dumais, and Ashish Kapoor. (2010). Modeling long-term search engine usage. *Proc. 19th International Conference on User Modeling, Adaptation and Personalization*, 28-39. [BEST PAPER FINALIST]
71. Qi Guo, **Ryen W. White**, Susan Dumais, Jue Wang, and Blake Anderson. (2010). Predicting query performance using query, result, and user interaction features. *Proc. 9th International Conference on Adaptivity, Personalization and Fusion of Heterogeneous Information*, 198-201.
72. Paul André, m.c. schraefel, Alan Dix, and **Ryen W. White**. (2010). Experience in social affective applications: methodologies and case study. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 2755-2764.
73. **Ryen W. White** and Susan Dumais. (2009). Characterizing and predicting search engine switching behavior. *Proc. 18th Annual ACM CIKM Conference on Information and Knowledge Management*, 87-96.
74. **Ryen W. White** and Eric Horvitz. (2009). Experiences with web search on medical concerns and self diagnosis. *Proc. Annual Symposium of the American Medical Informatics Association*, 696-700.
75. **Ryen W. White**, Peter Bailey, and Liwei Chen. (2009). Predicting user interests from contextual information. *Proc. 32nd Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 363-370.
76. Maryam Karimzadehgan, **Ryen W. White**, and Matthew Richardson. (2009). Enhancing expert finding using organizational hierarchies. *Proc. 31st European Conference on Information Retrieval*, 177-188.
77. **Ryen W. White**, Susan Dumais, and Jaime Teevan. (2009). Characterizing the influence of domain expertise on web search behavior. *Proc. 2nd Annual International ACM WSDM Conference on Web Search and Data Mining*, 132-141.
78. Srivatsan Laxman, Vikram Tankasali, and **Ryen W. White**. (2008). Stream prediction using a generative model based on frequent episodes in event sequences. *Proc. 14th Annual International ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, 453-461.
79. **Ryen W. White**, Matthew Richardson, Mikhail Bilenko, and Allison P. Heath. (2008). Enhancing web search by promoting multiple search engine use. *Proc. 31st Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 43-50.

80. Mikhail Bilenko and **Ryen W. White**. (2008). Mining the search trails of surfing crowds: identifying relevant websites from user activity. *Proc. 17th International World Wide Web Conference*, 51-60.
81. Massimo Melucci and **Ryen W. White**. (2007). Utilizing a geometry of context for enhanced implicit feedback. *Proc. 16th Annual ACM CIKM Conference on Information and Knowledge Management*, 273-282.
82. Massimo Melucci and **Ryen W. White**. (2007). Discovering hidden contextual factors for implicit feedback. *Proc. Workshop on Contextual Information Retrieval (part of the 6th International and Interdisciplinary Conference on Modeling and Using Context, CONTEXT 2007)*.
83. **Ryen W. White**, Mikhail Bilenko, and Silviu Cucerzan. (2007). Studying the use of popular destinations to enhance web search interaction. *Proc. 30th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 159-166. [BEST PAPER AWARD]
84. **Ryen W. White** and Dan Morris. (2007). Investigating the querying and browsing behavior of advanced search engine users. *Proc. 30th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 255-262.
85. Charles L.A. Clarke, Eugene Agichtein, Susan Dumais, and **Ryen W. White**. (2007). The influence of caption features on clickthrough patterns in web search. *Proc. 30th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 135-142.
86. **Ryen W. White** and Steven M. Drucker. (2007). Investigating behavioral variability in web search. *Proc. 16th International World Wide Web Conference*, 21-30.
87. **Ryen W. White**, Steven M. Drucker, Gary Marchionini, Marti Hearst, and mc schraefel. (2007). Exploratory search and HCI: designing and evaluating interfaces to support exploratory search interaction. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 2877-2880.
88. Douglas W. Oard, Jianqiang Wang, Gareth J.F. Jones, **Ryen W. White**, Pavel Pecina, Dagobert Soergel, Xiaoli Huang, and Izhak Shafran. (2006). Overview of the CLEF-2006 Cross-Language Speech Retrieval Track. *Proc. Cross-Language Evaluation Forum*, 744-758.
89. **Ryen W. White** and Diane Kelly. (2006). A study on the effects of personalization and task information on implicit feedback performance. *Proc. 15th Annual ACM CIKM Conference on Information and Knowledge Management*, 297-306.
90. **Ryen W. White**, Hyun Young Song, Jay Liu. (2006). Concept maps to support oral history search and use. *Proc. ACM Joint Conference on Digital Libraries*, 192-193.
91. Penelope Brooks, Khoo Yit Phang, Douglas W. Oard, **Ryen W. White**, Rachael Bradley, and François Gumbretière. (2006). Measuring the utility of gaze detection for task modeling: a study design. *Proc. Workshop on Intelligent User Interfaces for Intelligence Analysis (part of IUI 2006)*.
92. **Ryen W. White**, Douglas W. Oard, Dagobert Soergel, Xiaoli Huang, and Gareth Jones. (2006). Overview of the CLEF2005 Cross-Language Speech Retrieval Track. *Proc. Cross-Language Evaluation Forum*, 744-759.
93. **Ryen W. White**. (2005). *Contextual simulations for information retrieval evaluation*. *Proc. Information Retrieval in Context Workshop (IRiX 2005, part of SIGIR 2005)*.
94. **Ryen W. White**, Ian Ruthven, and Joemon M. Jose. (2005). A study of factors affecting the utility of implicit relevance feedback. *Proc. 28th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 35-42.
95. **Ryen W. White**, Joemon M. Jose, C.J. van Rijsbergen, and Ian Ruthven. (2004). A simulated study of implicit feedback models. *Proc. 26th Annual European Conference on Information Retrieval*, 311-326. [BEST STUDENT PAPER AWARD]

96. **Ryen W. White**, Joemon M. Jose, Ian Ruthven. (2003). A granular approach to web search result presentation. *Proc. 9th IFIP TC13 International Conference on Human-Computer Interaction*, 213-220. [BEST PAPER AWARD]
97. Anastasios Tombros, Ian Ruthven, Joemon M. Jose, and **Ryen W. White**. (2003). Clustering the information space using top-ranking sentences: a study of user interaction. *Proc. 9th IFIP TC13 International Conference on Human-Computer Interaction*, 928-931.
98. Richard Osdin, Iadh Ounis, **Ryen W. White**. (2002). Using hierarchical clustering and summarisation approaches for web retrieval: Glasgow at the TREC 2002 interactive track. *Proc. Text REtrieval Conference*.
99. **Ryen W. White**, Joemon M. Jose, Ian Ruthven. (2002). Implicit contextual modelling for information seeking. *Proc. Glasgow Context Group 1st Colloquium: "Building Bridges: Interdisciplinary Context-Sensitive Computing"*.
100. **Ryen W. White**, Ian Ruthven, Joemon M. Jose. (2002). Finding relevant documents using top-ranking sentences: an evaluation of two alternative schemes. *Proc. 25th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 57-64.
101. **Ryen W. White**, Ian Ruthven, Joemon M. Jose. (2002). The use of implicit evidence for relevance feedback in web retrieval. *Proc. 24th BSC-IRSG European Colloquium on IR Research*, 93-109.
102. **Ryen W. White**, Ian Ruthven, Joemon M. Jose. (2001). Comparing implicit and explicit feedback techniques for web retrieval: TREC-10 interactive track report. *Proc. Text REtrieval Conference*.

#### REFEREED CONFERENCE POSTERS AND SHORT PAPERS

1. **Ryen W. White** and Ryan Ma. (2017). Improving search engines via large-scale physiological sensing. *Proc. 40th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, in press.
2. Ashiqur KhudaBukhsh, Paul N. Bennett, and **Ryen W. White**. (2015). Building effective query classifiers: A case study in self-harm intent detection. *Proc. 24th ACM International Conference on Information and Knowledge Management*, 1735-1738.
3. Milad Shokouhi, **Ryen W. White**, and Emine Yilmaz. (2015). Anchoring and adjustment in relevance estimation. *Proc. 38th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 963-966.
4. **Ryen W. White**, Matthew Richardson, and Wen-tau Yih (2015). Questions vs. queries in informational search tasks. *Proc. 24th International World Wide Web Conference*, 135-136.
5. Adish Singla, Eric Horvitz, Pushmeet Kohli, **Ryen W. White**, and Andreas Krause. (2014). Building collaborative teams: A local navigation-based approach. *Proc. NIPS 2014 Workshop on Crowdsourcing and Machine Learning*.
6. Youngho Kim, Ahmed Hassan, **Ryen W. White**, and Imed Zitouni. (2014). Comparing client and server dwell time estimates for click-level satisfaction prediction. *Proc. 37th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 895-898.
7. Adish Singla, **Ryen W. White**, Ahmed Hassan, and Eric Horvitz. (2014). Enhancing personalization via search activity attribution. *Proc. 37th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 1063-1066.
8. David Sontag, Kevyn Collins-Thompson, Paul Bennett, **Ryen W. White**, Susan Dumais, and Bodo Billerbeck. (2013). Personalization via probabilistic adaptation. *Proc. NIPS 2013 Workshop on Personalization*.

9. Robert West, **Ryen W. White**, and Eric Horvitz. (2013). Here and there: goals, activities, and predictions about location from geotagged queries. *Proc. 36th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 817-820.
10. Shuang-Hong Yang, **Ryen W. White**, and Eric Horvitz. (2013). Pursuing insights about healthcare utilization via geocoded search queries. *Proc. 36th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 993-996.
11. Dmitry Lagun, Peter Bailey, Georg Buscher, Avneesh Sud, and **Ryen W. White**. (2013). Explicit feedback in local search tasks. *Proc. 36th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 1065-1068.
12. Makato Kato, **Ryen W. White**, Jaime Teevan, and Susan Dumais. (2013). Clarifications and question specificity in synchronous social Q&A. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 913-918.
13. Roberto González-Ibáñez, Chirag Shah, and **Ryen W. White**. (2012). Pseudo-collaboration as a method to perform selective algorithmic mediation in collaborative IR systems. *Proc. 75th Annual Meeting of the American Society for Information Science and Technology*, 1-4.
14. **Ryen W. White** and Georg Buscher. (2012). Text selections as implicit relevance feedback. *Proc. 35th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 1151-1152.
15. Dan Liebling, Paul N. Bennett, and **Ryen W. White**. (2012). Anticipatory search: using context to initiate search. *Proc. 35th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 1035-1036.
16. **Ryen W. White** and Matthew Richardson. (2012). Effects of expertise differences in synchronous social Q&A. *Proc. 35th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 1055-1056.
17. Ovi Dan, Pavel Dmitriev, and **Ryen W. White**. (2012). Mining for insights in the search engine query stream. *Proc. 21st International World Wide Web Conference*, 489-490.
18. Jie Tang, **Ryen W. White**, and Peter Bailey. (2011). Recommending interesting activity-related local entities. *Proc. 34th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 1161-1162.
19. **Ryen W. White** and Adish Singla. (2011). Finding our way on the web: exploring the role of waypoints in search interaction. *Proc. 20th International World Wide Web Conference*, 147-148.
20. Peter Bailey, Nick Craswell, **Ryen W. White**, Liwei Chen, Ashwin Satyanarayana, and S.M.M. Tahaghoghi. (2010). Evaluating whole-page relevance. *Proc. 33rd Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 767-768.
21. **Ryen W. White** and Eric Horvitz. (2010). Predicting escalations of medical queries based on web page structure and content. *Proc. 33rd Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 769-770.
22. **Ryen W. White** and Raman Chandrasekar. (2010). Exploring the use of labels to shortcut search trails. *Proc. 33rd Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 811-812.
23. Adish Singla and **Ryen W. White**. (2010). Sampling high-quality clicks from noisy click data. *Proc. 19th International World Wide Web Conference*, 1187-1188.
24. Craig Macdonald and **Ryen W. White**. (2009). Usefulness of click-through data in expert search. *Proc. 32nd Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 816-817.

25. m.c. schraefel, **Ryen W. White**, Paul André, and Desney Tan. (2009). Investigating web search strategies and forum use to support diet and weight loss. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 3829-3834.
26. Mikhail Bilenko, **Ryen W. White**, Matthew Richardson, and G. Craig Murray. (2008). Talking the talk vs. walking the walk: salience of information needs in querying vs. browsing. *Proc. 31st Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 705-706.
27. **Ryen W. White**, Susan T. Dumais, and Jaime Teevan. (2008). How medical expertise influences web search interaction. *Proc. 31st Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 791-792.
28. Allison Heath and **Ryen W. White**. (2008). Defection detection: predicting search engine switching. *Proc. 17th International World Wide Web Conference*, 1173-1174.
29. Pavel Ircing, Pavel Pecina, Douglas W. Oard, Jianqiang Wang, and **Ryen W. White**. (2007). Information retrieval test collection for spontaneous conversational speech. *Proc. 10th International Conference on Text, Speech, and Dialog*.
30. **Ryen W. White**, Charles L.A. Clarke, and Silviu Cucerzan. (2007). Comparing query logs and pseudo-relevance feedback for web-search query refinement. *Proc. 30th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 831-832.
31. Silviu Cucerzan and **Ryen W. White**. (2007). Query suggestion based on user landing pages. *Proc. 30th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 875-876.
32. **Ryen W. White** and Gary Marchionini. (2006). A study of real-time query expansion effectiveness. *Proc. 29th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 715-716.
33. Zvi Band and **Ryen W. White**. (2006). PygmyBrowse: A small screen tree browser. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 514-519.
34. Xiaoli Huang and **Ryen W. White**. (2005). Policy capturing models for multi-faceted relevance assessments. *Proc. 68th Annual Meeting of the American Society for Information Science and Technology*.
35. Wilma Bainbridge, **Ryen W. White**, and Douglas W. Oard. (2005). An interface to search human movements based on geographic and chronological metadata. *Proc. 28th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 579-580.
36. **Ryen W. White** and Joemon M. Jose. (2004). A study of topic similarity measures. *Proc. 27th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 520-521.
37. **Ryen W. White**. (2004). A visualisation technique to communicate implicit feedback decisions. *Proc. 26th Annual European Conference on Information Retrieval*.
38. **Ryen W. White**, Joemon M. Jose, and Ian Ruthven. (2003). An approach for implicitly detecting information needs. *Proc. 12th International Conference on Information and Knowledge Management*, 504-507.
39. **Ryen W. White**, Joemon M. Jose, and Ian Ruthven. (2003). Adapting to evolving needs: evaluating a behaviour-based search interface. *Proc. 17th Annual Human-Computer Interaction Conference*.
40. **Ryen W. White**, Joemon M. Jose, and Ian Ruthven. (2003). Using top-ranking sentences for web search result presentation. *Proc. 12th International World Wide Web Conference*.
41. **Ryen W. White**, Joemon M. Jose, and Ian Ruthven. (2001). Query-biased web page summarisation: a task-oriented evaluation. *Proc. 24th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 412-413.

## WORKSHOP PAPERS

1. Adish Singla, Eric Horvitz, Pushmeet Kohli, **Ryen W. White**, and Andreas Krause. (2014). Building collaborative teams: A local navigation-based approach. *Proc. NIPS 2014 Workshop on Crowdsourcing and Machine Learning*.
2. David Sontag, Kevyn Collins-Thompson, Paul Bennett, **Ryen W. White**, Susan Dumais, and Bodo Billerbeck. (2013). Personalization via probabilistic adaptation. *Proc. NIPS 2013 Workshop on Personalization*.
3. Alan Haggerty, **Ryen W. White**, Joemon M. Jose. (2003). NewsFlash: adaptive TV news delivery on the web. *Proc. 1st International Workshop on Adaptive Multimedia Retrieval (AMR 2003, part of KI 2003)*.
4. **Ryen W. White**, Ian Ruthven, and Joemon M. Jose. (2001). Web document summarisation: a task-oriented evaluation. *Proc. 1st International Workshop on Digital Libraries (DLib 2001, part of DEXA 2001)*.

## PANELS

1. m.c. schraefel, Paul André, **Ryen W. White**, Desney Tan, Tim Berners-Lee, Sunny Consolvo, Robert Jacobs, Christopher A La Dantec, Gary Marsden, Ben Shneiderman, and Daniel Weitzner. Interacting with eHealth. *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems*, 3309-3312.

## DEMONSTRATIONS

1. **Ryen W. White** and Joemon M. Jose. (2004). An implicit system for predicting interests. *Proc. 27th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 595.
2. **Ryen W. White**, Joemon M. Jose, and Ian Ruthven. (2002). A system using implicit feedback and top-ranking sentences to help users find relevant web documents. *Proc. 25th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 446.

## DISSERTATION

1. **Ryen W. White**. (2004). *Implicit Feedback for Interactive Information Retrieval*. Unpublished Doctoral Dissertation, Department of Computing Science, University of Glasgow, Glasgow, UK. [DISTINGUISHED DISSERTATION AWARD – BRITISH COMPUTER SOCIETY / COUNCIL OF PROFESSORS AND HEADS OF COMPUTING].

## BOOK REVIEWS

1. **Ryen W. White**. (2006). "Information Retrieval Design" by James Anderson and Jose Perez-Carballo. *Journal of the American Society for Information Science and Technology*, 57(10): 1412-1413.

## OTHER PUBLICATIONS

1. Robert Capra, Luanne Freund, Catherine L. Smith, Mark D. Smucker, and **Ryen W. White**. (2013). HCIR 2013: The Seventh International Symposium on Human-Computer Interaction and Information Retrieval. *SIGIR Forum*, 47(2).
2. **Ryen W. White**, Elad Yom-Tov, Eric Horvitz, Eugene Agichtein, and William Hersh. (2013). Report on SIGIR 2013 workshop on health search and discovery. *SIGIR Forum*, 47(2).
3. Daniel Tunkelang, Robert Capra, Gene Golovchinsky, Bill Kules, Catherine L. Smith, and **Ryen W. White**. (2012). Symposium on human-computer information retrieval. *Big Data*, 1(1): 65-70.



4. Robert Capra, Gene Golovchinsky, Bill Kules, Catherine L. Smith, Daniel Tunkelang, and Ryen W. White. (2012). HCIR 2012: The sixth international symposium on human-computer interaction and information retrieval. *SIGIR Forum*, 46(2): 42-49.
5. Robert Capra, Gene Golovchinsky, Bill Kules, Dan Russell, Catherine L. Smith, Daniel Tunkelang, and **Ryen W. White**. (2011). HCIR 2011: The fifth international workshop on human-computer interaction and information retrieval. *SIGIR Forum*, 45(2): 102-106.
6. Robert Capra, Bill Kules, Catherine L. Smith, Daniel Tunkelang, and **Ryen W. White**. (2010). HCIR 2010: The fourth international workshop on human-computer interaction and information retrieval. *SIGIR Forum*, 44(2): 73-77.
7. Bill Kules, Daniel Tunkelang, and **Ryen W. White**. (2009). HCIR 2009: The third international workshop on human-computer interaction and information retrieval. *SIGIR Forum*, 43(2): 83-87.
8. **Ryen W. White** and Eric Horvitz. (2008). Cyberchondria: studies of the escalation of medical concerns in web search. *Microsoft Research Technical Report (MSR-TR-2008-178)*.
9. Kerry Rodden, Ian Ruthven, and **Ryen W. White**. (2007). Report on ACM SIGIR 2007 workshop on web information seeking and interaction. *SIGIR Forum*, 41(2): 63-67.
10. **Ryen W. White**, Gheorghe Muresan, and Gary Marchionini. (2006). Report on ACM SIGIR 2006 workshop on evaluating exploratory search systems. *SIGIR Forum*, 40(2): 52-60.
11. **Ryen W. White**, Bill Kules, and Ben Bederson. (2005). Exploratory search interfaces: categorization, clustering and beyond. *SIGIR Forum*, 39(2): 52-56.

### Patents (Granted, Inventor name order not meaningful)

1. **Ryen W. White** and Dan S. Morris. Identification and use of web searcher expertise. U.S. Patent 7996400 (Filed: 2007, Granted 2011).
2. Nick E Craswell, Hugh E. Williams, **Ryen W. White**, Michael M. Cameron, and Mikhail Bilenko. Using search trails to provide enhanced search interaction. U.S. Patent 7774339 (Filed: 2007, Granted: 2010).
3. Steven M. Drucker, Eric D. Brill, Chris J.C. Burges, and **Ryen W. White**. Accounting for behavioral variability in web search. U.S. Patent 7743047 (Filed: 2007, Granted: 2010).
4. Robert L. Rounthwaite, Eric D. Brill, Chris J.C. Burges, **Ryen W. White**, Allison P. Heath. Predicting and using search engine switching behavior. U.S. Patents 7984000, 8185484 (Filed: 2007, Granted: 2011)
5. Srivatsan Laxman, **Ryen W. White**, and Vikram M. Tankasali. Future data event prediction using a generative model. U.S. Patent 8126891 (Filed: 2008, Granted: 2012).
6. Susan T. Dumais, Jaime Teevan, and **Ryen W. White**. Domain expertise determination. U.S. Patents 8122021, 8402024 (Filed: 2008, Granted: 2012).
7. Robert L. Rounthwaite, Scott K. Imig, John H. Larcheveque, Silviu-Petru Cucerzan, Kenneth W. Church, **Ryen W. White**, Sam D. Paye, and Emily Pitler. Contextual query suggestion in result pages. U.S. Patent 8275759 (Filed: 2009, Granted: 2012).
8. Eric Brill, Matthew Richardson, and **Ryen W. White**. Balanced routing of questions to experts. U.S. Patent 8751559 (Filed 2008: Granted: 2014).
9. Kevyn Collins-Thompson, **Ryen W. White**, David Sontag, Paul Bennett, and Susan Dumais. Functionality for personalizing search results. U.S. Patent 8700544 (Filed: 2011, Granted: 2014).
10. Kevyn Collins-Thompson, Paul Bennett, **Ryen W. White**, Sebastian de la Chica, and David Sontag. Using reading levels in responding to requests. (Filed: 2011, Granted: 2014).
11. **Ryen W. White**, Jaime Teevan, and Susan Dumais. Domain expertise determination. (Filed: 2009, Granted: 2014).

12. Allison Heath, **Ryen W. White**, Chris J.C. Burges, Eric Brill, and Robert Rounthwaite. Predicting and using search engine switching behavior. U.S. Patent 8185484 (Filed: 2007, Granted: 2014).
13. Milad Shokouhi, **Ryen W. White**, and Paul Bennett. Ranking search results using result repetition. (Filed: 2011, Granted: 2014).
14. Paul Bennett, Filip Radlinski, **Ryen W. White**, and Emine Yilmaz. Using aggregate location metadata to provide a personalized service. (Filed: 2011, Granted: 2014).
15. **Ryen W. White**, Robert Rounthwaite, and Silviu Cucerzan. Suggesting related search queries during web browsing. (Filed: 2009, Granted: 2014).
16. Eric Horvitz and **Ryen W. White**. Predicting escalation events during information searching and browsing (Filed: 2010, Granted: 2014).
17. Elad Yom-Tov, Eric J. Horvitz, **Ryen W. White**, Munmun De Choudhury, and Scott J. Counts. User behavior monitoring on a computerized device (Filed: 2013, Granted: 2014).
18. Allison P. Heath, **Ryen W. White**, Christopher J.C. Burges, Eric D. Brill, and Robert L. Rounthwaite. Technologies for encouraging search engine switching based on behavior patterns. U.S. Patent 9031885 (Filed: 2012, Granted: 2015).
19. Paul N. Bennett, **Ryen W. White**, Milad Shokouhi, and Filip Radlinski. Ranking search results using result repetition. U.S. Patent 9064016 (Filed: 2013, Granted: 2015).
20. Timothy Edgar, Ambarish Chitnis, **Ryen W. White**, Pavel Dmitriev, RajaniKanth Ageeru, Lin Tang, and Ovi Dan. Query refinement in a browser toolbar (Filed: 2011, Granted: 2015).
21. Robert Rounthwaite, Matthew Richardson, and **Ryen W. White**. Identifying a discussion topic based on user interest information (Filed: 2008, Granted: 2015).
22. **Ryen W. White**, Xiao Huang, Yu Wang, An Yan, and Zijian Zheng. Task completion (Filed: 2012, Granted: 2015).
23. Elad Yom-Tov, Eric Horvitz, **Ryen W. White**, Munmun De Choudhury, and Scott Counts. User behavior monitoring on a computerized device (Filed: 2013, Granted: 2016).
24. Andre Furtado, Robert L Rounthwaite, Xiaohan Shi, Matthew Richardson, **Ryen W. White**, Syed Fahad Allam Shah, Shantanu Sharma. Role-specific device behavior (Filed: 2015, Granted: 2017).