Catherine L. Smith

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EDUCATION

Ph.D. Information Science, January 2010
Graduate Certificate in Cognitive Science, August 2009
      Rutgers University, New Brunswick, NJ
M.B.A. *Simmons College*, Boston, MA, 1987
B.A.   *Bard College*, Annandale-on-Hudson, NY, 1977

ACADEMIC APPOINTMENTS

Assistant Professor, School of Library and Information Science,
Kent State University, August 2010 – present

Post-doctoral Research Associate, School of Communication and Information Rutgers
University, September 2009 – June 2010

Instructor, School of Communication and Information
Rutgers University, Fall 2007 – Spring 2008

Teaching Assistant, School of Communication and Information
Rutgers University, Fall 2003 – Summer 2006 and Spring 2007

RESEARCH FOCUS

RESEARCH INTERESTS

The psychology of query formulation in skilled information searching using computer systems.
This includes the processes involved in learning to search and the design of interactive retrieval
systems that enrich the information literacy of their users.

PUBLICATIONS

Refereed journal articles:

- **Smith, C.L.** (in press). Domain-independent search expertise: Gaining knowledge in query
  formulation through guided practice*. Journal of the Association for Information Science and
  Technology.* (single-blind review)
- **Smith, C.L.** (2016). Privacy and trust attitudes in the intent to volunteer for data-tracking
  research. Information Research, 21(4), paper 726. Retrieved from
  http://InformationR.net/ir/21-4/paper726.html (Archived by WebCite® at
  http://www.webcitation.org/6m5H0ikHJ) (double-blind review)

updated 9/2/2016

- **Smith, C.L.** (early release, 2015). Investigating the role of semantic priming in query expression: A framework and two experiments. *Journal of the Association for Information Science and Technology. DOI: 10.1002/asi.23611* (single-blind review)
- **Smith, C.L.** (2015). Domain-independent search expertise: A description of procedural knowledge gained during guided instruction. *Journal of the Association for Information Science and Technology, 66*(7)*, p. 1388-1405.* doi: 10.1002/asi.23272 (single-blind review)
- **Smith, C.L.** & M. I. Roseberry (2013). Professional education in expert search: A content model. *The Journal of Education for Library and Information Science*, *53*(4), 255-269. (double blind review)

Refereed conference papers: *full conference presentation*
- **Smith, C.L.,** Gwizdka, J. & Field, H., (March, 2016). Exploring the use of query auto completion: Search behavior and query entry profiles. In proceedings of the *1st International ACM SIGIR Conference on Human Information Interaction and Retrieval (CHIIR '16)*, Chapel Hill, NC. (double-blind review)
- **Smith, C.L.** & Wacholder, N. (October, 2010). Developing a detailed view of query reformulation: One step in an incremental approach. In proceedings of the *American Society for Information Science and Technology Annual Meeting (ASIS&T '10)*, Pittsburgh, PA. (single-blind review)
- **Smith, C.L.** & Kantor, P.B. (July, 2008). User adaptation: Good results from poor systems. In proceedings of the *31st annual international ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR '08)*, Singapore, 147-154. (double-blind review)

Refereed short papers:
- **Smith, C.L.** (March, 2016). Process-learning as a factor in evaluation. In proceedings of the *Workshop on System and User Centered Evaluation Approaches in Interactive Information Retrieval (SAUCE 2016)*, Chapel Hill, NC. (double-blind review, selected for presentation)
- **Smith, C.L.** & Kantor, P. K. (August, 2015). Semantic priming in search and discovery. In Proceedings of the *SIGIR NeuroIR Workshop (NeuroIR'15)*, Santiago, Chile.
- **Smith, C.L.** (November, 2013). Factors affecting conditions of trust in participant recruiting and retention: A position paper. In proceedings of the *2013 workshop on Living labs for information retrieval evaluation (LivingLab '13)*, 13-14. (selected for presentation)
- Dickerhoof, A. & **Smith, C.L.** (October, 2014). Looking for query terms on search engine results pages. In proceedings of the *American Society for Information Science and Technology Annual Meeting (ASIS&T '14)*, Seattle, WA. (double-blind review)
- **Smith, C.L.** (October, 2012). Exploring and describing search expertise. In proceedings of the *American Society for Information Science and Technology Annual Meeting (ASIS&T '12)*. (single-blind review)
- **Smith, C.L.** (October, 2011). Conditions of trust for completely-remote methods: A proposal for collaboration. In proceedings of the *5th Workshop on Human-Computer Interaction and Information Retrieval (HCIR '11)*, Mountain View, CA.
- **Smith, C.L.** & Wacholder, N. (February, 2010). Why do users neglect suggestions?: Effects of semantic relatedness and task on word recognition**.** In proceedings of the *2010 iConference*, Urbana-Champaign, IL. (double-blind review)
- **Smith, C.L.** (October, 2008). Searcher adaptation: A response to topic difficulty. In proceedings of *the Annual Conference of the American Society for Information Science and Technology (ASIS&T '08)*, Columbus, OH. (single-blind review)

- Muresan, G., Cole, M., **Smith, C. L.**, Liu, L., & Belkin, N. (January, 2006). Does familiarity breed content? Taking account of familiarity with a topic in personalizing information retrieval. In proceedings of the *39th Annual Hawaii International Conference on System Sciences (HICSS '06, track 1)*, Kauai, HI. (double-blind review)
- Muresan, G., **Smith, C. L.**, Cole, M., Liu, L., & Belkin, N. (January, 2006). Detecting document genre for personalization of information retrieval for personalization of information retrieval. In proceedings of the *39th Annual Hawaii International Conference on System Sciences (HICSS '06, track 1)*, Kauai, HI. (double-blind review)
- Muresan, G., Liu, L., Cole, M., **Smith, C. L.**, & Belkin, N. (October, 2005). The effect of document readability on perceived familiarity and relevance. In proceedings of the *Annual Conference of the American Society for Information Science and Technology (ASIS&T '05)*, Charlotte, NC.

Editorials and workshop reports:
- Capra, R., Freund, L., **Smith, C.L.**, Smucker, M. D., & White, R.W. (December, 2013). HCIR 2013: The seventh international symposium on human-computer interaction and information retrieval. *SIGIR Forum 47*(2), 33-40.
- White, R., Capra, R., Golovchinsky, G., Kules, B., **Smith, C.** & Tunkelang, D. (September, 2013). Editorial: Introduction to special issue on human-computer information retrieval. *Information Processing & Management, 49*(5), 1053-1057.
- Tunkelang, D., Capra, R., Golovchinsky, G., Kules, B., **Smith, C.** & White, R. (March, 2013). Symposium on Human–Computer Information Retrieval. *Big Data, 1*(1): 65-70.
- Capra, R., Kules, B., Golovchinsky, G., **Smith, C.L.**, Tunkelang, D., & White, R. (December, 2012). HCIR 2012: The sixth international workshop on human-computer interaction and information retrieval. *SIGIR Forum 46(2), 42-49.*
- Capra, R., Kules, B., Golovchinsky, G., Russell, D., **Smith, C.L.**, Tunkelang, D., & White, R. (December, 2011). HCIR 2011: The fifth international workshop on human-computer interaction and information retrieval. *SIGIR Forum 45(2), 102-107.*
- Capra, R., Kules, B., **Smith, C.L.**, Tunkelang, D., & White, R.W. (December, 2010). HCIR 2010: The fourth international workshop on human-computer interaction and information retrieval. *SIGIR Forum 44*(2)*, 73-77.*

OTHER RESEARCH WORKS

Posters:
- **Smith, C.L.** (January, 2016). The conceptualization and development of learning tasks for search expertise. Poster presented at the *Association for Library and Information Science Education Annual Conference (ALISE '16)*, Boston, MA.
- **Smith, C.L.** & Wacholder, N. (October, 2010). Why users don't take suggestions: Preliminary results. Poster presented at the *Association for Library and Information Science Education Annual Conference (ALISE '10)*, Boston, MA.
- **Smith, C.L.** (January, 2009). Sensitivity to the results list: A response to poor system performance. Poster presented at the *Association for Library and Information Science Education Annual Conference (ALISE '09)*, Denver, CO.
- **Smith, C.L.** (October, 2008). What might the system teach its user? In proceedings of the *2nd Workshop on Human-Computer Interaction and Information Retrieval (HCIR '08)*, Redmond, WA.

- Barrett, L.P., de Richemond, J., Gal, C. S., Kantor, P. B., & **Smith, C. L.** (May, 2008). Assessing the impact of IAIMS on the UMDNJ "Information Workspace". Poster presented at the *Annual Meeting of the Medical Library Association (MLA '08)*, Chicago, IL.
- **Smith, C.L.** (October, 2008). What might the system teach its user? Poster presented at the *Workshop on Human-Computer Interaction and Information Retrieval (HCIR '08)*, Seattle, WA.
- Barrett, L.P., de Richemond, J., Gal, C. S., Kantor, P. B., & **Smith, C. L.** (November, 2007). Assessing the impact of IAIMS on the UMDNJ "Information Workspace"*.* Poster presented at the *American Medical Informatics Association 2007 Annual Symposium*, *IAIMS Program and Poster Session*, Chicago, IL.
- **Smith, C. L.** (May, 2007). Stopping behavior in information search: The effect of recent search experience on expectations, confidence, and action. Presentation at *Connections 2007*, Philadelphia, PA.

Technical reports:
- **Smith, C.L.** (2016). *Development of 14 dichotomous scale items measuring attitudes in the intent to participate in research.* Retrieved from http://faculty-l.slis.kent.edu/~seaed/Dichotomous_Item_Development_Technical_Report_Smith_2016.pdf
- Diaz, F., **Smith, C.,** Stumpf, S., & Toms, E. (March, 2013)*. Bringing search into task: Identifying task primitives. NSF Task-Based Information Search Systems Workshop*, invited participation. https://ils.unc.edu/taskbasedsearch/reports.html
- **Smith, C.L.** & Wang, G. (2012). *Kent State University/Lemur Remote Toolkit (KLRT): A toolkit for remote collection of client-side search logs.* Retrieved from http://faculty-l.slis.kent.edu/~seaed/KLRT_Technical_Report_Smith_Wang_2012.pdf
- Belkin, N., Cole, M., Gwizdka, J., Li, Y.-L., Liu, J.-J., Muresan, G., Roussinov, D., **Smith, C. L.,** Taylor, A., Yuan, X.-J. (2005). Rutgers information interaction lab at TREC 2005: Trying hard. Paper presented at the *Fourteenth Text Retrieval Conference (TREC2005)*, Gaithersburg, MD.
- Belkin, N., Chaleva, I., Cole, M., Li, Y.-L., Liu, L., Liu, Y.-H., Muresan, G., **Smith, C. L.,** Sun, Y., Yuan, X.-J., & Zhang, X.-M. (2004). Rutgers' HARD track experiences at TREC 2004. Paper presented at the *Thirteenth Text Retrieval Conference (TREC2004)*, Gaithersburg, MD. Note, this paper is indexed incorrectly.

Dissertation:
- **Smith, C.L.** (2010). *Adaptive search behavior: A response to query failure.* (Unpublished doctoral dissertation). Rutgers, The State University of New Jersey, New Brunswick, NJ.

WORK IN UNDER REVIEW AND IN PREPARATION

- **Smith, C.L.**, J. Gwizdka, & H. Feild (under review). The use of query auto-completion in search for multifaceted information needs. *Information Processing & Management.*
- **Smith, C.L.**, J. Gwizdka, & H. Feild (in revision). QWERTY keyboard skill and the use of query auto-completion. (tentative title).
- **Smith, C.L.**, (in preparation). (Not so) radical thinking on information literacy in the age of machine learning. (tentative title).

INVITED TALKS AND ROUND-TABLES

- **C.L. Smith** & M. Matteson (October 2016). *Search expertise in student library workers: Making complex information systems more useable.* Round-table discussion at the Academic Library Association of Ohio Conference (ALAO).
- **C.L. Smith.** *(*February, 2016). *Why don't you use suggestions?* Invited short talk at the winter meeting of the Northeast Ohio Chapter of ASIS&T (*NORASIS&T*).
- **C.L. Smith.** (November, 2012). *Exploring & Describing Search Expertise.* Invited talk at the Northeast Ohio Chapter of ASIS&T (*NORASIS&T*).
- **C.L. Smith.** (November, 2009). *Why users don't take suggestions: Visual and semantic processing in the uptake of suggested query-terms.* Brown Bag Lunch at Rutgers University Library & Information Science Department.
- **C.L. Smith &** N. Wacholder (October 2009). *Why users don't take suggestions: Semantic processing during the search process*. Invited talk at Syracuse University School of Information Studies, Brown Bag Lunch.
- **C.L. Smith.** (April, 2008). *User adaptation: Good results from poor systems.* Brown Bag Lunch at Rutgers University Library & Information Science Department.

GRANTS and SUPPORT

Funded:
- Principal investigator on *Google Research Award*, $76,000, for "A description of domain-independent search expertise", awarded Summer 2011
- Co-principal investigator on *Google Research Award*, $70,000, for "Why users don't take suggestions: Visual and semantic processing in the uptake of suggested query-terms", awarded Spring 2009, (with N. Wacholder)
- *SC&I Graduate Fellowship*, 2008-2009 Academic Year, Rutgers University, School of Communication and Information
- *Student Travel Grant,* ACM Special Interest Group on Information Retrieval, $1,600, July 2008
- Co-principal investigator on *SC&I Research Development Award*, $2,100, for "Identifying factors that inhibit information seekers' recognition of useful query terms", awarded Fall 2006, (with N. Wacholder)

Unfunded:
- "Interrelated effects of dynamic query suggestion and retrieval performance on search behavior", submitted to OCLC/ALISE Library and Information Science Research Grant Program, Fall 2014, Co-PI with H. Feild (not funded).
- "Logging Privacy and Trust", submitted to National Science Foundation, submitted to Division of Information & Intelligent Systems, Secure and Trustworthy Cyberspace Program, Spring 2014, Co-PI with J. Allen and H. Feild (not funded).
- "Expanding Archival Access through Semantic Enrichment and Enhancement of Archival Descriptive Data (EAASEE-ADD)", submitted to National Historical Publications & Records Commission, Innovation in Archives and Documentary Editing program, Fall 2013, as Investigator for Co-PIs K. Gracy and M. Zheng (not funded).
- "Dynamic Models of Search Behavior", submitted to National Science Foundation, Division of Information & Intelligent Systems, Human-Centered Computing Program, Fall 2008, Co-PI with P. Kantor (not funded)

- "Dynamic Mathematical Models of Search Behavior", submitted to National Science Foundation, Division of Information & Intelligent Systems, Human-Centered Computing Program, Fall 2007, Co-PI with P. Kantor (not funded)
- "How Users Choose Words: Cognitive Bias in Query Term Formulation", submitted to National Science Foundation, Division of Information & Intelligent Systems, Human-Centered Computing Program, Fall 2007, Co-PI with N. Wacholder (not funded)

ADDITIONAL RESEARCH EXPERIENCE

- "Barriers to Innovation: Problems, Experiments, and Paths to Solutions. Final report on research conducted for the White Rose Health Innovation Project", 2006-07, Research Associate. Development, implementation, and analysis of online survey of health-related technology innovators in New Jersey, for the Brystra Corporation.
- Evaluation of the Integrated Advanced Information Management Systems (IAIMS) Operational Project, 2006, Research team member. Report writing and development of online survey, supervised by Dr. P. Kantor.
- Website Quality Study, 2006, Research team member. Automation of assessment instrument and evaluation of selected sites, supervised by Dr. C. McInerney.
- Text REtrieval Conference (TREC), 2004, 2005, Research team member. Planning, analysis and writing, supervised by Dr. N. Belkin.

TEACHING FOCUS

TEACHING INTERESTS

Digital libraries, human-computer interaction, interactive information retrieval systems, research methods, and system evaluation.

TEACHING EXPERIENCE

Awards and recognition:
- *Certificate of Appreciation: In recognition of outstanding support provided to students with disabilities,* Kent State University, April 2012
- *Distinguished Achievement as a Part-time Lecturer*, Library and Information Science Department, Rutgers University, December 2006

Courses taught:
Kent State University
- *Digital Libraries*: Fall 2010 – 2015
- *Information Storage and Retrieval Systems:* Spring 2011 – 2016
- *Information Technology for Library Professionals* (SLIS core) Spring and Fall 2011 – 2016

Rutgers University
- *Organizing Information*: Spring 2010
- *Understanding Library Systems and Software Applications*: Fall 2010 (redesign of the course)
- *Database Technologies*: Fall 2006 – Spring 2008 (4 sections)
- *Undergraduate Independent Study*: Fall 2007
- *Management of Technological Organizations*: Fall 2007 – Spring 2008 (2 sections)
- *Information Technology and Informatics*: Spring 2006 (1 section)

Invited talks
- *Overcoming search-engine bias; systems that motivate skill acquisition,* presentation to Kent State University PhD course CCI 8000, Fall 2013
- *Overview of Digital Libraries*, presentation to Kent State University PhD course CCI 80000, Fall 2010, Fall 2011

PhD committees and supervision
- External committee member for Earl Bailey (2013-present), School of Information and Library Science, University of North Carolina – Chapel Hill; research on search expertise
- Program planning committee member and GA-supervisor for Heather Flynn (2013-2015), School of Library and Information Science, Kent State University
- External committee member for Nouh Alhindawi (2013), Department of Computer Science, Kent State University; work on information retrieval

M.L.I.S. thesis supervised
- Zhiyan Chen (M.L.I.S. proposal approved). Differences in search behavior for native-language and non-native-language search systems.
- Alison M. Dickerhoof, M.L.I.S. (August, 2014). Looking for query terms on search engine results pages.

M.L.I.S. thesis committees
- Shadi Shakeri, M.L.I.S. (December, 2013). Data Curation Perspectives and Practices of Researchers at Kent State University's Liquid Crystal Institute: A Case Study.

M.L.I.S. culminating experiences supervised

Year	Semester	# Students
2012	Spring	1
	Summer	2
	Fall	4
2013	Spring	1
	Summer	2
	Fall	1
2014	Spring	5
	Summer	4
	Fall	3
2015	Spring	3
	Summer	5
	Fall	3
2016	Spring	8
	Summer	9
	Fall	2

Catherine L. Smith

SERVICE FOCUS

<u>**KENT STATE UNIVERSITY**</u>
<u>**SCHOOL OF LIBRARY AND INFORMATION SCIENCE**</u>

Committees:
- *Search Committee, Goodyear Professor of Information Architecture and Knowledge Management,* 2015-2016
- *SLIS Technology Committee*, 2010 – 2016; Chair 2013-2016
- *Student Academic Complaint Committee*, 2010 – 2011; Chair 2011 – 2013
- *Sub-committee on Administration & Financial Support, Committee on Accreditation*, 2010 – 2011

Ad-hoc Service:
- *Ad hoc Committee on Online Student Orientation*: 2016
- *Ad hoc Committee on Revisions to the SLIS FAC Handbook*: 2012 – 2014
- *Ad hoc Committee on Learning Outcomes*: 2012
- *"Cognition and Technology",* group member for course outline for Digital Studies Task Force, Fall 2010

<u>**SERVICE TO THE PROFESSION**</u>

Peer review and editorial activities: journals
- *ACM Transactions on Information Systems,* 2014
- *Information Processing & Management*, Special Issue on HCIR, co-guest editor, 2012; article reviewing, 2015, 2016
- *Journal of the American Society for Information Science and Technology*, 2010
- *Journal of Information Retrieval*, 2009

Peer review activities: conferences
- *Conference on Human Information Interaction and Retrieval (CHIIR),* 2016
- *Information Interaction in Context Conference (IIiX)*, 2010, 2012, 2014
- *Knowledge Maps and Information Retrieval (KMIR) workshop,* at *JCDL,* 2014
- *American Society for Information Science and Technology Annual Meeting*, 2009
- *Association for Computing Machinery Conference on Research and Development in Information Retrieval (SIGIR)*, 2009, 2010, 2013, 2014, 2015, 2016
- *Association for Computing Machinery SIGCHI Conference on Human Factors in Computing Systems, 2010, 2011*
- *IEEE International Conference on Intelligence and Security Informatics*, 2005

Peer review activities: funding
- Panel reviewer for the *National Science Foundation* (*NSF*), 2014, 2016

Committee memberships:
- *Conference on Human Information Interaction and Retrieval (CHIIR '17),* Senior Program Committee Member, 2016-present
- *Association for Information Science & Technology (ASIS&T),* Award Nomination Committee, 2016

- *Conference on Human Information Interaction and Retrieval (CHIIR),* Steering Committee Member, 2014 – present;
- *Joint Conference on Digital Libraries (JCDL)*, Doctoral Consortium Co-chair, 2015
- *IIiX/HCIR Ad hoc Merger Taskforce, Committee Member,* 2014
- *Symposium on Human-Computer Interaction and Information Retrieval (HCIR)*
    - Steering Committee Member, 2010 – 2014
    - Local Arrangements Chair, HCIR 2010, 2012

Board Membership:
- *Information Processing & Management, Editorial Board*, 2016- present
- *Northern Ohio Chapter of The American Society for Information Science and Technology* (NORASIS&T)
    - *Co-chair*, 2015 - present
    - *Treasurer*, 2011 – present
    - *Chair*, 2014 - 2015

PROFESSIONAL AFFILIATIONS

- Association for Computing Machinery
- Association for Library and Information Science Education
- The Association for Information Science and Technology

OTHER

OTHER PROFESSIONAL EXPERIENCE

Massachusetts Software Council Fellowship Program Internship, 2000;
User Interface Engineering (Jared Spool), Andover, MA

Founder, International Documentary Library Service, 1999 – 2010;
Designed, developed, and launched database-driven digital library for documentary film, television and radio

Management in various capacities in banking and investment services, BankBoston, Boston, MA, 1980 – 1998, selected activities:
- Managed budgeting, cost accounting and reporting for $100+ million annual expenses for systems development and computer operations unit operating in a five-state region
- Directed development of retail retirement investment services business, including banking products and mutual funds
- Facilitated design of client sales and service delivery organization for private banking business
- Directed development of business strategy and marketing plans for private banking
- Managed various IT and banking operations units