

# Gerald Benoit, Ph.D.

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## Professional Profile

- Professional employment as a systems analysis/programmer
- **Data Science, Interactive Information Visualization, Info Aesthetics, Communications Theory**
- Experienced teaching technical subjects: information systems design, programming, and testing of information retrieval systems, theory and history of search engines, relational database management
- Research program in information science, particularly interactive retrieval systems, interactive information visualization applied to art history, visual resources, education, financial and biomedical corpora
  - Information Visualization projects; business systems consulting.
  - Developer of “proof of concept” systems applied to digital humanities, museum and archive, and biomedical collections as data integration projects
- Teach undergraduate computer science and health informatics students
- Teach graduate and doctoral students information science students

## Education

2014 Online Teaching Certificate, Simmons College

2007 Discrete Mathematics, Harvard University, Continuing Education

1998 Ph. D., University of California-Los Angeles

1986 Graphic design, The Art Center, Los Angeles

1984 M. S., Columbia University, New York, NY

1983 B. A., University of California-Davis. Double majors: French & Russian

1979 Certificate, United States Navy, Defense Language Institute, Monterey, CA. Russian

## Employment History

2005 - Present **Associate Professor** (with tenure) Simmons College, GSLIS and Computer Science, 300 The Fenway, Boston, MA 02115

2013-2017 Information Science/Technology Program director

2012-present 3+1 BS/MS program director (Computer Science/GSLIS)

2008, Fall Visiting Professor, University of Washington

2006-present Harvard College, Adams House Associate, Senior Common Room, faculty tutor

2006-2013 Periodic consultant on information systems design, use, and work flow analyses for local organizations and international businesses in the Boston area

2003-2006 **Assistant Professor**, Simmons College, GSLIS and Computer Science, 300 The Fenway, Boston, MA 02115

1998-2003 **Assistant Professor**, University of Kentucky, College of Communications and Information, Lexington, KY USA

1987-1994 **Programmer/Analyst**, University of California (Berkeley-Information Systems Office; Davis School of Medicine, Information Services Support Group)

### Academic Experience

#### Grants

1. Benoît, G., & Leonard, D. (2016). Metadata for information discovery [with Boston Public Library]. Dole, \$6,000.
2. Benoît, G. (2013). Information Science Experience Lab. President's Fund for Excellence, Simmons College, \$7900.
3. Benoît, G. [PI], & Agarwal, N. (2012). End-user interface experience project. Hollowell Grant.
4. Thomasian, R., Arakelyan, A., & Benoît, G. [Consultant] (2006-2010). Bilezikian Foundation Grant, \$104,620, multilingual digital library project.
5. Benoît, G. (2006-7). Phrasal parsing of English and Chinese bilingual corpora. Hollowell Grant.
6. Johnson, J. D., N. Harrington, J. Andrews, ... G. Benoît [technical advisor], et al. (2002). CECCR – RO1: "Increasing the Effectiveness of Tailored Health Message" (a multimedia project) National Institutes of Health. \$10,000,000.
7. Jeng, L-H., & Benoît, G. [Co-PI] (2000). National Leadership Grants, IMLS, LL-90187-99, "Improving electronic information seeking in emerging fields of research: a case of bio-acoustics", \$214,000.
8. Benoît, G. (2000). Summer research fellowship. Univ. of Kentucky, \$5,000.

### Publications

#### Submissions, awaiting action:

1. Benoît, G. Monograph: *Critical Theory, Habermas, and Civic Engagement* - submitted to MIT Press.
2. Benoît, G. Monograph: *Information Visualization* - submitted to Rowman & Litterfield
3. Benoît, G., Applying Linguistic Registers to Information Retrieval and Visualization Interfaces [Submitted to ACM SIGIR Forum]
4. Benoît, G., Critical Theory & con-fusions in information studies. [Submitted to JASIST]

#### Peer-reviewed articles

1. Benoît, G. (2016, Sept). The 'beautiful' in information: Thoughts about visual literacy and aesthetics. *Journal of Visual Literacy*, 35(1), 60-78.
2. Benoît, G. (2016). Visual communication as an information activity. *Journal of Visual Literacy*, 34(2), 51-67.
3. \*Benoît, G. (2014). The aesthetic turn: thoughts about knowledge claims of information visual systems. *Preservation, Digital Technology & Culture* 43(2), 100-113. DOI 10.115/pdte-2014-0003.
4. Benoît, G. (2012). Measuring relevance theory's effects in an image-driven explorative information system. *iConference '12 Proceedings*. New York: ACM, 438-440.
5. \*Benoît, G. (2012). auroraDL and responding to end-user digital library needs. New York: ACM *Proceedings of the 2012 iConference*, pp. 444-446.
6. Benoît, G., & Agarwal, N. (2012). All-visual retrieval: how people search for and respond to an affect-driven visual information retrieval system. *Proceedings, ASIST*.

7. \*Benoît, G. (2011-Dec.). Integrating use history as a context for dynamically-updated metadata. *Journal of Library Metadata*, 11(3-4), 129-154.
8. \*Benoît, G., & Hussey L. (2011). Repurposing digital objects: Case studies across the publishing industry. *JASIST*, 62(2), 363-374.
9. \*Benoît, G. (2010). The 'beautiful' in information: philosophy of aesthetics and information visualization. 2nd Int'l Conference on the Theory of Information Retrieval. Microsoft Research, Cambridge, UK. *Lecture Notes in Computer Science*, Vol. 5766, 338-341. Berlin & New York: Springer Verlag.
10. Benoît, G., & Rashid, F. (2009, Nov.). Iraq's Digital Library Dilemma: OpenSource Digital Objects Repository architecture, tools, and interface project. ASIST, Vancouver, BC. [in Arabic]
11. Benoît, G. (2008, Oct.). Interactive 3D Visual Retrieval for Art History Education. *Proceedings ASIST*.
12. Benoît, G. (2007, Oct.). Critical Theory and the legitimacy and information science. *Information Research*, 12(4). <http://InformationR.net/ir/12-4/colis01.html>
13. Benoît, G. (2005). Application of Markov chains in an interactive information retrieval system. *Information Processing & Management*, 41, 843-857. DOI:10.1016/j.ipm.2004.06.005
14. Benoît, G., Chan, L.-M., Andrews, J. E. (2004). "lois" – locally-organized information system. Information Seeking in Context, Dublin, Ireland, Sept. 2004. *Information Research*.
15. Benoît, G. (2004, April). Properties-based retrieval and user decision states: user control and behavior modeling. *Journal of the American Society for Information Science & Technology*, 55(6), 471-487.
16. Benoît, G. (2002). Data discretization for novel relationship discovery in information retrieval. *Journal of the American Society for Information Science & Technology*, 53(9), 736-746.
17. Benoît, G. (2002, Oct.). Towards a critical theoretic perspective in information systems. *Library Quarterly*, 72(4), 444-474.
18. Benoît, G. (2002, Sept.). Properties-based tailoring of information seeking contexts. *New Review of Information Seeking Behavior Research*, 3/4, Sept. 2002/2003.
19. Benoît, G. (2001). Critical theory as a foundation for pragmatic information systems design. *Information Research*, 6(2). <http://www.shef.ac.uk/~is/publications/infres/6-2/paper98.html>
20. Benoît, G. (2002). Data discretization for novel information discovery. *Journal of the American Society for Information Science & Technology*, 53(9), 736-746.
21. Benoît, G. (2002, May). Interactive visualization for resource co-location, Special Supplement *MLA '02 Abstracts*, Medical Library Assoc., Dallas, TX, p. 36.
22. Benoît, G. (2002). Markov chain model for evidence-adaptive clinical decision support system. *Proceedings*, American Medical Informatics Association, San Antonio, TX.
23. Benoît, G. (2002, Nov.). Weighted Markov chains and interactive graphic state nodes for information retrieval. *Proceedings of ASIST Annual Meeting*, pp. 115-123.
24. Benoît, G., & Andrews, J. (2000). Data discretization for novel resource discovery in large medical datasets. *Proceedings of the American Medical Informatics Association Symposium*, 61-5. <http://www.amia.org/pubs/symposia/D200636.pdf>
25. Stapley B. J., & Benoît, G. (2000). BioBibliometrics: information retrieval and visualization from co-occurrences of gene names in Medline abstracts. *Proceedings of the Pacific Symposium of Biocomputing*, 5, 529-540.

Conference Posters: [Peer-reviewed]

1. Benoît, G., & Agarwal, N. (2012). All-visual retrieval: searching and responses in an affect-driven visual IR System. ASIST.
2. Benoît, G. (2012). auroraDL and responding to end-user digital library needs. iSchool Conference, Toronto, Canada.
3. Benoît, G., Hussey, L., & Bartley, P. (2012). Digital Object Repurposing. ASIST Annual Conference.
4. Benoît, G., & Rashid, F. (2009, Nov.). Iraq's Digital Library Dilemma: OpenSource Digital Objects Repository architecture, tools, and interface project. ASIST, Vancouver, BC.
5. Benoît, G., Bartley, P. T., & Hussey, L. (2009, Nov.). Repurposing digital objects: seven case studies across the publishing and information industry. ASIST, Vancouver, BC
6. Benoît, G., & Andrews, J. (2000, Nov.). Data discretization for novel resource discovery in large medical datasets. Proceedings American Medical Informatics Assoc Symposium, Los Angeles, CA.

Invited Chapters: (‡ = subject to peer review and acceptance)

1. Benoît, G. (2013). Critical theory. In T. D. Wilson & Em. Maceviciute (Eds.) *Theories of Information Behavior Research - an information research reader*. London: Eiconics.‡
2. Chan, L. M. (2007). Contributed section on SGML and XML for Chan's *Cataloging and Classification*. New York: McGraw-Hill.
3. Benoît, G. (2007). Theory of Communication Action and LIS. *Epistemological Lifeboat*, B. Hjørland, Ed. [www.db.dk/jni/lifeboat/home.htm](http://www.db.dk/jni/lifeboat/home.htm)
4. Benoît, G. (2005). Theory of Communicative Action. In K. Fisher, S. Erdelez, & L. McKechnie (Eds.), *Theories of information behavior: a researcher's guide*. Medford, NJ: Information Today.
5. Benoît, G. (2004). Bioinformatics. In B. Cronin (Ed.), *Annual Review of Information Science and Technology*, vol. 40. Medford, NJ: Information Today for ASIST.‡
6. Benoît, G. (2002). Data mining. In B. Cronin (Ed.), *Annual Review of Information Science and Technology (ARIST)*, vol. 36, pp. 265-310. Medford, NJ: Information Today for ASIST.‡

Presentations:

1. 2010 Bioinformatics Education panel (moderator, ASIST Annual Conference).
2. 2008, Oct 25 Interactive 3D Visualization for Art History Education, ASIST Annual Conference.
3. 2007, Aug 16 Critical theory and the legitimacy of information science. CoLIS7, Högskolan i Borås. Borås, Sweden.
4. 2004 Cross-language information retrieval. Int'l Federation of Library Assoc. Buenos Aires.
5. 2002, Nov Weighted Markov chains and graphic state nodes for information retrieval. ASIS&T Annual Meeting, Philadelphia.
6. 2002, Sep Properties-based tailoring of information seeking contexts. Information Seeking in Context, Lisbon, Portugal.
7. 2002 Markov-Chain Model for Evidence-Adaptive Clinical Decision Support System. American Medical Informatics Association, San Antonio, TX.
8. 2002 Interactive visualization for resource co-location. Medical Library Assoc.
9. 2002, Jun Applying Communicative Action to Inter-group Computer Mediated Cooperative Work. International Communications Association annual conference, Seoul, S. Korea. With James Andrews.

10. 2002, May Interactive Visualization for Resource Co-Location, Medical Library Assoc., Dallas, TX.
11. 2000, Aug 16 Critical theory as a foundation for pragmatic information systems design, Information Seeking in Context 2000, Gothenburg, Sweden.
12. 2000 PCSB 2000: Pacific Conference on Structural Biology – BioBibliometrics: information retrieval and visualization from co-occurrence of gene names in Medline abstracts. (With Benjamin Stapley.)
13. 1999, Aug 6 ISMB1999, 7th International Conference on Intelligence Systems for Molecular Biology, Heidelberg, Germany. (With Benjamin Stapley.)

Presentations: Lectures and invited presentations

1. 2016, Dec. Information Visualization: There's Room for All [LIS, Libraries and Computer Science]. Univ of Rhode Island.
2. 2015, May 20 Updating information systems for digital humanities research. American Antiquarian Society.
3. 2015, Feb 12 Participatory Computing, Simmons College SLIS Research Colloquium.
4. 2014, Mar 4 Demystifying Search Engine Algorithms: Harvard Discovery Initiative Project, Harvard University.
5. 2014, Mar 4 Information Visualization. Simmons GSLIS Research Colloquium.
6. 2013, Oct 23 The Rome Experience, summer 2013. [With Bethany Fair, Laura Saunders.] Simmons GSLIS Research Colloquium.
7. 2012, Apr 24 Using auroraDL to integrate your digital items. Simmons GSLIS Research Coll..
8. 2011, Nov 3 Applying ruby to improve user engagement with encoded texts and manuscript arts. Simmons GSLIS Research Colloquium.
9. 2011, Apr 28 Challenges for information visualization. Simmons GSLIS Research Colloquium.
10. 2011, Apr 7 Aesthetics and future of truth in information systems. Simmons GSLIS Research Colloquium.
11. 2010, Feb 23 Visualization and visual information management. [Panel discussion with Naresh Agarwal, Martha Mahard]. Simmons GSLIS Research Colloquium.
12. 2009, Feb The 'beautiful' in information: philosophy of aesthetics and information visualization. Simmons GSLIS Research Colloquium.
13. 2008, Jan Doctoral seminar - 3D visualization, University of Washington, Seattle.
14. 2006, Apr 18 Bioinformatics and LIS. Simmons GSLIS Research Colloquium.
15. 2005, Dec 1 The role of philosophy in information studies. Simmons GSLIS Research Colloquium.
16. 2004, Nov 18 Application of Markov chains in an interactive information retrieval system. Simmons GSLIS Research Colloquium.
17. 2004, Oct 21 Information science: what is it? Simmons GSLIS Research Colloquium.
18. 2004, June Habermas' Critical Theory. National Library of Ireland, Dublin. [Lecture].
19. 1999, Oct 7 Logic, language and communication in information systems. Graduate Communications Seminar, University of Kentucky.
20. 1999, Apr 19 Systems, Theories & Language: the cyclic nature of technological change. Univ. of Rhode Island, Graduate School of Library & Information Science.
21. 1998, Jun 9 The Use of Information Technology in the Foreign Language Curriculum, Middlebury College.

Reviews:

1. 2011 Critical theory in Library & Information Science. (Buschman & Liecke) *LISR*.
2. 2006 Link analysis: An information science approach. (M. Thewall) *JASIST*, 57(13), 1855-1858.
3. 2002 Animating the Letter (L. Kendrick). *Library Quarterly*.
4. 2001 Snap to grid: A user's guide to digital arts, media, and cultures. *JASIST*, 52(6), 509-510.
5. 2001 Intelligent applications in LIS (F. Lancaster & A. Warner). *LISR* 23, 4-6.
6. 2001 Ethical Issues in Biomedical Publication (A. H. Jones & F. McLellan). *Library and Information Science Research*.
7. 2001 Snap to Grid (Peter Lunenfeld). *JASIS*, 52(7).
8. 2000 Languages of the World (Andrew Dalby). *Library Quarterly*, 265-266.
9. 1999 Concise Dictionary of Library and Information Science (Stella Keenan). *Library Quarterly*, 67(2), 180-184.
10. 1999 From Writing to Computers (J. Warner). *Library Quarterly*, 66(2), 213-216.

Translations:

1. 1999 Scientific Elite: Nobel Laureates in the United States (Galina F. Godrukalova/Harriet Zuckerman). *Library Quarterly*. (I translated this from Russian to English for LQ.)

Service Activities and Administrative Responsibilities:

1. Created and direct the Information Science & Technology concentration in the MS program
2. Created and co-direct the 3+1 accelerated program (BS/MS, CS/LIS) program (2012 - present)
3. Data Science & Analysis creation committee for new BS and MS programs (2015 - present)
4. Doctoral Committee - founding member, oral and written examiner (2009 - present)
5. Created, lead Simmons Summer Courses in Paris and Rome (2012 - present)
6. Lazerow Lecture Committee
7. Hollowell Research Cmte (2013-14, chair)
8. Health Informatics Campus Initiative (2010-)
9. Faculty Compensation Sub-committee, Fiscal Affairs (2011)
10. Core-curriculum review (2010) and continuing Curriculum Committee (2010 - present)
11. Research Colloquium - founded and continue since 2004

Professional:

ASIST SIG-VIS Communications Officer (2016-Present). "Sig of the Year, 2017"  
Acquisitions and Series Editor, ASIS&T Monograph Series, 2013-present  
Annual Meeting, Co-Chair, Track III, Innovation, 2011  
Communications Officer, SIG-BIO, 2008-09  
ALISE Planning Committee, 2008

Consulting and External Professional Presentations:

1. 2016-ongoing Harvard University Libraries - Information Visualization Service and Professional Development. [Suite of computer programs for data visualization.]
2. 2012 American Institute for Conservation of Historic and Artistic Works, Computing in Preservation - History of Computing [[.keynote](#)].
3. 2009,2010 Ponogansett High School, Gloucester, RI; Technology in Education.

4. 2005-2013 XPlana Corp. - working as a consulting thru XPlana training in systems use, metadata, ontology creation for Thomson Learning, Centage, McGraw-Hill.
5. *Projects*: French ontology, Spanish ontology, German ontology mapped to learning outcomes and text resources for American Federation of Teachers of Foreign Languages
6. Mathematics education ontology
7. Social Sciences and History education ontology
8. Systems Analysis at corporate level
9. Integration with EMC2 products
10. 2010 Peabody-Essex Museum, Library and Archives. Data Unity Merger project.
11. 2010 Berkman Center, Harvard Univ.
12. 2010 Boston Public Library. Systems Analysis training.
13. 2010 Harvard College, Office of Student Life, Systems Analysis training.
14. 2009 Jouve Publishing Comp.
15. 2006 American Institute for Conservation of Historic and Artistic Works, "Theory & Practice of Conservation Research."

Manuscript and Grant Reviewing:

1. National Research Foundation of Korea (NRF), 2017.
2. Association for Information Science & Technology, annual meeting, paper and poster reviewer, 1999 - ongoing.
3. JASIST conference, 2000-present (ongoing).
4. *Études de communication*, 2010.
5. iSchool Conferences, contributed paper and posters reviewer (ongoing)
6. IEEE, 2010 - contributed papers.
7. ACM (SIGIR) conference, 2006-present - contributed papers and posters (ongoing)
8. Israel Science Foundation - grant reviewer

Miscellaneous:

**Creative activities: Software and Web Applications:** *for research projects and teaching*

This lists a few samples of applications (the names of the applications are in quotes) used for research projects and teaching.

1. Applying Linguistic Registers to an information retrieval and visualization project.
2. "TIARAS" - Integrated images/prints record creation, search, and production application. Boston Public Library.
3. Identity Management Program - integrated college services program written for Simmons College Technology Office - as part of the Spring 2015 systems analysis class project
4. Participatory Computing - increasing participation and understanding innovation
5. Online EBook Creation Tool
6. "auroraDL" - full-featured record-creation, search, display, and integrated resource system
7. "Waystation" - privacy-protecting file sharing utility, using jQuery, PHP, flat-files and sql resources
8. "NICK" - networked information and contact knowledge-base demonstrating data-driven model, ease of maintenance
9. "Martha" - an image collection builder, demonstrating drag-and-drop interfaces with tools to build teaching lessons.

10. Chinese-English bi-lingual retrieval engine.
11. "Build-a-collection" pdf creator (searches, integrates heterogeneous file types (text, .html, .xml, .svg) using XML-Formatting Objects code libraries to convert XML to PDF as the result of searching collections).
12. Survey and Quiz maker tools - web-based data gathering tools, tailorable surveys and stat analysis
13. Self-grading quiz tools - randomizes questions and answer selections in self-grading quizzes, with links to review materials, test question beds, etc.
14. "DUM" - Data Utility Merger project - Java programs and web-enabled databases to create enterprise-wide records integrating from library, archive, photography and other collections into a unified, searchable, standards-based data model and system. Part of Peabody Essex Museum project - [documentation link](#)
15. Student record, advising and enrollment management tools, includes enrollment projections, visualizations
16. Visualization tools to create multiple displays of data, links across collections, with polar, logarithmic, and interactive displays.

#### IT Skills:

<i>Programming</i>	Java: standalone applications, servlets, and applets; including JavaFX and J3D libraries; C++; JavaScript, Python, PHP, Perl, Unix, jQuery libraries iOS application development
<i>Operating Systems</i>	Unix, Mac
<i>XML</i>	Facility with XML DTD, Schema creation (.xsd and .dtd) XML Extensible Style Language (XSLT) XML-Formatting Objects libraries Programming for XML record processing
<i>Web + Data</i>	Apache Tomcat; Apache Zeppelin; Apache Hadoop
<i>Visualization</i>	Tableau, various js libraries, e.g., D3.js
<i>RDBMS</i>	MySQL, Oracle PI
<i>Design Software</i>	Adobe Creative Suite 5.5, Maya Illustrator, Photoshop, DreamWeaver, InDesign, Flash MX Digital camera and audio capture software
<i>HTML</i>	HTML4 and HTML5; Cascading Style Sheets (CSS3)

#### Language Skills

English and French - Fluent  
German, Italian, Swedish, Spanish - Conversational; read  
Russian - Conversational  
Danish - basic

#### Personal Interests

Travel, studying other languages; graphic design and photography; playing piano (Baroque, some classical and romantic era works) and music in general; art and architecture; all things nautical.

#### References | Referencer:



1. James Matarazzo, Ph.D., Dean Emeritus, Simmons College, 300 The Fenway, Boston, MA 02115 USA +01 617-521-2815 james.matarazzo@simmons.edu
2. Michèle V. Cloonan, Ph.D., Professor and Dean Emerita, Simmons College, 300 The Fenway, Boston, MA 02115 USA +01 617-521-2806 michele.cloonan@simmons.edu
3. James Anderson, Ph.D., Associate Professor and Director, Univ. of South Florida, School of Information, 4202 E. Fowler Ave., CIS1040, Tampa, FL 33620-8100 USA +01 812-855-3260 jimandrews@usf.edu
4. Nanette Veilleux, Ph.D., Professor, Associate Dean for Research, Chair of Computer Science Dept. Simmons College, 300 The Fenway, Boston, MA 02115 USA veilleux@simmons.edu

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