

Gerald Benoit, Ph.D.

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Professional profile

- Professional employment as a teacher in data science, computer science and library and information science programs.

Research interests:

- interactive, aesthetic and ethical visualization of information;
- design of language registers and search systems;
- culture, critical theory and philosophy of information
- public information institutions, public participation and user experience.

Consultant experienced in systems analysis, programming; complete website design; interoperability.

- Experienced teacher of undergraduate and graduate students, responsible for supervising dozens of theses.
- Actively participate in many professional and research groups as a reviewer, contributor, speaker; and in administrative functions.

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 Language.

Professional development

2014 Online Teaching Certificate, Simmons College.

2007 Discrete Mathematics, Harvard University, Division of Continuing Education.

Experience

2018 - present Univ. of California-Berkeley, *School of Information, MIDS Program. Berkeley, CA, USA. Plan, teach courses in data science, programming, visualization, etc. Adjunct Assoc. Prof.*

San José State Univ., *Online Informatics Program, San José, CA, USA; plan and teach courses in informatics, visualization, programming, relational database design, web services.*

2006 - present Harvard University, *Adams House Associate, Senior Common Room, faculty tutor.*

- 2006 - present Consultant for small- and large- local and international corporations in systems analysis, integration, multilingual systems.
- 2005 - 2018 Associate Professor *Simmons College, College of Organizational, Computational, and Information Sciences (COCIS), 300 The Fenway, Boston, MA 02115 USA*
- 1998-2003 Assistant Professor. *University of Kentucky, College of Communications and Information, Lexington, KY USA*
- 1987-1994 Programmer/Analyst, II. *University of California (Berkeley-Information Systems Office; Davis-School of Medicine, Information Services Support Group)*

Publications

Grants

- Benoît, G., & Leonard, D. (2016). Metadata for information discovery. Dole, \$6000.
- Benoît, G. (2013). Information Science Experience Lab. President's Fund for Excellence, Simmons College, \$7900.
- Benoît, G. [PI], & Agarwal, N. (2012). End-user interface experience project. Hollowell Grant.
- Thomasian, R., Arakelyn, A., & Benoît, G. [Consultant] (2006-2010). Bilezikian Foundation Grant, \$104,620, multilingual digital library project.
- Benoît, G. (2006-7). Phrasal parsing of English and Chinese bilingual corpora. Hollowell Grant.
- Johnson, J. D., N. Harrington, J. Andrews, ... G. Benoît [technical advisor], et al. (2002). CECCR – ROI: “Increasing the Effectiveness of Tailored Health Message” (a multimedia project) National Institutes of Health. \$7,000,000.
- 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.
- Benoît, G. (2000). Summer research fellowship. Univ. of Kentucky, \$5,000.

Publications & Peer-Reviewed Research

Monographs:

- *Information Visualization: turning data into meaningful information*. New York: Rowman & Littlefield, 2019-20.
- *Critical Theory, Habermas, & Civic Engagement*. [MIT Press; under review]

Work in progress

- Scrollytelling Toolkit : *software proof of concept for integrating institutional resources with public participation records; designed to increase the participation of groups, such as First Nations*
- *Cataloguer Tool: Customizable Python-based record creation tool for visual documents; facilitates the integration of publicly created files with controlled vocabularies; search engine and system integration*
- Language registry and information retrieval: Using information viewer software to improve the influences of domain and language registries on search engine performance.

Publications (peer-reviewed):

- Benoît, G. “Critical Theory and critical theories in information studies” (submitted)
- Benoît, G. (2020) “Searching Covid-19 by Linguistic Register: Parallels and Warrant for a New Retrieval Model”. Long paper. *Proc. Assoc Info Science Technology 2020*. DOI: 10.1002/pr2.246
- Benoît, G. (2016, Sept). The ‘beautiful’ in information: Thoughts about visual literacy and aesthetics. *Journal of Visual Literacy*, 35(1), 60-78.
- Benoît, G. (2015). Visual communication as an information activity. *Journal of Visual Literacy*, 34(2), 51-67.
- Benoît, G. (2014). The aesthetic turn: thoughts about knowledge claims of information in visual systems. *Preservation, Digital Technology & Culture* 43(2), 100-113. DOI 10.115/pdte-2014-0003.
- Benoît, G. (2012). Measuring relevance theory’s effects in an image-driven explorative information system. *iConference ‘12 Proceedings*. New York: ACM, 438-440.
- Benoît, G. (2012). auroraDL and responding to end-user digital library needs. New York: ACM *Proceedings of the 2012 iConference*, pp. 444-446.
- Benoît, G., & Agarwal, N. (2012). All-visual retrieval: how people search for and respond to an affect-driven visual information retrieval system. *Proceedings, ASIST*.
- Benoît, G. (2011-Dec.). Integrating use history as a context for dynamically-updated metadata. *Journal of Library Metadata*, 11(3-4), 129-154.
- Benoît, G., & Hussey L. (2011). Repurposing digital objects: Case studies across the publishing industry. *JASIST*, 62(2), 363-374.
- 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.
- 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]
- Benoît, G. (2008, Oct.). Interactive 3D Visual Retrieval for Art History Education. *Proceedings ASIST*.
- Benoît, G. (2007, Oct.). Critical Theory and the legitimacy and information science. *Information Research*, 12(4). <http://InformationR.net/ir/12-4/colis01.html>
- 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
- Benoît, G., Chan, L.-M., Andrews, J. E. (2004). “lois” – locally-organized information system. Information Seeking in Context, Dublin, Ireland, Sept. 2004. *Information Research*.
- 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.
- 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.
- Benoît, G. (2002, Oct.). Towards a critical theoretic perspective in information systems. *Library Quarterly*, 72(4), 444-474.
- Benoît, G. (2002, Sept.). Properties-based tailoring of information seeking contexts. *New Review of Information Seeking Behavior Research*, 3/4, Sept. 2002/2003.

- 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>
- Benoît, G. (2002). Data discretization for novel information discovery. *Journal of the American Society for Information Science & Technology*, 53(9), 736-746.
- Benoît, G. (2002, May). Interactive visualization for resource co-location, Special Supplement *MLA '02 Abstracts*, Medical Library Assoc., Dallas, TX, p. 36.
- Benoît, G. (2002). Markov chain model for evidence-adaptive clinical decision support system. *Proceedings*, American Medical Informatics Association, San Antonio, TX.
- Benoît, G. (2002, Nov.). Weighted Markov chains and interactive graphic state nodes for information retrieval. *Proceedings of the American Society for Information Science Annual Meeting*, pp. 115-123.
- 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>
- 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 Bio-computing*, 5, 529-540.

Conference Posters (peer-reviewed):

- Benoît, G., & Agarwal, N. (2012). All-visual retrieval: searching and responses in an affect-driven visual IR System. ASIST.
- Benoît, G. (2012). auroraDL and responding to end-user digital library needs. iSchool Conference, Toronto, Canada.
- Benoît, G., Hussey, L., & Bartley, P. (2012). Digital Object Repurposing. ASIST Annual Conference.
- Benoît, G., & Rashid, F. (2009, Nov.). Iraq's Digital Library Dilemma: OpenSource Digital Objects Repository architecture, tools, and interface project. ASIST, Vancouver, BC. [English/Arabic]
- Benoît, G., Bartley, P. T., & Hussey, L. (2009, Nov.). Repurposing digital objects: seven case studies across the publishing and information industry. ASIST, Vancouver, BC
- 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:

- Benoît, G. (2013). Critical theory. In T. D. Wilson & Em. Maceviciute (Eds.) *Theories of Information Behavior Research - an information research reader*. London: Eiconics.
- Chan, L. M. (2007). Contributed section on SGML and XML for Chan's *Cataloging and Classification*. New York: McGraw-Hill.
- Benoît, G. (2007). Theory of Communication Action and LIS. *Epistemological Lifeboat*, B. Hjørland, Ed. www.db.dk/jni/lifeboat/home.htm
- 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.

- Benoît, G. (2004). Bioinformatics. In B. Cronin (Ed.), *Annual Review of Information Science and Technology*, vol. 40. Medford, NJ: Information Today for ASIST.
- Benoît, G. (2002). Data mining. In B. Cronin (Ed.), *Annual Review of Information Science and Technology*, vol. 36, pp. 265-310. Medford, NJ: Information Today for ASIST.

Invited Presentations

- 2021, April 8. *Meet the authors*. Webinar, ASIST.
- 2020, Oct 25. Applying linguistic register to covid-19: a new model for retrieval. ASIST.
- 2018, Feb 28. Information Visualization challenges and opportunities. Adams House, Harvard Univ.
- 2017, Mar 3. The value of Habermas and Critical Theory in Information Science, Simmons College.
- 2017. Information retrieval design. Harvard University Libraries Professional Seminars.
- 2016, Sept 1. Developing “Literary Tourism” - an collaborative model for government, local agencies, and libraries to encourage cultural tourism. Mass. Center for the Book, Boston.
- 2016, Dec 21. Information Visualization: room for all. Univ. of Rhode Island.
- 2016. Current State of Metadata Interoperability in Libraries. Boston Public Library.
- 2016. Massachusetts Center for the Book; “Literary Tourism GIS”
- 2015, May 20 Updating information systems for digital humanities research. American Antiquarian Soc.
- 2015, Feb 12. Participatory Computing, Simmons College SLIS Research Colloquium.
- 2014, Mar 4. Information Visualization. Simmons Research Colloquium.
- 2014, Mar 4. Demystifying Search Engine Algorithms: Harvard Discovery Initiative Project..
- 2014. Facilitating historical research. American Antiquarian Society
- 2013, Oct 23. The Rome Experience, summer 2013. [With Bethany Fair, Laura Saunders.] Simmons Research Colloquium.
- 2012, Apr 24. Using auroraDL to integrate your digital items. Simmons Research Colloquium.
- 2012. American Institute for Conservation of Historic and Artistic Works, Computing in Preservation - History of Computing.
- 2011, Nov 3. Applying ruby to improve user engagement with encoded texts and manuscript arts. Simmons Research Colloquium.
- 2011, Apr 7. Aesthetics & future of truth in information systems. Simmons Research Colloquium.
- 2011, Apr 28. Challenges for information visualization. Simmons Research Colloquium.
- 2010. Bioinformatics Education panel (moderator, ASIST Annual Conference).
- 2010, Feb 23 Visualization and visual information management. [Panel discussion with Naresh Agarwal, Martha Mahard]. Simmons Research Colloquium.
- 2010 Peabody-Essex Museum, Library and Archives. Data Unity Merger project.
- 2010 Harvard College, Office of Student Life, Systems Analysis training.
- 2010 Boston Public Library. Systems Analysis training.
- 2010 Berkman Center, Harvard Univ. Paul Saber/Robin Peek - Integration Project.

- 2009, Feb The 'beautiful' in information: philosophy of aesthetics and information visualization. Simmons Research Colloquium.
- 2009, 2010 Ponogansett High School, Gloucester, RI; Technology in Education.
- 2009 Jouve Publishing Comp.
- 2008, Oct 25. Interactive 3D Visualization for Art History Education, ASIST Annual Conference.
- 2008, Jan Doctoral seminar - 3D visualization, University of Washington, Seattle.
- 2007, Aug 16. Critical theory and the legitimacy of information science. *CoLIS7*, Högskolan i Borås. Borås, Sweden.
- 2006, Apr 18 Bioinformatics and LIS. Simmons Research Colloquium.
- 2006 American Institute for Conservation of Historic and Artistic Works, "Theory & Practice of Conservation Research."
- 2005, Dec 1. The role of philosophy in information studies. Simmons Research Colloquium.
- 2005-2013. XPlana Corp. - working as a consulting thru XPlana training in systems use, metadata, ontology creation for Thomson Learning, Centage, McGraw-Hill.
- 2004. Cross-language information retrieval. Int'l Federation of Library Assoc. Buenos Aires.
- 2004, Oct 21 Information science: what is it? Simmons Research Colloquium.
- 2004, Nov 18 Application of Markov chains in an interactive information retrieval system. Simmons Research Colloquium.
- 2004, June. Habermas' Critical Theory. National Library of Ireland, Dublin. [Lecture].
- 2002. Markov-Chain Model for Evidence-Adaptive Clinical Decision Support System. American Medical Informatics Association, San Antonio, TX.
- 2002. Interactive visualization for resource co-location. Medical Library Assoc.
- 2002, Sep. Properties-based tailoring of information seeking contexts. Information Seeking in Context, Lisbon, Portugal.
- 2002, Nov. Weighted Markov chains and graphic state nodes for information retrieval. ASIS&T Annual Meeting, Philadelphia.
- 2002, May. Interactive Visualization for Resource Co-Location, Medical Library Assoc., Dallas, TX.
- 2002, Jun. Applying Communicative Action to Inter-group Computer Mediated Cooperative Work. International Communications Assoc annual conference, Seoul, S. Korea. With James Andrews.
- 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.)
- 2000, Aug 16. Critical theory as a foundation for pragmatic information systems design, Information Seeking in Context 2000, Gothenburg, Sweden.
- 1999, Oct 7. Logic, language and communication in information systems. Graduate Communications Seminar, University of Kentucky.
- 1999, Aug 6. ISMB1999, 7th International Conference on Intelligence Systems for Molecular Biology, Heidelberg, Germany. (With Benjamin Stapley.)
- 1999, Apr 19. Systems, Theories & Language: the cyclic nature of technological change. Univ. of Rhode Island, Graduate School of Library & Information Science.

- 1998, Jun 9. The Use of Information Technology in the Foreign Language Curriculum, Middlebury College.

Reviews:

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

Translations:

- 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 and Administrative Activities:

- *Journal of Bioinformatics Computing*
- *Journal of the Assoc for Information Science & Technology* and Annual Meetings: contributed paper, and poster reviewer
- *Études de communication*
- iSchool Conferences, contributed paper reviewer
- IEEE, 2010 - contributed papers
- ACM (SIGIR) conference, 2006-present - contributed papers and posters
- Cambridge Univ. Press (monograph submissions related to NLP, Data Science, Communication)
- UC Berkeley: Course Redesign (Data Science).
- San José State Univ., Course Development (Informatics Program)
- Simmons College. Dept. Communications Committee, Computer Science Faculty Committee, Data Science & Analysis creation committee for new BS and MS programs, Curriculum Committee Information Science & Technology (created and directed); Public Lecture Series (founded as Research Colloquium); 3+1 accelerated program (BS/MS, CS/LIS; created and co-direct).
 Doctoral Committee - founding member, oral and written examiner
 Created, lead Simmons Summer Courses in Paris and Rome
 Lazerow Lecture Committee
 Hollowell Research Committee
 Health Informatics Campus Initiative
 Faculty Compensation Sub-committee, Fiscal Affairs

Professional service:

Reviewer (Submitted papers and posters), ASIST, ACM
 Program Committee, 2016 - , ASIST.
 Communications Officer, ASIST SIG-InfoVis (2017 Sig of the Year recipient)
 ASIST Publication Panel
 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
 NSF, Korean science foundation, Israel science foundation grant reviewer

Miscellaneous: Creative activities:

I create and share many OpenSource tools. These include websites, core programming, scrolling proofs of concept, interactive information visualization, content management systems, documentation, multilingual research, captioned teaching tools, institutional communication, the integration of library system records and public participation cataloging tools to collaborate with institutions records, with various output options.

Personal interests: languages, photography, the arts, piano, architecture. All nautical things.

Technical Skills:

- Programming: Python, Java, JavaScript, PHP, Unix, d3.js
- Systems Analysis: Ontology design; work-flow analyses; documentation; etc.
- Web Servers: Apache Webserver; Tomcat.
- RDBMS: MySQL
- Design tools: Adobe Illustrator, Photoshop; HTML, CSS, JavaScript; various frameworks

Linguistic Skills:

English: native speaker
 French: fluent
 German: intermediate
 Spanish: intermediate
 Italian: conversational
 Russian: conversational: intermediate writing
 Swedish and Mandarin: basic!

Professional References:

Michèle V. Cloonan, Ph.D., Simmons College
 Anastasia Weigel, Ph.D., University of Maine
 Paul Landowski, Ph.D. UC Berkeley
 Howard Silver, Ph.D., MIT