

Michael E. Lesk

Education

Harvard College, Cambridge, Mass., Physics and Chemistry, BA, 1964.
Harvard University, Cambridge, Mass., Chemical Physics, Ph.D, 1969.

Employment

2003-: Rutgers University, Professor of Library and Information Science (Dept. chair 2005-2008)

2009-2010: Visiting researcher, Google

1998-2002: National Science Foundation, Division Director, Information and Intelligent Systems.

1995-1998: Bellcore, Chief Research Scientist

1983-1995: Bellcore, led Computer Science Research Dept (various titles)

1987: Senior Visiting Fellow, British Library (at University College London)

1983-1985, and 1996: adjunct lecturer in Computer Science, Columbia University

1969-1983: Bell Laboratories, Member of Technical Staff

Publications

Book:

Michael Lesk, *Understanding Digital Libraries*, Morgan Kaufmann, San Francisco (2004).
This is the second edition of a book originally entitled *Practical Digital Libraries*, 1997.

Papers:

M. Lesk, J. Golbeck, C. Triggs, N. Wacholder, and C. Yu, "Online nonsense: tools and teaching to combat fake news on the Web," workshop, *I-conference* 2019, College Park, Maryland (to happen in March)

M. Lesk, J. Bially Mattern, H. Moulaison Sandy, "Are papers with open data more credible? An analysis of open data availability in retracted PLoS articles," paper, *I-conference* 2019, College Park, Maryland (to happen in April)

Michael Lesk and Janice Bially Mattern, "Why Share? Politics and Possibilities for Successful Research Data Archives," *National Digital Stewardship Alliance*, Pittsburgh, 2017.

Cragin, Michael Lesk, Yu-Hung Lin, Daniel O'Connor Soo-yeon Hwang, Melissa. "Issues of Dealing with Fluid Data in Digital Libraries," *JCDL '16: Proceedings of the 16th ACM/IEEE-CS on Joint Conference on Digital Libraries* (June 2016).

Janet Lazar, Michael Lesk, "The Trumpet Shall Sound: De-anonymising jazz recordings." EVA 2016.

Michael Lesk, *The Convergence of Curation*. Handbook of Science and Technology Convergence 2016: 95-112

Janet Lazar and Michael Lesk, "It must be Louis 'cause Miles don't shake like that: towards

identifying jazz trumpeters by vibrato," *ISMIR* 2016, late poster.

Michael Lesk, "Safety Risks--Human Error or Mechanical Failure?: Lessons from Railways," *IEEE Security & Privacy* vol. 13, no. 2, pp 99-102. (2015)

Shahé Navasart Sanentz, Michael Lesk, "Toward a semantic stability index (SSI) via a preliminary exploration of translation looping," *ASIST '15: Proceedings of the 78th ASIS&T Annual Meeting: Information Science with Impact: Research in and for the Community* November 2015.

Michael Lesk, "License Creep," *IEEE Security & Privacy* Volume: 13, Issue: 6 Pages: 85 – 88 (2015).

Michael Lesk, "The new knowledge infrastructure," *Int. J. on Digital Libraries* 16(1): 3-4 (2015)

Michael Lesk, "Library science: The word on our archival future," *Nature* 520(7548): 435(2015)

Michael Lesk, "Ideas Ahead of Their Time: Digital Time Stamping," *IEEE Security & Privacy*, Volume: 13, Issue: 4, Pages: 76 – 79 (2015).

Michael Lesk, "How many scientific papers are not original?" *PNAS* 2015, 112 (1) 6-7; December 23, 2014.

Michael Lesk, "Caller ID: Whose Privacy?" *IEEE Security & Privacy*, Vol. 12, issue 2, pp 77-79 (2014).

Michael Lesk, Annamarie Klose. "Summarising Pictures" *EVA* 2014

Michael Lesk, "Does the Cloud of Surveillance Have a Silver Lining?" *IEEE Security & Privacy*, vol. 12, issue 3, pp 78-81 (2014).

Michael Lesk: Staffing for Security: Don't Optimize. *IEEE Security & Privacy* 12(4): 71-73 (2014)

Michael Lesk, "Trust, but Verify," *IEEE Security & Privacy*, vol 12, no. 6, pp 94-96 (2014).

Michel Lesk: "Electronic Medical Records: Confidentiality, Care, and Epidemiology," *IEEE Security & Privacy* 11(6): 19-24 (2013)

Michael Lesk, "Privateers in cyberspace: Aargh!" *IEEE Security & Privacy*, Volume: 11, Issue: 3, Pages: 81 – 84 (2013).

Michael Lesk, "From Descriptions to Duplicates to Data," *Electronic Visualisation in Arts and Culture* 2013: 9-23

Michael Lesk, "Big Data, Big Brother, Big Money," *IEEE Security & Privacy*, Volume: 11, Issue: 4 (2013).

Kelly Caine; Michael Lesk, "Security and Privacy in Health IT [Guest editors' introduction],"

IEEE Security & Privacy, Volume: 11, Issue: 6, Pages: 10 – 11 (2013).

Michael Lesk, "The Old Is New Again," *IEEE Security & Privacy*, vol 11, no. 6, pp 77-79 (2013).

Michael Lesk: "The Price of Privacy." *IEEE Security & Privacy* 10(5): 79-81 (2012)

Michael Lesk, "Your Memory Is Now a Vendor Service," *IEEE Security & Privacy*, vol 10, no 1, pp 88-90 (2012).

Michael Lesk, "The Clouds Roll By," *IEEE Security & Privacy*, Volume: 10, Issue: 3 Pages: 84 – 87 (2012).

Michael Lesk, "Georgia on My Mind," *IEEE Security & Privacy*, vol 10, no 4, pp 88-90 (2012).

Carl E. Landwehr, Dan Boneh, John C. Mitchell, Steven M. Bellovin, Susan Landau, Michael E. Lesk: "Privacy and Cybersecurity: The Next 100 Years." *Proceedings of the IEEE 100* (Centennial-Issue): 1659-1673 (2012)

Michael Lesk: "Salmon, Songs, and Blankets: Creativity on the Northwest Coast," *IEEE Security & Privacy* 9(3): 78-81 (2011)

Michael Lesk, "What Is Information Worth?" *IEEE Security & Privacy*, Volume: 9, Issue: 1, Pages: 88 – 90 (2011).

Judith Gelernter, Michael Lesk, "Use of Ontologies for Data Integration and Curation," *IJDC* 6(1): 70-78 (2011)

Michael Lesk, "Reading: From Paper to Pixels," *IEEE Security & Privacy*, Volume: 9, Issue: 4 Pages: 76 – 79 (2011).

Michael Lesk, "Cybersecurity and Economics," *IEEE Security & Privacy*, vol. 9, issue 6, pp 76-79 (2011).

Michael Lesk, "Do the Luddites Ever Win?" *IEEE Security & Privacy*, vol 8, no. 5 pp 79-82 (2010).

Michael Lesk and Judith Gelernter, "Use of Ontologies for data integration and curation," *Sixth Digital Curation Conference*, Chicago, Dec. 2010.

Arden Kirkland, Michael Lesk, Allison Steffmann, "Context for costumes: faceted access to historic costumes," *EVA 2010*

Rick Hale, Ron Jantz, Annamarie Klose and Michael Lesk, "Currency (Metadata) Conversion: Conflicts in Coin Cataloging , poster at *10th Digital Curation Conference*, London 2015.

Michael Lesk, "Son of Carterfone: Network Neutrality or Regulation?" *IEEE Security & Privacy*, vol 8, issue 3, pp 77-82 (2010).

Judith Gelernter, Michael Lesk, "Text mining for indexing," *JCDL '09: Proceedings of the 9th ACM/IEEE-CS joint conference on Digital libraries* (June 2009).

Michael Lesk, "Incentives to Innovate: Improve the Past or Break with It?" *IEEE Security & Privacy*, vol 7, no. 5, pp 78-81 (2009).

Michael Lesk, "Reading Over Your Shoulder," *IEEE Security & Privacy*, Volume: 7, Issue: 3 Pages: 78 – 81, (2009).

J. Gelernter, M. E. Lesk, "Traditional resources help interpret texts," *BooksOnline '08: Proceedings of the 2008 ACM workshop on Research advances in large digital book repositories*, October 2008.

Michael Lesk, "Recycling Information: Science Through Data Mining" *IJDC* 3(1): 154-157 (2008).

Aleksandra Sarcevic, Ivan Marsic, Michael E. Lesk, Randall S. Burd, "Transactive memory in trauma resuscitation," *CSCW '08: Proceedings of the 2008 ACM conference on Computer supported cooperative work*, November 2008.

A. Sarcevic, M. E. Lesk, I. Marsic, and R. S. Burd, "Quantifying adaptation parameters for information support of trauma teams," *Proc. ACM SIGCHI Conference on Human Factors in Computing Systems (CHI 2008): Extended Abstracts*, pp. 3303-3308, Florence, Italy (April 5-10, 2008.).

Judith Gelernter, Michael Lesk, "Creating a searchable map library via data mining," *JCDL '08: Proceedings of the 8th ACM/IEEE-CS joint conference on Digital libraries* (June 2008)

M. Lesk, "Digital Rights Management and Individualized Pricing," *IEEE Security and Privacy* 6(3), pp. 76-79 (May-June 2008).

Paul B. Kantor, Michael E. Lesk, "The Challenges of Seeking Security While Respecting Privacy," *ISIPS 2008*: 1-10

M. Lesk, "Forum shopping on the Internet," *IEEE Security and Privacy* 6(1), pp. 78-80 (January-February 2008).

Jia Li, Shih-Fu Chang, Michael Lesk, Rainer Lienhart, Jiebo Luo, and Arnold Smeulders, "New challenges in multimedia information research for the increasingly connected and fast growing digital society," *ACM Multimedia Information Retrieval Conference*, pp. 3-10, Augsburg, Germany (2007).

M. E. Lesk, "Managing 3D: Our next problem," *ACM Multimedia Information Retrieval Conf.*, Augsburg, Germany (2007).

Michael Lesk, "South Korea's Way to the Future," *IEEE Security & Privacy* 5(2), pp. 85-87 (March-April 2007).

Michael Lesk, "The New Front Line: Estonia under Cyberassault," *IEEE Security & Privacy* 5(4), pp. 76-79 (July-August 2007).

Michael Lesk, "From Data to Wisdom: Humanities Research and Online Content," *Academic*

Commons (2007). See <http://www.academiccommons.org/commons/essay/michael-lesk>.

Michael Lesk, "Easy 3D: User Opinions," *EVA London Conference*, pp. 39.1-39.10 (2007).

Michael Lesk, "Should Indexing be Fair Use? The Battle over Google Book Search," *IEEE Security & Privacy* 4(2), pp. 80-83 (2006).

A. Sarcevic and M. E. Lesk, "Searching for emotional content in digital video," *CHI-2006 Workshop "HCI and the Face"*, Montreal, Canada (April 22-27, 2006.). Online at: <http://www.bart-neck.de/workshop/chi2006/>.

Serge Abiteboul, Rakesh Agrawal, Philip A. Bernstein, Michael J. Carey, Stefano Ceri, W. Bruce Croft, David J. DeWitt, Michael J. Franklin, Hector Garcia-Molina, Dieter Gawlick, Jim Gray, Laura M. Haas, Alon Y. Halevy, Joseph M. Hellerstein, Yannis E. Ioannidis, Martin L. Kersten, Michael J. Pazzani, Michael Lesk, David Maier, Jeffrey F. Naughton, Hans-J Schek, Timos K. Sellis, Avi Silberschatz, Michael Stonebraker, Richard T. Snodgrass, Jeffrey D. Ullman, Gerhard Weikum, Jennifer Widom, and Stanley B. Zdonik, "The Lowell database research self-assessment," *Commun. ACM* 48(5), pp. 111-118 (2005).

Michael Lesk, "Salute the Broadcast Flag," *IEEE Security & Privacy* 3(3), pp. 84-87 (2005).

Michael Lesk, "Copyright and Creativity," *IEEE Security & Privacy* 2(3), pp. 76-78 (2004).

Michael Lesk, "Bigger Share of a Smaller Pie," *IEEE Security and Privacy* 2(4), pp. 62-64 (July- Aug 2004).

Michael Lesk, "Copyright and Creativity," *IEEE Security and Privacy* 2(3), pp. 76-78 (May-June 2004).

Michael Lesk, "Shedding Light on Creativity: The History of Photography," *IEEE Security and Privacy* 2(2), pp. 62-64 (March-April 2004).

Michael Lesk, "Micropayments: An Idea Whose Time Has Passed Twice?" *IEEE Security and Privacy* 2(1), pp. 61-63 (January-February 2004).

Michael Lesk, "Feist and Facts: If Data is Protected, Will It Be More or Less Available?" *IEEE Security and Privacy* 1(6), pp. 68-70 (January-February 2004).

Michael Lesk, "Chicken Little and the Recorded Music Crisis," *IEEE Security and Privacy* 1(5), pp. 73-75 (Sep-Oct 2003).

Michael Lesk and Michael Lesk, "Making the Copyright Law Work," *IEEE Security and Privacy* 1(4), pp. 73-74 (Jul-Aug 2003).

Michael Lesk, "The Good, The Bad, and the Ugly: What Might Change if We Had Good DRM," *IEEE Security and Privacy* 1(3), pp. 63-66 (May-Jun 2003).

Michael Lesk, "Copyright Enforcement or Censorship: New Uses for DMCA," *IEEE Security and Privacy* 1(2), pp. 67-69 (Mar-Apr 2003).

Michael Lesk, "Copyright Extension: Eldred v. Ashcroft," *IEEE Security and Privacy* 1(1), pp. 76-78 (Jan-Feb 2003).

Michael Lesk, "Size Matters: Web and Book Archiving," *EVA Conference*, London (2003). Also presented at the Public Record Office, Kew; see their conference on preservation.

Michael Lesk, "How to Pay for Digital Libraries" in *Digital Libraries: Policy, Planning and Practice*, ed. Judith Andrews and Derek Law, pp. 37-52, Ashgate Publishing, Aldershot, Hants, England (2003).

Michael Lesk, "International Cooperation in Digital Library Research," *Multimedia Content-Based Indexing and Retrieval*, INRIA, Rocquencourt, France (2001).

Michael Lesk, "US Digital Library Research - Broadening our Reach," *Kyoto International Conference on Digital Libraries*, pp. 2-17, Kyoto, Japan (2000).

Michael Lesk, "Real World Searching Panel at SIGIR 97," *SIGIR Forum* 32(1), pp. 1-4 (1998).

Philip A. Bernstein, Michael L. Brodie, Stefano Ceri, David J. DeWitt, Michael J. Franklin, Hector Garcia-Molina, Jim Gray, Gerald Held, Joseph M. Hellerstein, H. V. Jagadish, Michael Lesk, David Maier, Jeffrey F. Naughton, Hamid Pirahesh, Michael Stonebraker, and Jeffrey D. Ullman, "The Asilomar Report on Database Research," *SIGMOD Record* 27(4), pp. 74-80 (1998).

M. E. Lesk, "Going Digital," *Scientific American* 276(3), pp. 58-60 (March 1997).

R. Entlich, L. Garson, M. Lesk, L. Normore, J. Olsen, and S. Weibel, "Testing a Digital Library: user response to the CORE project," *Library Hi-Tech* 14(4), pp. 99-118 (1996).

M. Lesk, "The SMART Lab Report: the Harvard Years (1961-68)," *SIGIR Forum* 31(1), pp. 2-6 (Spring 1997).

R. Entlich, L. Garson, M. Lesk, L. Normore, J. Olsen, and S. Weibel, "Making a Digital Library: the Contents of the CORE Project," *ACM Trans. on Inf. Sys.* 15(2), pp. 103-123 (April 1997).

Michael Lesk, "The electronic context: libraries and the World Wide Web" in *Librarianship and Information Work Worldwide, 1996/1997*, ed. Maurice B. Line, pp. 1-20, Bowker Saur, London (1997).

Michael Lesk, "Projections for Making Money on the Web" in *Internet Publishing and Beyond: The Economics of Digital Information and Intellectual Property*, Kennedy School of Government, Harvard University (January 1997).

Michael Lesk, "Substituting Images for Books," *Fifth Annual Symposium on Document Analysis and Information Retrieval*, Univ. Nevada Las Vegas, Las Vegas, Nev. (April 1996).

Michael Lesk, "Preserving Digital Objects: Recurrent Needs and Challenges" in *Multimedia Preservation: Capturing the Rainbow*, pp. 106-125, National Preservation Office, National Library of Australia, Brisbane, Australia (November 1995).

M. Lesk, "Digital libraries meet electronic commerce: on-screen intellectual property," *Proc. ADL '96*, pp. 58-65, Washington, DC (1996).

M. E. Lesk, "The future value of digital information and digital libraries," *Joho Kanri* 38(12), pp. 1063-79 (March 1996). Japanese translation of talk given at Kanazawa Institute of Technology.

M. E. Lesk, "Which way to the future? The control of scholarly publication" in *Digital Libraries. Current Issues*, pp. 33-49, Springer-Verlag (1995). Paper given at Rutgers Digital Library conference, Newark, 1994.

Richard Entlich, Lorrin Garson, Michael Lesk, Lorraine Normore, and Stuart Weibel, "Making a digital library: The chemistry online retrieval experiment," *Comm. ACM* 38(4), p. 54 (April 1995).



Michael Lesk, "Mad Library Disease: Holes in the Stacks," Lazerow Lecture Series (1996).

Michael Lesk, *The Seven Ages of Information Retrieval* (October 1995). (presented at an MIT conference which has never published its proceedings).

M. Lesk, "Experiments on Access to Digital Libraries: How can Images and Text be Used Together?" *Proc. 20th VLDB Conference*, pp. 655-667, Santiago, Chile (September, 1994). Invited keynote talk.

Michael E. Lesk, "Electronic Chemical Journals," *Analytical Chemistry* 66(14), pp. 747A-755A (July 15, 1994).

M. E. Lesk, *Electronic Libraries and Electronic Journals*, British Library, London (1993). *Tenth British Library Research Lecture*, ISBN 0-7123-3287-1.

M. Lesk, "How can digital information be protected" in *Research Challenges in the Economics of Information*, CNRS, Poigny-le-Forêt, France (July 1993).

T. Landauer, D.E. Egan, J.R. Remde, M.E. Lesk, C.C. Lochbaum, and R.D. Ketchum, "Enhancing the usability of text through computer delivery and formative evaluation: the SuperBook project" in *Empirical Issues in Hypertext*, ed. C. McKnight and A. Dillon, pp. 71-136 (1992).

M. E. Lesk, "Better Things for Better Chemistry Through Multimedia," *Screening Words: User Interfaces for Text*, 8th Annual Conference of the UW Centre for the New Oxford English Dictionary and Text Research, University of Waterloo, Ontario, Canada (October 18-20, 1992).

M. E. Lesk, *Preservation of New Technology*, Commission on Preservation and Access (Oct. 1992).

Michael Lesk, "Pricing electronic information," *Serials Review* 18(1-2), pp. 38-40 (Spring-Summer 1992).

- M. E. Lesk, "The CORE Electronic Chemistry Library," *Proc. 14th ACM SIGIR Conference*, pp. 93-112, Chicago (October 13-16, 1991).
- M. Lesk, "Safe not sorry," *New Scientist* 130(1772), p. 2 (1991). (letter to the editor).
- D. E. Egan, M. E. Lesk, R. D. Ketchum, C. C. Lochbaum, J. R. Remde, M. Littman, and T. K. Landauer, "Hypertext for the Electronic Library? CORE sample results," *Proc. Hypertext '91*, pp. 299-312, San Antonio (15-18 Dec. 1991).
- M. E. Lesk, "Television Libraries for Workstations: An All-Digital Storage, Transmission and Display System for Low-Rate Video" in Multimedia information. *Proceedings of the Second International Information Research Conference* held at Churchill College, ed. Mary Feeney and Shirley Day, pp. 187-194, Cambridge, UK (15-18 July 1991).
- Michael Lesk, "Image formats for preservation and access," *Information Technology and Libraries* 9(4), pp. 300-308 (Dec. 1990). Previously a report of the Commission on Preservation and Access.
- M. E. Lesk, "Images in Document Retrieval: Extraction of Figures from Pages," *Proc. Anglo-French-US Meeting on Image Storage in Museums and Libraries*, British Library (1990).
- M. E. Lesk, "Packets vs Circuits: A 19th Century Case Study," *Algorithms* 1.5, pp. 16-19 (July 1990).
- M. E. Lesk, "Full Text Retrieval with Graphics" in *Bridging the Communication Gap*, pp. 5-1 to 5-13, NATO AGARD Conference Preprint No. 487 (1990).
- M. E. Lesk, "What to Do When There's Too Much Information," *Proc. Hypertext '89*, pp. 305-318, ACM Press (Nov. 1989).
- M. E. Lesk, "Information Retrieval," *The Weaver*, pp. 6-7 (1989).
- M. E. Lesk, "They Said True Things, but Called Them By Wrong Names: Vocabulary Problems Over Time in Retrieval," *Proc. 1988 Waterloo OED conference*, pp. 1-10, Waterloo, Ont. (1988).
- M. E. Lesk, "Should Networks Be Designed Bottom-Up or Top-Down?" *Proc. Australian Unix Users Group*, Melbourne (1988). (Invited keynote address).
- M. E. Lesk, "Word Manipulation in Online Catalog Searching: Using the Unix System for Library Experiments," *Proc. 1988 EUUG Meeting* (April 11-15), pp. 135-47, London, England (1988).
- M. E. Lesk, "Can Unix Survive Secret Source Code?" *Computing Systems* 1, pp. 189-199 (1988).
- M. E. Lesk, "GRAB: Inverted Indexes with Low Storage Overhead," *Computing Systems* 1, pp. 207-220 (1988).
- M. E. Lesk, "Can Machine-Readable Dictionaries Replace a Thesaurus for Searches in Online

Catalogs?" *Proc. 3rd Annual Conference of the UW Centre for the New OED*, "The Uses of Large Text Databases", pp. 65-74, Waterloo (November 1987).

M. E. Lesk, "Why Use Words to Label Ideas: The Uses of Dictionaries and Thesauri in Information Retrieval," *Proc. EEC Conf. on Automating the Lexicon*, Oxford U. Press, Marina di Grosseto, Italy, May, 1986 (1995).

M. E. Lesk, "Automatic Sense Disambiguation Using Machine Readable Dictionaries: How to Tell a Pine Cone from an Ice Cream Cone," *Proc. 1986 SIGDOC Conference*, Toronto (June, 1986).

M. E. Lesk, "Why I want the OED on My Computer, and When I'm Likely to Have It," *SIGCUE OUTLOOK*, pp. 62-66 (Spring/Summer 1986).

M. E. Lesk, "Graphical Information Resources: Maps and Beyond," *Proc. 8th Int'l SIGIR Conference*, pp. 2-8, Montreal, Que. (June, 1985). (Invited keynote address).

M. E. Lesk, "Programming Languages for Text and Knowledge Processing," *Ann. Rev. of Information Science and Technology*, pp. 97-128 (1984).

M. E. Lesk "Computer Software for Information Management" *Scientific American*, 251 (3), pp. 162-172, Sept. 1984

R. J. Elliott and M. E. Lesk, "Data Structures for Street Maps," *National Communications Forum* 38, pp. 625-629, Chicago (O'Hare) (Sept. 1984).

M. E. Lesk, "Technology Driven Software Meets User Psychology: Irresistible Force and Immovable Object," *USENIX Meeting*, Toronto, Ont. (July 1983). (Invited keynote address).

V. J. Geller and M. E. Lesk, "User Interfaces to Information Systems: Choices vs. Commands," *Proc. 6th Int. ACM SIGIR Conference*, pp. 130-135, Bethesda, Md. (June 1983).

V. J. Geller and M. E. Lesk, "An Online Catalog Offering Menu and Keyword User Interfaces," *Proc. 4th National Online Meeting*, pp. 159-166, New York (April 1983).

R. J. Elliott and M. E. Lesk, "Route Finding in Street Maps by Computers and People," *Proc. Nat'l Conf. on Artificial Intelligence*, pp. 258-261, Pittsburgh, Pa. (August 1982).

M. E. Lesk, "Combining Data Bases: National and Cartographic Files," *Proc. AFIPS Office Automation Conference*, pp. 415-426, San Francisco, Cal. (April 1982).

D. A. Nowitz and M. E. Lesk, "Implementation of a Unix network," *Computer Communications* 5(1), pp. 30-34 (1982).

M. E. Lesk, "A Programming Community on the Unix system," *Proc. Online '81 Conf.*, pp. 315-320, Dallas, Tex. (Nov. 1981).

M. E. Lesk, "Another View," *Datamation* 27(12), p. 146 (November 1981).

D. A. Nowitz and M. E. Lesk, "A Dial-Up Network of UNIX Systems," *Proc. Compton 80*,

pp. 483-486, Washington (Sept. 1980).

D. M. Ritchie, S. C. Johnson, M. E. Lesk, and B. W. Kernighan, "The C Programming Language," *Bell Sys. Tech. J.* 57(6), pp. 1991-2019 (1978).

S. C. Johnson and M. E. Lesk, "Language Development Tools" in *Unix system readings and applications*. Vol.1. UNIX time-sharing system p, pp. 245-65 (1987).

B. W. Kernighan, M. E. Lesk, and J. F. Ossanna, "Document Preparation," *Bell Sys. Tech. J.* 57(6), pp. 2115-2135 (1978).

M. Lesk and B. Kernighan, "Computer Typesetting of Technical Journals on UNIX," *AFIPS NCC Proceedings* 46, pp. 879-888, Dallas, TX (June 1977).

R. H. Gammon, R. C. Stern, M. E. Lesk, B. G. Wicke, and W. Klemperer, "Metastable $a^3\Pi^{13}$ CO: Molecular-Beam Electric Resonance Measurements of the Fine Structure, Hyperfine Structure and Dipole Moment," *J. Chem. Phys.* 54(5), pp. 2136-2150 (January 1971).

R. C. Stern, R.H. Gammon, M. E. Lesk, R. S. Freund, and W. Klemperer, "Fine Structure and Dipole Moment of Metastable $a^3\Pi$ Carbon Monoxide," *Journal of Chemical Physics*, Volume 52, Issue 7, p.3467-3482

M. E. Lesk, "Word-word associations in document retrieval systems," *Amer. Doc.* 20(1), pp. 27-38 (January 1969).

M. E. Lesk and G. Salton, "Interactive search and retrieval methods using automatic information displays," *Proc. SJCC*, vol. 34, pp. 435-446 (January 1969).

M. E. Lesk, "Performance of Automatic Information Systems," *Inform. Stor. Retr.* 4, pp. 201-218 (1968).

G. Salton and M. Lesk, "Computer Evaluation of Indexing and Text Processing," *Jour. ACM* 15(1), pp. 8-36 (Jan. 1968).

G. A. Salton and M. Lesk, "Relevance assessments and retrieval system evaluation," *Inf. Stor. Retrieval* 4(4), pp. 343-359 (Dec. 1968).

G. Salton and M. Lesk, "The SMART Automatic Document Retrieval System: An Illustration," *Comm. ACM* 8(6), pp. 391-398 (June 1965).

J. I. Steinfeld, R. N. Zare, L. Jones, M. Lesk, and W. Klemperer, "Spectroscopic Constants and Vibrational Assignments for the $B^3\Pi_{ou}^+$ State of Iodine," *J. Chem. Phys.* 42(1), pp. 25-33 (January 1965).

Reprints, technical reports, other minor items

M. Lesk, "New Access and View of Chemical Information," Abstracts of Papers of the American Chemical Society 208, pp. 22-COMP (August 21, 1994).

M. E. Lesk, The library of the future is not the computer centre of the past. pp. 1-15, British

Library R&D Report (1993).

Michael Lesk, "Image formats for preservation and access." *Microform Review* 21(1), pp. 17-24 (1992). Previously a report of the Commission on Preservation and Access.

D. J. Pullinger, B. Shackel, M. Lesk, and S. E. Robertson, "BLEND-7: other studies and user commodities." *Research Paper* 81, p. 33, British Library (1991).

M. E. Lesk, "Electronic Journals: When?" *Optics and Photonics News* 2(12), p. 61,81 (Dec. 1991).

M. Lesk, "AI systems for chemical information retrieval - promise and performance," *Abstracts of Papers of the American Chemical Society* 201, pp. 1-CINF (April 1991).

J. C. Gray, R. Hayes, M. Lesk, and S. E. Robertson, "Information UK 2000. Additional contributions." *BLRD Report* 6023, p. 65, British Library (1990).

M. Lesk, "The shorter the better (technical documentation)," *June* 1985 11(2), pp. 11-16.

D. M. Ritchie, S. C. Johnson, M. E. Lesk, and B. W. Kernighan, "The C programming language" in *Programming languages: A grand tour*, pp. 364-85, Computer Science Press (1983).

B. W. Kernighan and M. E. Lesk, "UNIX document preparation" in *Document preparation systems. A collection of survey articles*, ed. J. Nievergelt et al., pp. 1-20, North-Holland (1982).

D. M. Ritchie, S. C. Johnson, M. E. Lesk, and B. W. Kernighan, "The C Programming Language," *Western Electric Engineer* 25(1), pp. 14-27 (1981).

D. Williamson, R. Williamson, and M. E. Lesk, "The Cornell Implementation of the Smart System," *ISR-16 Information Storage and Retrieval*, pp. I-1 to I-62, Cornell University (September 1969).

M. E. Lesk, "Design of a Revised Online Retrieval Information System," *ISR-14 Information Storage and Retrieval*, pp. I-1 to I-58, Cornell University (October 1968).

G. A. Salton and M. E. Lesk, "Relevance Assessments and Retrieval System Evaluation," *ISR-1 Information Storage and Retrieval*, pp. III-1 to III-38, Cornell University (October 1968).

M. E. Lesk and G. A. Salton, "Interactive Search and Retrieval Methods Using Automatic Information Displays," *ISR-14 Information Storage and Retrieval*, pp. IX-1 to IX-36, Cornell University (October 1968).

M. E. Lesk, "Word/Word Associations in Document Retrieval Systems," *ISR-13 Information Storage and Retrieval*, pp. IX-1 to IX-52, Cornell University (December 1967).

M. E. Lesk, "SIG: The Significance Programs for the Testing of Evaluation Output," *ISR-12 Information Storage and Retrieval*, pp. II-1 to II-22, Cornell University (June 1967).

G. A. Salton and M. E. Lesk, "Computer Evaluation of Indexing and Text Processing," *ISR-12*

Information Storage and Retrieval, pp. III-1 to III-67, Cornell University (June 1967).

M. E. Lesk, "The Smart Automatic Text Processing and Document Retrieval System," ISR-9 Information Storage and Retrieval, pp. II-1 to II-56, Harvard Computation Laboratory (August 1965).

M. E. Lesk, "Specification Input to the Revised Smart System," ISR-9 Information Storage and Retrieval, pp. IV-1 to IV-9, Harvard Computation Laboratory (August 1965).

A. Priver and M. E. Lesk, "A Smart Clustering Program," ISR-9 Information Storage and Retrieval, pp. VIII-1 to VIII-14, Harvard Computation Laboratory (August 1965).

T. Evslin, G. Hochgesang, and M. E. Lesk, "Vector Merging and Vector Correlations," ISR-9 Information Storage and Retrieval, pp. XIII-1 to XIII-26, Harvard Computation Laboratory (August 1965).

M. E. Lesk, "Evaluation of Retrieval Results in the Extended Smart System," ISR-9 Information Storage and Retrieval, pp. XVII-1 to XVII-15, Harvard Computation Laboratory (August 1965).

M. E. Lesk, "A Program to Evaluate the Iterative Search Process," ISR-9 Information Storage and Retrieval, pp. XVIII-1 to XVIII-13, Harvard Computation Laboratory (August 1965).

M. E. Lesk, "The Smart Program - General Program Description," ISR-7 Information Storage and Retrieval, pp. II-1 to II-35, Harvard Computation Laboratory (June 1964).

M. E. Lesk and Tom Evslin, "Statistical Phrase Processing," ISR-7 Information Storage and Retrieval, pp. IX-1 to IX-10, Harvard Computation Laboratory (June 1964).

M. E. Lesk, "Procedures for Statistical Processing and Request Alteration," ISR-7 Information Storage and Retrieval, pp. X-1 to X-24, Harvard Computation Laboratory (June 1964).

M. E. Lesk and Tom Evslin, "Housekeeping Routines," ISR-7 Information Storage and Retrieval, pp. XI-1 to XI-13, Harvard Computation Laboratory (June 1964).

M. E. Lesk, "An Interpretive Program for Correlating Logical matrices," ISR-3, Information Storage and Retrieval, pp. IV-1 to IV-17, Harvard Computation Laboratory (April 1963).

M. E. Lesk, "A Comparison of Citation Data for Open and Closed Document Collections," ISR-3, Information Storage and Retrieval, pp. V-1 to V-10, Harvard Computation Laboratory (April 1963).

M. E. Lesk, "Attempts to Cluster Documents with Citation Data," ISR-3, Information Storage and Retrieval, pp. VI-1 to VI-6, Harvard Computation Laboratory (April 1963).

M. E. Lesk and E. F. Storm, "A Computer Experiment for Sentence Extraction," ISR-2, Information Storage and Retrieval, pp. I-1 to I-34, Harvard Computation Laboratory (September 1962).

There are also additional internal Bell Laboratories memoranda (1969-1983), which are not

accessible to outsiders, and the Unix manual sections on Lex, the -ms macros, and tbl.

Two items only online which have attracted as much attention as anything on paper are:

- A. How Much Information Is There in the World
<http://lesk.com/mlesk/ksg97/ksg.html>;
- B. Projections for Making Money on the Web <http://lesk.com/mlesk/iih/iih.html>

Awards

1. National Academy of Engineering, elected 2005.
2. Usenix Lifetime Achievement Award "The Flame" for UUCP; presented at the Usenix Conference, San Francisco, January 1994;
3. Usenix card deck, 7 of Clubs; part of a selection of 52 "founders" of Unix for recognition by Usenix;
4. ACM Fellow, named 1995.
5. Distinguished MTS award. Bell Laboratories, 1983.

Organizational

Chair, National Academies Board on Research Data and Information (2008-2010).

Technical Assessment Advisory Committee, Commission on Preservation and Access;

Chair, ACM SIGIR (Special Interest Group on Information Retrieval), 1983-1985;

Chair, ACM SIGLASH (Special Interest Group on Language Analysis and Studies in the Humanities), 1973-1975;

Harvard University Library visiting committee;

OCLC Research Advisory Committee;

NSF Information Science Advisory Panel;

CMU Academic Services Advisory Board;

Chemical Abstracts Service research advisory committee;

Editor, Information systems book series, MIT Press (1983-1990);

Columbia University advisory board for their CAT (Centers for Advanced Technology) programs.

Program committees: 1986 SIGIR conference, 1988 OED Conference, 1990 OED Conference, 1995 ADL conference, 1997 Elvira Conference, and others.

Grant reviewer for NSF, NEH, NSERC (Canada), and British Library.

Talks

I have spoken at a great many universities and laboratories, including:

- a. In the US/Canada: University of British Columbia, University of California (Berkeley), University of California (Los Angeles), University of Chicago, Carnegie-Mellon University, Columbia University, Cornell University, Dalhousie University, Harvard University, Johns Hopkins University, University of Illinois, Louisiana State University, University of Maryland, Massachusetts Institute of Technology, University of Michigan, Michigan State

University, University of Nevada Las Vegas, University of North Carolina, University of Pittsburgh, Rice University, Rutgers University, Simmons College, Stanford University, University of Toronto, University of Virginia, Virginia Tech, University of Waterloo. and University of Western Ontario.

Also: ACM SIGCHI, ACM SIGGRAPH, ACM SIGIR, American Library Association, Amdahl, American Chemical Society, Brooklyn Public Library, Coalition for Networked Information, Computing Research Association, Cornell/NSF Engineering Design Workshop, DEC Cambridge Research Lab, Eastern Analytical Symposium, Educational Testing Service, Fermilab, GE, Google, GTE, HP, IBM, Intel, Microsoft, NEC, the Library of Congress, the Los Angeles Preservation Network, NFAIS (National Federation of Abstracting and Indexing Societies), the National Library of Medicine, OCLC, RAND, Thinking Machines, and the Visual History Foundation

In the UK: Universities of: Aston, Bath, City, Edinburgh, Glasgow, Heriot-Watt, Kingston (then a polytechnic), Lancaster, Leeds, London (Birkbeck, LSE, QMC, and UCL), Loughborough, Newcastle, Nottingham, Oxford, Sheffield, Strathclyde, Trent (then a polytechnic), Wales (Aberystwyth), and York. Also the British Library, the British Computer Society, ASLIB, EPSRC, MRC/APU, the Public Record Office (now the National Archive) and Rutherford Laboratories.

Other places:

Australia (1988 and 1995): U. of Melbourne, U. of Sydney, U. of New South Wales, State Library of New South Wales, Australian National University, Canberra; Australian Unix Users' Group (Melbourne).

And: Chile (1994): VLDB conference, Santiago. China (2002): Shanghai Jiaotong University, France (1990, 1999, and 2001): University of Rennes; European Conference on Digital Libraries, Paris, INRIA Rocquencourt. Germany (2007) Technische Universitat Darmstadt. Japan (1995, 1999, 2000): Kanazawa Institute of Technology; Kyoto University; University of Library and Information Science, Tsukuba; JIPDEC, Tokyo. Italy (1986): Workshop in Marina di Grossetto. Switzerland (1996): SIGIR conference, Zurich.

Research Grants

NSF IIS-0441172: HCI (SGER): Finding Happiness: Indexing Emotions in Digital Video, with Aleksandra Sarcevic, \$58,530 for one year, 9/1/04-8/31/05.

NSF IIS-0414557: IDM: A Better Book Browser: How to Read a Million Books, with Nina Wacholder, \$315,000 for 3 years, 10/1/04-9/30/07.

Rutgers Academic Excellence Fund, Mobile Knowledge, with Kaan Ozbay and Christopher Rose; \$125,000 for one year, 7/1/07-6/30/08.

Other activities

1. Chair, National Academies Board on Research Data and Information (2008-2010).
2. Chair, ACM SIGIR (Special Interest Group on Information Retrieval), 1983-1985;

3. Chair, ACM SIGLASH (Special Interest Group on Language Analysis and Studies in the Humanities), 1973-1975.
4. National Academy of Engineering, elected 2005.
5. Usenix Lifetime Achievement Award "The Flame" for UUCP

Former PhD students (total: 4)

Judith Gelernter (on leave), Karen Kukich (retired), Heather Moulaison (University of Missouri), Aleksandra Sarcevic (Drexel University)

Teaching at Rutgers

Digital Libraries (17:610:553)

Digital Library Technology (17:610:558)

Fundamentals of Data Science (17:610:560)

Data Analytics (17:610:561)

Data Curation/Digital Curation (17:610:596 and 598)

Database Design and Management (17:610:557)

Preservation (17:610:556)

Introduction to Information Technologies (17:610:550)

The Internet and the Information Environment (04:547:111)

Data Analytics (04:547:421)