Final Program
Fourth ACM Conference on Digital Libraries
(DL '99)
August 11-14, 1999

Sponsored by ACM SIGIR and ACM SIGWEB
With additional support from the Coalition for Networked Information and Alta Vista

Radisson Hotel Berkeley Marina
200 Marina Boulevard
Berkeley, California 93710 USA

Conference Web site: http://fox.cs.vt.edu/DL99/

General Chair: Neil C. Rowe, U.S. Naval Postgraduate School (rowe@cs.nps.navy.mil)
Program Chair: Edward A. Fox, Virginia Tech (fox@vt.edu)
Publicity Chair: James C. French, University of Virginia (french@virginia.edu)
Tutorials Chair: Gene Golovchinksy, Xerox FX Palo Alto Lab (gene@pal.xerox.com)
Workshops Chair: Robert B. Allen, University of Maryland (rba@glue.umd.edu)
Posters/Exhibits Chair: Jonathan Furner, University of California, Los Angeles (jfurner@ucla.edu)
Computer Networks Chair: Brandon Muramatsu, University of California, Berkeley (mura@needs.org)
Treasurer: Michael Freeston, University of California, Santa Barbara (freeston@alexandria.ucsb.edu)

Schedule

Wednesday, August 11, 1999: Tutorials

Registration 8AM-7PM -- *Ballroom Foyer*

Morning Tutorials (8:30-12AM):

T1: "Practical Digital Libraries Overview (Part 1)", Ian Witten (University of Waikato) – *Amador Room, 2nd Floor*

T3: "XML, RDF, and Metadata for the Web", Neel Sundaresan (IBM Almaden Research Center, San Jose) -- *Angel Room, 1st Floor*

12-1:30: Lunch (on your own)

Afternoon Tutorials (1:30-5PM):

T4: "Practical Digital Libraries Overview (Part 2)", Edward Fox (Virginia Tech) -- *Amador Room, 2nd Floor*

T5: "Thesauri for Knowledge-Based Assistance in Searching Digital Libraries", Dagobert Soergel (University of Maryland)   -- *Angel Room, 1st Floor*

T6: "Searching from Multiple Text Sources in the Internet", Clement Yu (University of Illinois at Chicago) and Weiyi Meng (State University of New York at Binghamton – *Treasure Room, 1st Floor*

5-7PM Opening Reception – *Belvedere Room, 1st Floor* (receptions may be moved outdoors to patio opposite if weather is good)

Thursday, August 12, 1999: General Sessions with Paper Presentations – *Angel / Belvedere Ballroom, 1st Floor*

Registration 8AM-5PM -- *Ballroom Foyer*

9-10:10 Session 1, Chair: Neil Rowe
- Welcome

- Keynote Address: David Levy (Xerox Palo Alto Research Center), "Digital Libraries and the Problem of Purpose"

10:10-10:30 Break – *Ballroom Foyer*

10:30-12:00 Session 2 – Testbeds, Chair: Henry Gladney

P1: "The Computing Research Repository: Promoting the Rapid Dissemination and Archiving of Computer Science Research", Joseph Y. Halpern and Carl Lagoze (Cornell University)

P2: "VARIATIONS: A Digital Music Library System at Indiana University", Jon W. Dunn and Constance A. Mayer (Indiana University)

P3: "A Digital Library for Authors: Recent Progress of the Networked Digital Library of Theses and Dissertations", Constantinos Phanouriou, Neill A. Kipp, Ohm Sornil, Paul Mather, and Edward A. Fox (Virginia Tech)

P4: "A Prototype Implementation of Archival Intermemory", Yuan Chen (NEC Research Institute and Georgia Institute of Technology), Jan Edler (NEC Research Institute), Andrew Goldberg (InterTrust Corporation), Allan Gottlieb (NEC Research Institute and New York University), Sumeet Sobti (University of Washington), and Peter Yianilos (NEC Research Institute)

12:00-1:30 Lunch (on your own)

1:30-3 Parallel Session 3a - IR / Multimedia, Chair: Edie Rasmussen – *Angel / Belvedere Ballroom, 1ˢᵗ Floor*

P5: "Semantic Indexing for a Complete Subject Discipline", Yi-Ming Chung, Qin He, Kevin Powell, and Bruce Schatz (University of Illinois, Urbana-Champaign)

P6: "Scalable Collection Summarization and Selection", R. Dolin, D. Agrawal, and A. El Abbadi (University of California, Santa Barbara)

P7: "Vocal Access to a Newspaper Archive: Design Issues and Preliminary Investigation", Fabio Crestani (International Computer Science Institute, Berkeley, California)

P8: "Multimedia Description Framework (MDF) for Content Description of Audio/Video Documents", Michael J. Hu and Ye Jian (Nanyang Technological University)

1:30-3 Parallel Session 3b - User / Social Issues, Chair: Cliff McKnight – *Sierra Nevada Room, 2nd Floor*

P9: "Introducing a Digital Library Reading Appliance into a Reading Group", Catherine C. Marshall, Morgan N. Price, Gene Golovchinsky, and Bill N. Schilit (FX Palo Alto Laboratory)

P10: "Multimodal Surrogates for Video Browsing", Wei Ding (University of Maryland, College Park), Gary Marchionini (University of North Carolina, Chapel Hill) and Dagobert Soergel (University of Maryland, College Park)

P11: "Making Digital Libraries Go: Comparing Use Across Genres", Ann Peterson Bishop (University of Illinois, Urbana-Champaign)

3-3:30 Break – *Ballroom Foyer*

3:30-5 Session 4, Chair: Sugimoto Shigeo – *Angel / Belvedere Ballroom, 1ˢᵗ Floor*

Panel 1: "Visions for a Digital Library for Science, Mathematics, Engineering, and Technology Education (SMETE)" Chair: Alice M. Agogino (University of California, Berkeley)
Panelists: William Y. Arms, Edward A. Fox, Frank Wattenberg, and Flora McMartin

Thursday evening, August 12, 7PM-10PM: Reception with posters and demonstrations – *Islands Ballroom, 1ˢᵗ Floor*

Poster papers

Abbadeni, Noureddine, D. Ziou, and S. Wang, "Image Classification and Retrieval on the World Wide Web"

Ardö, Anders, and Traugott Koch, "Creation and Automatic Classification of a Robot-Generated Subject Index"

Besser, Howard, "The Making of America II: Structural and Administrative Metadata Standards for Distributed Repositories"

Blake, Miriam E., and Herbert Van de Sompel, "Just-in-Case Linking vs. Just-in-Time Linking: The Library Without Walls Experience"

Buchanan, George, Gil Marsden, and Harold Thimbleby, "Dynamic Metadata for Monitoring Digital Library Management"

Dempsey, Bert J., Micah Beck, and Terry Moore, "Internet2 Distributed Storage Infrastructure (I2-DSI) Project: Improving Global Access to Digital Libraries"

Dempsey, Bert J., Barbara M. Wildemuth, and Gary Geisler, "Use of an Expanding Directory Interface for WWW Legal Resources"

Fernández, Camino, Paloma Diaz, Ignacio Aedo, and Vicente Matellán, "WAY-Z39.50: Adaptive Access to Library Catalogues"

Hand, Victoria, Jeremy Roschelle, and Roy Pea, "Dimensions of Quality Management Systems in Self-Improving Communities"

Hartley, Roger T., and Kathleen Crumpton, "Quality of OCR for Degraded Text Images"

Kovacs, László, Andrés Micsik, and Balázs Pataki, "AQUA: Query Visualization for the NCSTRL Digital Library"

Lawrence, Steve, Kurt Bollacker, and C. Lee Giles, "Distributed Error Correction"

Liu, King-Lup, Clement Yu, Weiyi Meng, and N. Rishe, "Discovery of Similarity Computations on the Internet"

Morishima, Atsuyuki, and Hiroyuki Kitagawa, "InfoWeaver: Dynamic and Tailor-Made Integration of Structured Documents, Web, and Databases"

Ockerbloom, John Mark, "Managing Diverse Data Formats in Digital Libraries"

Quiroga, Luz Marina, and Javed Mostafa, "Empirical Evaluation of Explicit versus Implicit Acquisition of User Profiles in Information Filtering Systems"

Rauber, Andreas, and Dieter Merkl, "SOMLib: A Digital Library System Based on Neural Networks"

Rocha, Luis Mateus, "TalkMine and the Adaptive Recommendation Project"

Sánchez, J. Alfredo, César A. Flores, and John L. Schnase, "Mutant: Agents as Guides for Multiple Taxonomies in the Floristic Digital Library"

Sharretts, Cristina W., and James C. French, "Electronic Theses and Dissertations at the University of Virginia Library"

Spertus, Ellen, and Lynn Andrea Stein, "A Relational Database Interface to the World-Wide Web"

Theng, Yin Leng, "'Lostness' and Digital Libraries"

Tolle, Kristin M., Gondy Leroy, Robin R. Sewell, Ye Fang, Dmitri Roussinov, Zoe Stavri, and Hsinchun Chen, "Medical Information Access for the New Millenium: UMLS-Enhanced Semantic Parsing and Personalized Medical Agent"

Witten, Ian H., Gordon W. Paynter, Eibe Frank, Carl Gutwin, and Craig G. Nevill-Manning, "KEA: Practical Automatic Keyphrase Extraction"

Wolfe, Shawn R., Stephen D. Wragg, and James R. Chen, "Managing Personal and Group Collections of Information"

Yang, Christopher C., Hsinchun Chen, and K. K. Hong, "Visualization Tools for Self-Organizing Maps: Fisheye View and Fractal View"

Zhu, Bin, Marshall Ramsey, Hsinchun Chen, Rosie V. Hauck, and Tobun D. Ng, "Create a Large-Scale Digital Library for Geo-Referenced Information"

Demonstrations – *Yerba Buena part of Ballroom (east side)*

Agogino, Alice, and Brandon Muramatsu, "NEEDS: The National Engineering Education Delivery System"

Hodge, Gail, Blaine Baker, and John Salerno, "The Interagency Digital Library for Science and Engineering: A Federated Digital Library Pilot for the US Government Scientist"

Baru, Chaitanya, Vincent Chu, Amarnath Gupta, Bertram Ludaescher, Richard Marciano, Yannis Papakonstantinou, and Pavel Velikhov, "XML-Based Information Mediation for Digital Libraries"

Chen, Yuan, Jan Edler, Andrew Goldberg, Allan Gottlieb, Sumeet Sobti, and Peter Yianilos, "A Prototype Implementation of Archival Intermemory"

Grissom, Scott, Edward A. Fox, Deborah Knox, and Rachelle Heller, "Computer Science Teaching Center: A Digital Library of Peer-Reviewed Teaching Resources"

McGrath, Robert E., Joe Futrelle, Ray Plante, and Damien Guillaume, "Digital Library Technology for Locating and Accessing Scientific Data"

Maly, Kurt, M. Zubair, S. Shen, S. Zeil, M. L. Nelson, M. Kholief, M. I. Ameerally, X. Liu and Z. Zhao, "The Use of Digital Libraries in Undergraduate Learning in Science"

Phanouriou, Constantinos, Neill A. Kipp, Ohm Sornil, Paul Mather, and Edward A. Fox, "A Digital Library for Authors: Recent Progress of the Networked Digital Library of Theses and Dissertations"

Friday, August 13, 1999: General Sessions with Paper Presentations – *Angel / Belvedere Ballroom, 1st Floor*

Registration 8AM-5PM -- *Ballroom Foyer*

8:30-10:00 Session 5, Links / Citations and User Interfaces, Chair: Nick Belkin

P12: "A System For Automatic Personalized Tracking of Scientific Literature on the Web", Kurt D. Bollacker, Steve Lawrence, and C. Lee Giles (NEC Research Institute)

P13: "Topic-Based Browsing Within a Digital Library Using Keyphrases", Steve Jones and Gordon Paynter (University of Waikato)

P14: "A Scrollbar-based Visualization for Document Navigation", Donald Byrd (University of Massachusetts, Amherst)

P15: "Does Zooming Improve Image Browsing?", Tammara T.A. Combs and Benjamin B. Bederson (University of Maryland, College Park)

10:00-10:30 Break – *Ballroom Foyer*

10:30-12:00 Session 6 – Multimedia, Chair: Robert Allen

P16: "Learnable Visual Keywords for Image Classification", Joo-Hwee Lim (Kent Ridge Digital Labs)

P17: "A New Ranking Principle for Multimedia Information Retrieval", Martin Wechsler and Peter Schäuble (Eurospider Information Technology AG, Zürich)

P18: "Musical Information Retrieval using Melodic Surface", Massimo Melucci and Nicola Orio (Padua University, Italy)

P19: "Towards a Digital Library of Popular Music", David Bainbridge (University of Waikato), Craig G. Nevill-Manning (Rutgers University), Ian H. Witten,

Lloyd A. Smith, and Rodger J. McNab (University of Waikato)

12:00-1:30 Lunch (on your own); also meeting of Digital Libraries Steering Committee, Boardroom 1102

1:30-3:00 Session 7 - Multiple Collections/Sources, Chair: José Luis Borbinha

P20: "Using Query Mediators for Distributed Searching in Federated Digital Libraries", Naomi Dushay (Cornell University), James C. French (University of Virginia), and Carl Lagoze (Cornell University)

P21: "A Patent Search and Classification System", Leah S. Larkey (University of Massachusetts, Amherst)

P22: "Digital Library Technology for Locating and Accessing Scientific Data", Robert E. McGrath, Joe Futrelle, Ray Plante (NCSA, University of Illinois, Urbana-Champaign) and Damien Guillaume (Université Louis-Pasteur)

P23: "User Preferences When Searching Individual and Integrated Full-text Databases", Soyeon Park (Rutgers University)

3:00-3:30 Break – *Ballroom Foyer*

3:30-5:00 Session 8, Chair: Edward Fox
- Vannevar Bush Award for Best Paper, presented by Robert Akscyn
- Panel 2: "Digital Library Futures"; Chair: Barry Leiner (CNRI)

5-7PM Final Reception – *Sierra Nevada Room, 2nd Floor*

Saturday, August 14, 1999: Full-Day Workshops

Registration 8-11AM -- *Ballroom Foyer*

W1: "Networked Knowledge Organization Systems", Linda L. Hill (University of California, Santa Barbara), Gail Hodge (Information International Associates), and Joseph Busch (Datafusion) – *Diablo Room, 2nd Floor*

W2: "Organizing Web Space", Yoshinori Hara (NEC USA), Katsumi Tanaka (Kobe University), and Robert Wilensky (University of California, Berkeley) – *San Francisco Room, 4th Floor, Conference Center (northeast corner of complex)*

W3: "Multilingual Information Discovery and Access", Douglas W. Oard (University of Maryland) and Carol Peters (IEI-CNR, Pisa), joint with SIGIR'99 – *Sierra Nevada Room north side, 2nd Floor*

W4: "D-Lib Forum Working Group on Metrics for Digital Libraries", Barry Leiner (Corporation for National Research Initiatives) – *Los Angeles Room, 4th Floor, Conference Center (northeast corner of complex)*

W5: "Second Summit on International Cooperation in Digital Libraries", Robert Akscyn (Knowledge Systems Inc.) and Ian Witten (University of Waikato) – *San Diego Room, 4th Floor, Conference Center (northeast corner of complex)*

Publisher/Commercial Exhibits Throughout the Conference – *Yerba Buena Room, 1st Floor*

Kluwer Academic

MIT Press

Morgan Kaufmann

Nine Technologies

Scientific Book Displays

Workstations with Internet access will also be available in the Yerba Buena Room; they are for email and informal short demonstrations.