Advance Program
Fourth ACM Conference on Digital Libraries (DL '99)
Sponsored by ACM SIGIR and ACM SIGWEB
August 11-14, 1999

Radisson Hotel Berkeley Marina
200 Marina Boulevard
Berkeley, California 93710 USA
1-800-333-333 or 1-800-243-0625

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

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Treasurer: Michael Freeston, University of California, Santa Barbara (freeston@alexandria.ucsb.edu)

Schedule

Wednesday, August 11, 1999: Tutorials

Registration 8-8:30

Morning Tutorials (8:30-12):

T1: "Practical Digital Libraries Overview (Part 1)", Ian Witten (University of Waikato), ihw@rata.cs.waikato.ac.nz

This introductory tutorial surveys both the major issues surrounding digital libraries and the practical technologies available today to build such libraries. We will relate the issues to an existing, operational, comprehensive, economical digital library system, the New Zealand Digital Library. Special attention will be paid to user interfaces for searching, as supported by a full-text search engine, and for browsing, as supported by explicitly provided metadata, handling of keyphrases, and the results of text mining.

T2: "Multilingual Information Access", Judith Klavans (Columbia University) and Peter Schauble (Eurospider Information Technology AG), schauble@eurospider.ch

With emerging globalization, information access across language boundaries is becoming critical. This tutorial introduces the main approaches to multilingual information access, and presents the state of the art in detail with special attention to cross-language information retrieval. We will also cover areas of information presentation, including multilingual multidocument summarization, and will discuss the acquisition and usefulness of various multilingual resources. The tutorial will examine these issues from two points of view: information retrieval and computational linguistics. Prototype and commercial systems and evaluation methodologies will be discussed.

T3: "XML, RDF, and Metadata for the Web", Neel Sundaresan (IBM Almaden Research Center, San Jose), neel@almaden.ibm.com

Metadata is important to the World Wide Web for describing and processing web resources. The Resource Description Framework (RDF) describes metadata. In this tutorial we will introduce RDF and its schemata based upon the latest W3C draft documents. We will discuss how RDF descriptions can be produced, processed, and queried with a programming language (e.g. Java) and a markup language (e.g. XML). We will study the relationship

between XML and RDF, and will look at some Web applications and metadata structures in which RDF is used. Some working knowledge of XML and Java is preferred.

12-1:30: Lunch and Tutorial Registration

Afternoon Tutorials (1:30-4):

T4: "Practical Digital Libraries Overview (Part 2)", Edward Fox (Virginia Tech), fox@vt.edu

A continuation of Tutorial 1, this tutorial will ground attendees in the history, topics, concepts, projects, systems, resources, and references related to digital libraries. It should prepare them to participate in educational, research, and development efforts in the field. It also should provide a theoretical basis and conceptual framework for further investigation and study. The tutorial will start with an overview of definitions, foundations, scenarios and perspectives; the main section will cover a variety of issues, including search, retrieval and resource discovery, multimedia, metadata, SGML and XML, agents, commerce, and intellectual property rights, among others.

T5: "Thesauri for Knowledge-Based Assistance in Searching Digital Libraries", Dagobert Soergel (University of Maryland), ds52@umail.umd.edu

This tutorial will discuss principles for the design of an intelligent interface that guides users to better searches by exploiting – transparently or explicitly -- the rich information available in ontologies and thesauri. It will show how a well-structured thesaurus can help search-topic clarification and finding of good search terms, touching on cross-database and cross-language searching. It will elucidate thesaurus structure: Concept-term relationships for vocabulary control and synonym expansion, conceptual structures for topic clarification, and hierarchic query expansion. Selected thesauri will be presented as examples.

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), meng@panda.cs.binghamton.edu

Many information search services or search engines have been installed in the Internet in recent years. As the number of search engines increases, automatic search brokers (metasearch engines) are increasingly needed to provide search coverage unavailable to a single search engine. This tutorial will provide an overview of proposed methods for building metasearch engines. It will review necessary background information on searching and indexing techniques, and will cover database selection, document selection and result merging.

5-7 Opening Reception

Thursday, August 12, 1999: General Sessions

8-9 Registration

9-10:10 Session 1, Chair: Neil Rowe
- Welcome
- Keynote - David Levy, Xerox Palo Alto Research Center

10:10-10:30 Break

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

1:30-3 Session 3a - IR / Multimedia, Chair: Edie Rasmussen

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

P6: "Summarization and Selection of Information Sources Using Automated Classification", 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 (University of California, Berkeley)

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

1:30-3 Session 3b - User / Social Issues, Chair: Cliff McKnight

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 Bishop (University of Illinois, Urbana-Champaign)

3-3:30 Break

3:30-5 Session 4, Chair: Sugimoto Shigeo
Panel 1: "Visions for a Digital Library for Science, Mathematics, Engineering Technology Education (SMETE)" Chair: Alice Agogino (University of California, Berkeley)
Panelists: William Y. Arms, Edward A. Fox, Frank Wattenberg, and Flora McMartin

7-10 Reception with posters and demonstrations

Friday, August 13, 1999: General Sessions

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

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 Schauble (Eurospider Information Technology AG)

P18: "Musical Information Retrieval using Melodic Surface", M. Melucci and N. Orio (University of Padova)

P19: "Towards a Digital Library of Popular Music", David Bainbridge, Craig G. Nevill-Manning, Ian H. Witten, Lloyd A. Smith, and Rodger J. McNab (University of Waikato and Rutgers University)

12:00-1:30 Lunch

1:30-3:00 Session 7 - Multiple Collections/Sources, Chair: Jose 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 (Universite Louis-Pasteur)

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

3:00-3:30 Break

3:30-5:00 Session 8, Chair: Edward Fox

- Bush Award Presentation for Best Paper, by Robert Akscyn
- Panel 2: "Digital Library Futures"; Chair: Barry Leiner (CNRI)

5:00-7:00 Final Reception

Saturday, August 14, 1999: Full-Day Workshops

W1: "Networked Knowledge Organization Systems", Linda L. Hill (University of California, Santa Barbara) and Gail Hodge (Information Intl. Assoc.), lhill@alexandria.ucsb.edu; see http://www.alexandria.ucsb.edu/~lhill/nhos/DL99workshop.html

W2: "Organizing Web Space", Robert Wilensky (University of California, Berkeley), Katsumi Tanaka (Kobe University), and Yoshinori Hara (NEC USA),hara@ccrl.sj.nec.com;see http://www.ccrl.neclab.com/dl99ww/

W3: "Multilingual Information Discovery and Access", Douglas W. Oard (University of Maryland) and Carol Peters (IEI-CNR, Pisa), joint with SIGIR'99, oard@glue.umd.edu; see http://www.clis.umd.edu/conferences/midas.html

W4: "D-Lib Forum Working Group on Metrics for Digital Libraries", Barry Leiner (CNRI), bleiner@cnri.reston.va.us; see http://www.dlib.org/metrics

W5: "Second Summit on International Cooperation in Digital Libraries", Robert Akscyn (KSI, Inc.) and Ian Witten (University of Waikato), rma@ks.com; see http://www.ks.com/idla/

Hotel Registration: All sessions will be held at the Radisson Berkeley Marina. Rooms are $109 for single/double per night plus 12% city tax. Call 1-800-333-3333 or 1-800-243-0625 for reservations.