

Table of Contents

Research Papers

Optical Recognition

Automatic Feature Extraction and Recognition for Digital Access of Books of the Renaissance	1
<i>F. Muge, I. Granado, M. Mengucci, P. Pina, V. Ramos, N. Sirakov, J. R. Caldas Pinto, A. Marcolino, Mário Ramalho, P. Vieira, and A. Maia do Amaral</i>	
Content Based Indexing and Retrieval in a Digital Library of Arabic Scripts and Calligraphy	14
<i>Suliman Al-Hawamdeh and Gul N. Khan</i>	

Ancient Music Recovery for Digital Libraries	24
<i>J. Caldas Pinto, P. Vieira, M. Ramalho, M. Mengucci, P. Pina, and F. Muge</i>	

Probabilistic Automaton Model for Fuzzy English-Text Retrieval	35
<i>Manabu Ohta, Atsuhiro Takasu, and Jun Adachi</i>	

Information Retrieval

Associative and Spatial Relationships in Thesaurus-Based Retrieval	45
<i>Harith Alani, Christopher Jones, and Douglas Tudhope</i>	

Experiments on the Use of Feature Selection and Negative Evidence in Automated Text Categorization	59
<i>Luigi Galavotti, Fabrizio Sebastiani, and Maria Simi</i>	

The Benefits of Displaying Additional Internal Document Information on Textual Database Search Result Lists	69
<i>Offer Drori</i>	

Interactive-Time Similarity Search for Large Image Collections Using Parallel VA-Files	83
<i>Roger Weber, Klemens Böhm, and Hans-J. Schek</i>	

Metadata

Dublin Core Metadata for Electronic Journals	93
<i>Ann Apps and Ross MacIntyre</i>	

An Event-Aware Model for Metadata Interoperability	103
<i>Carl Lagoze, Jane Hunter, and Dan Brickley</i>	

QUEST – Querying Specialized Collections on the Web	117
---	-----

Martin Heß, Christian Mönch, and Oswald Drobnik

Personal Data in a Large Digital Library	127
--	-----

José Manuel Barrueco Cruz, Markus J.R. Klink, and Thomas Krichel

Frameworks

Implementing a Reliable Digital Object Archive.....	128
---	-----

Brian Cooper, Arturo Crespo, and Hector Garcia-Molina

Policy-Carrying, Policy-Enforcing Digital Objects	144
---	-----

Sandra Payette and Carl Lagoze

INDIGO – An Approach to Infrastructures for Digital Libraries	158
---	-----

Christian Mönch

Scalable Digital Libraries Based on NCSTRL/Dienst	168
---	-----

Kurt Maly, Mohammad Zubair, Hesham Anan, Dun Tan, and

Yunchuan Zhang

Multimedia

OMNIS/2: A Multimedia Meta System for Existing Digital Libraries	180
--	-----

Günther Specht and Michael G. Bauer

Modeling Archival Repositories for Digital Libraries	190
--	-----

Arturo Crespo and Hector Garcia-Molina

Implementation and Analysis of Several Keyframe-Based Browsing Interfaces to Digital Video	206
---	-----

*Hyowon Lee, Alan F. Smeaton, Catherine Berrut, Noel Murphy,
Seán Marlow, and Noel E. O'Connor*

Functional and Intentional Limitations of Interactivity on Content Indexing Topics: Possible Uses of Automatic Classification and Contents Extraction Systems, in Order to Create Digital Libraries Databases	219
---	-----

Florent Pasquier

Users

Interaction Profiling in Digital Libraries through Learning Tools	229
---	-----

G. Semeraro, F. Esposito, N. Fanizzi, and S. Ferilli

DEBORA: Developing an Interface to Support Collaboration in a Digital Library	239
--	-----

*David M. Nichols, Duncan Pemberton, Salah Dalhoumi, Omar Larouk,
Claire Belisle, and Michael B. Twidale*

Children as Design Partners and Testers for a Children's Digital Library ..	249
<i>Yin Leng Theng, Norliza Mohd Nasir, Harold Thimbleby, George Buchanan, Matt Jones, David Bainbridge, and Noel Cassidy</i>	
Evaluating a User-Model Based Personalisation Architecture for Digital News Services	259
<i>Alberto Díaz Esteban, Pablo Gervás Gómez-Navarro, and Antonio García Jiménez</i>	

Papers Complementing Invited Talks

Aging Links	269
<i>Claudia Niederée, Ulrike Steffens, Joachim W. Schmidt, and Florian Matthes</i>	
Core Elements of Digital Gazetteers: Placenames, Categories, and Footprints	280
<i>Linda L. Hill</i>	
The Application of an Event-Aware Metadata Model to an Online Oral History Archive	291
<i>Jane Hunter and Darren James</i>	
From the Visual Book to the WEB Book: The Importance of Good Design	305
<i>M. Landoni, R. Wilson, and F. Gibb</i>	

Short-Papers

Multimedia

Topic Detection in Read Documents	315
<i>Rui Amaral and Isabel Trancoso</i>	
Map Segmentation by Colour Cube Genetic K-Mean Clustering	319
<i>Victorino Ramos and Fernando Muge</i>	
Spoken Query Processing for Information Access in Digital Libraries	324
<i>Fabio Crestani</i>	
A Metadata Model for Historical Documentary Films	328
<i>Giuseppe Amato, Donatella Castelli, and Serena Pisani</i>	
Image Description and Retrieval Using MPEG-7 Shape Descriptors	332
<i>Carla Zibreira and Fernando Pereira</i>	
A Large Scale Component-Based Multi-media Digital Library System - Development Experience and User Evaluation	336
<i>Hiroshi Mukaiyama</i>	

Users in Digital Libraries

Personalised Delivery of News Articles from Multiple Sources	340
<i>Gareth J. F. Jones, David J. Quested, and Katherine E. Thomson</i>	
Building a Digital Library of Web News	344
<i>Nuno Maria and Mário J. Silva</i>	
Automatically Detecting and Organizing Documents into Topic Hierarchies: A Neural-Network Based Approach to Bookshelf Creation and Arrangement	348
<i>Andreas Rauber, Michael Dittenbach, and Dieter Merkl</i>	
Daffodil: Distributed Agents for User-Friendly Access of Digital Libraries .	352
<i>Norbert Gövert, Norbert Fuhr, and Claus-Peter Klas</i>	
An Adaptive Systems Approach to the Implementation and Evaluation of Digital Library Recommendation Systems	356
<i>Johan Bollen and Luis M. Rocha</i>	
Are End-Users Satisfied by Using Digital Libraries?	360
<i>Mounir A. Khalil</i>	

Information Retrieval

CAP7: Searching and Browsing in Distributed Document Collections	364
<i>Norbert Fuhr, Kai Großjohann, and Stefan Kokkelink</i>	
Representing Context-Dependent Information Using <i>Multidimensional XML</i>	368
<i>Yannis Stavrakas, Manolis Gergatsoulis, and Theodoros Mitakos</i>	
AQUA (Advanced Query User Interface Architecture)	372
<i>László Kovács, András Micsik, Balázs Pataki, and István Zsámboki</i>	
Fusion of Overlapped Result Sets	376
<i>Joaquim Macedo, António Costa, and Vasco Freitas</i>	
ActiveXML: Compound Documents for Integration of Heterogeneous Data Sources	380
<i>João P. Campos and Mário J. Silva</i>	

newsWORKS©, the Complete Solution for Digital Press Clippings and Press Reviews: Capture of Information in an Intelligent Way	385
<i>Begoña Aguilera Caballero and Richard Lehner</i>	

Internet Cataloguing

Effects of Cognitive and Problem Solving Style on Internet Search Tool ...	389
<i>Tek Yong Lim and Enya Kong Tang</i>	

Follow the Fox to Renardus: An Academic Subject Gateway Service for Europe	395
<i>Lesly Huxley</i>	
CORC: Helping Libraries Take a Leading Role in the Digital Age	399
<i>Kay Covert</i>	
Automatic Web Rating: Filtering Obscene Content on the Web	403
<i>K. V. Chandrinos, Ion Androutsopoulos, G. Paliouras, and C. D. Spyropoulos</i>	
The Bibliographic Management of Web Documents in Digital and Hybrid Libraries	407
<i>Wallace C. Koehler, Jr.</i>	

Technical Collections

The Economic Impact of an Electronic Journal Collection on an Academic Library	413
<i>Carol Hansen Montgomery and John A. Bielec</i>	
A Comparative Transaction Log Analysis of Two Computing Collections ..	418
<i>Malika Mahoui and Sally Jo Cunningham</i>	
ERAM - Digitisation of Classical Mathematical Publications	424
<i>Hans Becker and Bernd Wegner</i>	
The Electronic Library in EMIS - European Mathematical Information Service	428
<i>Bernd Wegner</i>	
Model for an Electronic Access to the Algerian Scientific Literature: Short Description	432
<i>Bakelli Yahia</i>	

Cases 1

A Digital Library of Native American Images	437
<i>Elaine Peterson</i>	
China Digital Library Initiative and Development	441
<i>Michael B. Huang and Guohui Li</i>	
Appropriation of Legal Information: Evaluation of Data Bases for Researchers	445
<i>Céline Hembise</i>	

Publishing 30 Years of the Legislation of Brazil's São Paulo State in CD-ROM and Internet	449
<i>Paulo Leme, Dilson da Costa, Ricardo Baccarelli, Maurício Barbosa, Andréa Bolanho, Ana Reis, Rose Bicudo, Eduardo Barbosa, Márcio Nunes, Innocêncio Pereira Filho, Guilherme Plonski, and Sérgio Kobayashi</i>	

Electronic Dissemination of Statistical Information at Local Level: A Cooperative Project between a University Library and Other Public Institutions	452
<i>Eugenio Pelizzari</i>	

Cases 2

Building Archaeological Photograph Library	456
<i>Rei S. Atarashi, Masakazu Imai, Hideki Sunahara, Kunihiro Chihara, and Tadashi Katata</i>	

EULER - A DC-Based Integrated Access to Library Catalogues and Other Mathematics Information in the Web	461
<i>Bernd Wegner</i>	

Decomate: Unified Access to Globally Distributed Libraries	467
<i>Thomas Place and Jeroen Hoppenbrouwers</i>	

MADILIS, the Microsoft Access-Based Digital Library System	471
<i>Scott Herrington and Philip Konomos</i>	

Leveraging Electronic Content: Electronic Linking Initiatives at Arizona State University	475
<i>Dennis Brunning</i>	

Cases 3

Asian Film Connection: Developing a Scholarly Multilingual Digital Library - A Case Study	481
<i>Marianne Afifi</i>	

Conceptual Model of Children's Electronic Textbook	485
<i>Norshuhada Shiratuddin and Monica Landoni</i>	

An Information Food Chain for Advanced Applications on the WWW	490
<i>Stefan Decker, Jan Jannink, Sergey Melnik, Prasenjit Mitra, Steffen Staab, Rudi Studer, and Gio Wiederhold</i>	

An Architecture for a Multi Criteria Exploration of a Documents Set	494
<i>Patricia Dzeakou and Jean-Claude Derniame</i>	

An Open Digital Library Ordering System	498
<i>Sarantos Kapidakis and Kostas Zorbadelos</i>	

Special Workshop

Special NKOS Workshop on Networked Knowledge Organization Systems .	502
<i>Martin Doerr, Traugott Koch, Douglas Tudhope, and Repke de Vries</i>	
Implementing Electronic Journals in the Library and Making them	
Available to the End-User: An Integrated Approach	506
<i>Gerrit Alewaeters, Serge Gilen, Paul Nieuwenhuysen, Stefaan Renard,</i>	
<i>and Marc Verpoorten</i>	
Author Index	511



<http://www.springer.com/978-3-540-41023-2>

Research and Advanced Technology for Digital Libraries
4th European Conference, ECDL 2000, Lisbon, Portugal,
September 18-20, 2000 Proceedings

Borbinha, J.; Baker, Th. (Eds.)

2000, XVII, 513 p. 158 illus., 63 illus. in color., Softcover

ISBN: 978-3-540-41023-2