

# Table of Contents

## Digital Library Architectures

Dynamic Digital Library Construction and Configuration . . . . .	1
<i>David Bainbridge, Katherine J. Don, George R. Buchanan, Ian H. Witten, Steve Jones, Matt Jones, and Malcolm I. Barr</i>	
Milos: A Multimedia Content Management System for Digital Library Applications . . . . .	14
<i>Giuseppe Amato, Claudio Gennaro, Fausto Rabitti, and Pasquale Savino</i>	
Designing an Integrated Digital Library Framework to Support Multiple Heterogeneous Collections . . . . .	26
<i>George Pyrounakis, Kostas Saidis, Mara Nikolaidou, and Irene Lourdi</i>	
DSpace: A Year in the Life of an Open Source Digital Repository System . . . . .	38
<i>MacKenzie Smith, Richard Rodgers, Julie Walker, and Robert Tansley</i>	

## Evaluation and Usability

Spatial Ranking Methods for Geographic Information Retrieval (GIR) in Digital Libraries . . . . .	45
<i>Ray R. Larson and Patricia Frontiera</i>	
Evaluation of an Information System in an Information Seeking Process .	57
<i>Lena Blomgren, Helena Vallo, and Katriina Byström</i>	
Fiction Electronic Books: A Usability Study . . . . .	69
<i>Chrysanthi Malama, Monica Landoni, and Ruth Wilson</i>	
Interoperable Digital Library Programmes? We Must Have QA! . . . . .	80
<i>Brian Kelly</i>	

## User Interfaces and Presentation

Next Generation Search Interfaces – Interactive Data Exploration and Hypothesis Formulation . . . . .	86
<i>Jane Hunter, Katya Falkovych, and Suzanne Little</i>	
Ontology Based Interfaces to Access a Library of Virtual Hyperbooks . . .	99
<i>Gilles Falquet, Claire-Lise Mottaz-Jiang, and Jean-Claude Ziswiler</i>	

Document Icons and Page Thumbnails: Issues in Construction  
of Document Thumbnails for Page-Image Digital Libraries ..... 111  
*William C. Janssen*

Citviz: A Visual User Interface to the CITIDEL System ..... 122  
*Nithiwat Kampanya, Rao Shen, Seonho Kim, Chris North,  
and Edward A. Fox*

## **New Approaches to Information Retrieval**

System Support for Name Authority Control Problem  
in Digital Libraries: OpenDBLP Approach ..... 134  
*Yoojin Hong, Byung-Won On, and Dongwon Lee*

NLP Versus IR Approaches to Fuzzy Name Searching  
in Digital Libraries ..... 145  
*Paul Horng-Jyh Wu, Jin-Cheon Na, and Christopher S.G. Khoo*

From Abstract to Virtual Entities: Implementation of Work-Based  
Searching in a Multimedia Digital Library ..... 157  
*Mark Notess, Jenn Riley, and Harriette Hemmasi*

Approaching the Problem of Multi-lingual Information Retrieval  
and Visualization in Greek and Latin and Old Norse Texts ..... 168  
*Jeffrey A. Rydberg-Cox, Lara Vetter, Stefan Ruger, and Daniel Heesch*

## **Interoperability**

Building Interoperability  
for United Kingdom Historic Environment Information Resources ..... 179  
*Edmund Lee*

Prototyping Digital Libraries Handling Heterogeneous Data Sources –  
The ETANA-DL Case Study ..... 186  
*Unni Ravindranathan, Rao Shen, Marcos Andre Gonalves,  
Weiguo Fan, Edward A. Fox, and James W. Flanagan*

zetoc SOAP: A Web Services Interface for a Digital Library Resource .... 198  
*Ann Apps*

## **Enhanced Indexing and Searching Methods**

A Comparison of Text and Shape Matching  
for Retrieval of Online 3D Models ..... 209  
*Patrick Min, Michael Kazhdan, and Thomas Funkhouser*

Corpus-Based Query Expansion in Online Public Access Catalogs . . . . .	221
<i>Jeffrey Komarjaya, Danny C.C. Poo, and Min-Yen Kan</i>	
Automated Indexing with Restricted Random Walks on Large Document Sets . . . . .	232
<i>Markus Franke and Andreas Geyer-Schulz</i>	

## Personalisation and Annotation

Annotations in Digital Libraries and Collaboratories – Facets, Models and Usage . . . . .	244
<i>Maristella Agosti, Nicola Ferro, Ingo Frommholz, and Ulrich Thiel</i>	
P-News: Deeply Personalized News Dissemination for MPEG-7 Based Digital Libraries . . . . .	256
<i>Qiuyue Wang, Wolf-Tilo Balke, Werner Kießling, and Alfons Huhn</i>	
Laws of Attraction: In Search of Document Value-ness for Recommendation . . . . .	269
<i>Tiffany Y. Tang and Gordon McCalla</i>	

## Music Digital Libraries

Sound Footings: Building a National Digital Library of Australian Music . . . . .	281
<i>Marie-Louise Ayres, Toby Burrows, and Robyn Holmes</i>	
Content-Based Retrieval in Digital Music Libraries . . . . .	292
<i>Michael Clausen, Frank Kurth, Meinard Müller, and Andreas Ribbrock</i>	
Knowledge-Based Scribe Recognition in Historical Music Archives . . . . .	304
<i>Ilvio Bruder, Temenushka Ignatova, and Lars Milewski</i>	

## Personal Digital Libraries

Enhancing Kepler Usability and Performance . . . . .	317
<i>Kurt Maly, Michael Nelson, Mohammad Zubair, Ashraf Amrou, Sathish Kothamasa, Lan Wang, and Rick Luce</i>	
Media Matrix: Creating Secondary Repositories . . . . .	329
<i>Mark Kornbluh, Michael Fegan, and Dean Rehberger</i>	
Incorporating Physical and Digital Artifacts into Growing Personal Collections . . . . .	341
<i>Pratik Dave, Luis Francisco-Revilla, Unmil P. Karadkar, Richard Furuta, Frank M. Shipman, and Paul Logasa Bogen II</i>	

## Innovative Technologies for Digital Libraries

Enhancing the OpenDLib Search Service . . . . .	353
<i>Leonardo Candela, Donatella Castelli, and Pasquale Pagano</i>	
Multi-level Exploration of Citation Graphs . . . . .	366
<i>François Boutin and Mountaz Hascoët</i>	
Collaborative Querying for Enhanced Information Retrieval . . . . .	378
<i>Lin Fu, Dion Hoe-Lian Goh, Schubert Shou-Boon Foo, and Yohan Supangat</i>	

## Open Archives Initiative

Servicing the Federation: The Case for Metadata Harvesting . . . . .	389
<i>Fabio Simeoni</i>	
Developing a Technical Registry of OAI Data Providers . . . . .	400
<i>Thomas G. Habing, Timothy W. Cole, and William H. Mischo</i>	
Applying SOAP to OAI-PMH . . . . .	411
<i>Sergio Congia, Michael Gaylord, Bhavik Merchant, and Hussein Suleman</i>	

## New Models and Tools

Connexions: An Alternative Approach to Publishing . . . . .	421
<i>Geneva Henry</i>	
<teiPublisher>: Bridging the Gap Between a Simple Set of Structured Documents and a Functional Digital Library . . . . .	432
<i>Amit Kumar, Alejandro Bia, Martin Holmes, Susan Schreibman, Ray Siemens, and John Walsh</i>	
Managing a Paradigm Shift – Aligning Management, Privacy Policy, Technology and Standards . . . . .	442
<i>Jonas Holmström</i>	

## User-Centred Design

Towards an Integrated Digital Library: Exploration of User Responses to a ‘Joined-Up’ Service . . . . .	452
<i>Ken Eason, Susan Harker, Ann Apps, and Ross MacIntyre</i>	
Supporting Information Structuring in a Digital Library . . . . .	464
<i>George Buchanan, Ann Blandford, Harold Thimbleby, and Matt Jones</i>	

Evaluating Strategic Support for Information Access in the DAFFODIL System .....	476
<i>Claus-Peter Klas, Norbert Fuhr, and André Schaefer</i>	

## **Innovative Technologies for Digital Libraries**

Using Digital Library Techniques – Registration of Scientific Primary Data .....	488
<i>Jan Brase</i>	
Towards Topic Driven Access to Full Text Documents .....	495
<i>Caterina Caracciolo, Willem van Hage, and Maarten de Rijke</i>	
Bibliographic Component Extraction Using Support Vector Machines and Hidden Markov Models .....	501
<i>Takashi Okada, Atsuhiko Takasu, and Jun Adachi</i>	
Towards a Policy Language for Humans and Computers .....	513
<i>Vicky Weissman and Carl Lagoze</i>	
<b>Author Index</b> .....	527