# Table of Contents

## Keynote and Invited Papers

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical Informatics and Security Informatics Research in Digital Library</td>
<td>Hsinchun Chen</td>
<td>1</td>
</tr>
<tr>
<td>ChinaGrid: Making Grid Computing a Reality</td>
<td>Hai Jin</td>
<td>13</td>
</tr>
<tr>
<td>Content Management and Resources Integration: A Practice in Shanghai Digital Library</td>
<td>Qiang Xu</td>
<td>25</td>
</tr>
<tr>
<td>Digital Libraries: Developing Countries, Universal Access, and Information for All</td>
<td>Ian H. Witten</td>
<td>35</td>
</tr>
<tr>
<td>Digital Libraries for Education: A Progress Report on the National Science Foundation’s (NSF) National Science, Technology, Engineering, and Mathematics Education Digital Library (NSDL) Program</td>
<td>Lee L. Zia</td>
<td>45</td>
</tr>
<tr>
<td>Digital Libraries for Education: Case Studies</td>
<td>Edward A. Fox</td>
<td>51</td>
</tr>
<tr>
<td>Digital Preservation and Workflow Process</td>
<td>Su-Shing Chen</td>
<td>61</td>
</tr>
<tr>
<td>Global Memory Net: New Collaboration, New Activities and New Potentials</td>
<td>Ching-chih Chen</td>
<td>73</td>
</tr>
<tr>
<td>Gold at the End of the Digital Library Rainbow: Forecasting the Consequences of Truly Effective Digital Libraries</td>
<td>Michael A. Keller</td>
<td>84</td>
</tr>
<tr>
<td>Information Retrieval Challenges for Digital Libraries</td>
<td>Edie Rasmussen</td>
<td>95</td>
</tr>
<tr>
<td>Knowledge Service and Digital Library: A Roadmap for the Future</td>
<td>Xiaoxing Zhang</td>
<td>104</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Ontological Service Layer for Digital Libraries: A Requirement and</td>
<td>Xiaolin Zhang</td>
<td>115</td>
</tr>
<tr>
<td>Architectural Analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Distributed Collaborative Virtual Reference System and Its</td>
<td>Min Huang, Haoming Lin, Yi Jin</td>
<td>124</td>
</tr>
<tr>
<td>Scheduler Mechanism for Chinese University Libraries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Role of Context for Information Mediation in Digital Libraries</td>
<td>Erich Neuhold, Claudia Niederée, Avaré Stewart, Ingo Frommholz, Bhaskar Mehta</td>
<td>133</td>
</tr>
<tr>
<td>Papers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaboration and Localization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Policy-Based System for Institutional Web Archiving</td>
<td>Wasuke Hiiragi, Tetsuo Sakaguchi, Shigeo Sugimoto, Koichi Tabata</td>
<td>144</td>
</tr>
<tr>
<td>Building a Distributed Heterogeneous CALIS-ETD Digital Library</td>
<td>Yang Zhao, Airong Jiang</td>
<td>155</td>
</tr>
<tr>
<td>Building Digitized Collection: Theory and Practice</td>
<td>Chunrong Luo, Zhinong Zhou, Ying Zhang</td>
<td>165</td>
</tr>
<tr>
<td>Cataloging and Preservation Toolkit of a Chinese Mathematics Ancient</td>
<td>Li Dong, Chunxiao Xing, Lizhu Zhou, Bei Zhang, Airong Jiang</td>
<td>174</td>
</tr>
<tr>
<td>Books Digital Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploiting Extended Service-Oriented Architecture for Federated</td>
<td>Hao Ding, Ingeborg Sølvberg</td>
<td>184</td>
</tr>
<tr>
<td>Digital Libraries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OAI Protocol for Chinese Culture Resources Metadata Harvesting</td>
<td>Qiaoying Zheng, Wei Zhu, Zongying Yang</td>
<td>195</td>
</tr>
<tr>
<td>Preserving Digital Media: Towards a Preservation Solution Evaluation</td>
<td>Carl Rauch, Andreas Rauber</td>
<td>203</td>
</tr>
<tr>
<td>Metric</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Issues of Sharing and Integration of OPAC and E-Learning</td>
<td>Qinghua Zheng, Jing Shao, Haifeng Dang, Huixian Bai</td>
<td>213</td>
</tr>
<tr>
<td>Resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Technical Issues on the China-US Million Book Digital Library Project

Jihai Zhao, Chen Huang

The Construction and Research on Academy Culture Database

Zhangfei Zheng, Zhijian Fan, Xiangbo Tu

The Institutional Repository: The Chinese University of Hong Kong ‘SIR’ Model

Colin Storey, Rita Wong, Kevin Leung, Ernest Yik

The Semantic Architecture for Chinese Cultural Celebrities’ Manuscript Library

Wei Liu

WebGIS-RBDL – A Rare Book Digital Library Supporting Spatio-Temporary Retrieval

Ming Zhang, Dongqing Yang, Zhihong Deng, Sai Wu, Feng Li, Shiwei Tang

Approaches to Interoperability Amongst Australian Digital Information Providers

Philip Hider

Knowledge Organization and Representation

An Experimental Study of Boosting Model Classifiers for Chinese Text Categorization

Yibing Geng, Guomin Zhu, Junrui Qiu, Jilian Fan, Jingchang Zhang

CatRelate: A New Hierarchical Document Category Integration Algorithm by Learning Category Relationships

Shanfeng Zhu, Christopher C. Yang, Wai Lam

Constrains in Building Domain-Specific Topic Maps for the Discipline “Gender Studies in Informatics (GSI)”

M. Suriya, R. Nagarajan, R. Sathish Babu, V. Kumaresan

Managing Digital Repositories Through an Ontology-Based Design

Jian Qin, Foster Zhang

Metadata Extraction from Bibliographies Using Bigram HMM

Ping Yin, Ming Zhang, ZhiHong Deng, Dongqing Yang

Metadata Quality Evaluation: Experience from the Open Language Archives Community

Baden Hughes
New Feature Selection and Weighting Methods Based on Category Information  
  *Gongshen Liu, Jianhua Li, Xiang Li, Qiang Li* .................................................. 330

Metadata Quality Study for the National Science Digital Library (NSDL) Metadata Repository  
  *Marcia Lei Zeng, Bhagirathi Subrahmanyam, Gregory M. Shreve* ................. 339

Providing Parallel Metadata for Digital Libraries with Linguistically Heterogeneous Documents  
  *Gregory M. Shreve, Marcia L. Zeng* ................................................................. 341

**Multi-media Processing and Knowledge Discovery in Digital Library**

A Kind of Index for Content-Based Music Information Retrieval and Theme Mining  
  *Jianzhong Li, Chaokun Wang, Shengfei Shi* ..................................................... 345

An Implementation of Web Image Search Engines  
  *Zhiguo Gong, Leong Hou U, Chan Wa Cheang* .............................................. 355

A Relevance Feedback Model for Fractal Summarization  
  *Fu Lee Wang, Christopher C. Yang* ............................................................... 368

A Query Analytic Model for Image Retrieval  
  *Hsiao-Tieh Pu* .................................................................................................. 378

Character Region Identification from Cover Images Using DTT  
  *Lixu Gu* ............................................................................................................. 388

Multilingual Story Link Detection Based on Event Term Weighting on Times and Multilingual Spaces  
  *Kyung-Soon Lee, Kyo Kageura* ......................................................................... 398

PaSE: Locating Online Copy of Scientific Documents Effectively  
  *Byung-Won On, Dongwon Lee* ......................................................................... 408

Temporal Versioning of XML Documents  
  *Vilas Wuwongse, Masatoshi Yoshikawa, Toshiyuki Amagasa* ......................... 419

Text-Based P2P Content Search Using a Hierarchical Architecture  
  *Junjie Jiang, Weinong Wang* ........................................................................... 429
# Table of Contents

- **A Document Image Preprocessing System for Keyword Spotting**  
  *C.B. Jeong, S.H. Kim*  
  440
- **A Gaussian-Fuzzy Content Feature Recognition System for Digital Media Asset Objects**  
  *Sanxing Cao, Rui Lu*  
  444
- **A Novel Watermarking Scheme Based on Video Content**  
  *Guomin Wu, Yueting Zhuang, Fei Wu, Yunhe Pan*  
  449
- **Subjective Relevance: Implications on Digital Libraries for Experts and Novices**  
  *Shu-Shing Lee, Yin-Leng Theng, Dion Hoe-Lian Goh, Schubert Shou-Boon Foo*  
  453
- **Visual Information Retrieval Based on Shape Similarity**  
  *Jong-Seung Park*  
  458

## Information Retrieval Techniques

- **A Query Rewriting System for Enhancing the Queriability of Form-Based Interface**  
  *Xiaochun Yang, Bin Wang, Guoren Wang, Ge Yu*  
  462
- **Digital Library Retrieval Model Using Subject Classification Table and User Profile**  
  *Seon-Mi Woo, Chun-Sik Yoo*  
  473
- **Hot-Spot Passage Retrieval in Question Answering**  
  *Jian Huang, Xuanjing Huang, Lide Wu*  
  483
- **Query Formulation with a Search Assistant**  
  *Lin Fu, Dion Hoe-Lian Goh, Schubert Shou-Boon Foo, Yohan Supangat*  
  491
- **Semantic Query Expansion Based on a Question Category Concept List**  
  *Hae-Jung Kim, Bo-Yeong Kang, Seong-Bae Park, Sang-Jo Lee*  
  501
- **Multilingual Collection Retrieving Via Ontology Alignment**  
  *Liang Zhang, Guowen Wu, Yanfei Xu, Wei Li, Yang Zhong*  
  510
- **Using Content-Based and Link-Based Analysis in Building Vertical Search Engines**  
  *Michael Chau, Hsinchun Chen*  
  515
wHunter: A Focused Web Crawler – A Tool for Digital Library

Yun Huang, YunMing Ye

519

Personalized Issues in Digital Library

Extending Your Neighborhood-Relationship-Based Recommendations Using Your Personal Web Context

Avaré Stewart, Claudia Niederée, Bhaskar Mehta, Matthias Hemmje, Erich Neuhold

523

Interest-Based User Grouping Model for Collaborative Filtering in Digital Libraries

Seonho Kim, Edward A. Fox

533

Leveraging Enterprise Technology for the Library Portal at the National University of Singapore

Lee Shong Lin Cecelia, Yulin Yang

543

Supporting Field Study with Personalized Project Spaces in a Geographical Digital Library

Ee-Peng Lim, Aixin Sun, Zehua Liu, John Hedberg, Chew-Hung Chang, Tiong-Sa Teh, Dion Hoe-Lian Goh, Yin-Leng Theng

553

Academic Digital Library Portal – A Personalized, Customized, Integrated Electronic Service in Shanghai Jiaotong University Library

Wei Pan, Youhua Chen, Qiaoying Zheng, Peifu Xia, Ruxing Xu

563

Service and Management

A Digital Library of a Service-Orientated Architecture in SJTU – A Case Study

Zongying Yang, Qiaoying Zheng, Guojing Yuan

568

A Research to Increase Users’ Satisfaction and Loyalty Based on the Customer Satisfaction Index: A Case Study on the National Taichung Institute of Technology’s Library

Tung-Shou Chen, Rong-Chang Chen, Tsui-Yun Chang

574

Cross-Cultural Usability of Digital Libraries

Anita Komlodi, Nadia Caidi, Kristin Wheeler

584

Design Lessons on Access Features in PAPER

Yin-Leng Theng, Dion Hoe-Lian Goh, Ming Yin, Eng-Kai Suen, Ee-Peng Lim

594
Information and Communication Technologies, Libraries and the Role of Library Professionals in the 21st Century: With Special Reference to Bangladesh
   Md. Anisur Rahman, Md. Hanif Uddin, Ragina Akhter................................. 608

Integrating Electronic Pathfinders in Digital Libraries: A Model for China
   Hanrong Wang, William J. Hubbard............................................................. 618

Copyrighting Digital Libraries from Database Designer Perspective
   Hideyasu Sasaki, Yasushi Kiyoki...................................................................... 626

Design and Development of Internet Resource Navigation Database on Key Disciplines in CALIS Project
   Xiya Zhang, Huijun Zhang, Xiaobo Xiao....................................................... 630

Live Digital Reference Service: Its Present and Future
   Paul W.T. Poon.............................................................................................. 636

Posters

Digital Library Technology

3D Object Retrieval by Bipartite Matching
   Xiang Pan, Yin Zhang, Xiuzi Ye, Sanyuan Zhang.......................................... 640

A Hybrid Neural Network for Web Page Classification
   Yukun Cao, Yunfeng Li, ZhuZheng Yu......................................................... 641

A Metasearch Engine with Automatic Resource Binding Ability
   Guowen Wu, Liang Zhang, Yin Kang, Jun Yin, Xiangdong Zhou,
   Peiyi Zhang, Lin Zhao.................................................................................. 642

Certificate-Based Authentication and Authorization Architecture in Digital Library
   Lin Chen, Xiaoqin Huang, Jinyuan You.......................................................... 643

Culture Grid and Its Key Technologies
   Zhendong Niu, Mingkai Dong, Jie Zhang....................................................... 644

Face Region Detection on Skin Chrominance from Color Images by Facial Features
   Jin Ok Kim, Jin Soo Kim, Chin Hyun Chung................................................... 646
Image Assisted Remote Visualization of Volume Data
Xubo Yang

Improving Multimedia Delivery Performance for Digital Library Applications
Yunpeng Wang, Xiulin Hu, Hui Guo

Multi-document Summarization Based on Link Analysis and Text Classification
Jiangqin Wu, Yizi Wu, Jian Liu, Yueting Zhuang

Query Between Heterogeneous Ontology-Based Information Sources Using Association Matrix
Jianjiang Lu, Baowen Xu, Wenxian Zhang, Dazhou Kang

Research and Development of Digital Library Platform
Jing Peng, Dake Wang

Peixiang Zhao, Ming Zhang, Dongqing Yang, Shiwei Tang

Usage of Hybrid Model Based on Concepts Correlations in Adaption to Changes of User's Interest
Lizhe Song, Zhendong Niu, Hantao Song, Zhengtao Yu, Xuelin Shi

WEBDL: A Specific Digital Library for Web Data
Zhiqiang Zhang, Chunxiao Xing, Lizhu Zhou

Collaboration and Localization

A Practice in the Integration of e-Resources at SJTU Library
Yongge Bai, Guojing Yuan, Haoming Lin, Jia Peng

An Essay on the Integrated Management of Digital Resources
Judy L. Cheng, Fred Y. Ye

Analysis, Design and Realization of Metadata Managing System for Multimedia Resources
Xu Wu, Ziwei Ma

Australian Digital Theses Program: Expansion, Partnership and the Future
Andrew Wells, Tony Cargnelutti

Building Indian Language Digital Library Collections: Some Experiences with Greenstone Software
B.S. Shivaram, T.B. Rajashekar
Descriptive Metadata Structure and Extended Rules: A Case Study on Ancient Atlases Metadata Standard

Yunyun Shen, Boyue Yao, Xiangyun Feng

Featured Collection Digitization and Cooperation: Case Study of Chinese Mathematics Digital Library

Xiaohui Zheng, Bianai Cheng, Lisheng Feng, Airong Jiang

**Service and Management**

A Study on Framework and Methods of Online Information Literacy Instruction

Chunhong Zhang, Zhenbo Lu, Wu Li

Assessing Users, Uses, and Usage of a Collaborated Digital Library

Natalie Lee-San Pang, Pang-Leang Hiew

Deepening and Developing the Conception and Service of the Library

JiaZhen Pan

Design an Ideal Digital Reference Service (DRS) Model for Academic Libraries

Jing Guo, Wei Pan, Qiaoying Zheng, Min Huang, Zongying Yang, Ying Ye

Discussion of Service Innovation Under the Mode of a Digital Library

Xiaoping He, Liang Wang, Xi Zhang

Information Services in Digital Library, Fudan’s Experience

Yixin Xu, Jun Ying, Xinli Si, Meiqi Mo, Zhiping Xia

Knowledge Management in Library Information Services

Meng Zhan, Ying Liu, Gaokang Yao

Marketing Academic Digital Library

Jingbo Zhang

Marketing Information Services in the Digital Age: Viewpoints from Academic Libraries in North America and the Asia-Pacific Rim

Michael R. Leach, Chihfeng P. Lin

Models for Sustainability: Three Case Studies

Naicheng Chang

Research on Academic Personal Portal in Digital Library

Youhua Chen, Wei Pan, Peifu Xia
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surfing the Hong Kong Baptist University e-Campus in 80 Days: A Pilot</td>
<td>Teresa M. L. Kong, Rebekah S. H. Wong</td>
<td>680</td>
</tr>
<tr>
<td>Pocket PC Project with Hewlett-Packard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Impact of Copyright Upon Digital Libraries</td>
<td>Min Chou, Oliver G. Zhou</td>
<td>681</td>
</tr>
<tr>
<td>Online Supervised Learning for Digital Library</td>
<td>Ning Liu, Benyu Zhang, Jun Yan, Wensi Xi, Shuicheng Yan, Zheng Chen,</td>
<td>683</td>
</tr>
<tr>
<td>Fengshan Bai, Wei-Ying Ma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation of a Personalized Portal for Academic Library</td>
<td>Chenggan Quan, Shuang Wang, Lin Mai</td>
<td>684</td>
</tr>
<tr>
<td>The System Design of Military Equipment Digital Library</td>
<td>Lu Gao, Hongmin Yu, Hongfeng Wang, Sumei Zhang</td>
<td>685</td>
</tr>
<tr>
<td>Author Index</td>
<td></td>
<td>687</td>
</tr>
</tbody>
</table>
Digital Libraries: International Collaboration and Cross-Fertilization
Chen, Z.; Chen, H.; Miao, Q.; Fu, Y.; Fox, E.; Lim, E.-p. (Eds.)
2005, XX, 690 p., Softcover
ISBN: 978-3-540-24030-3