

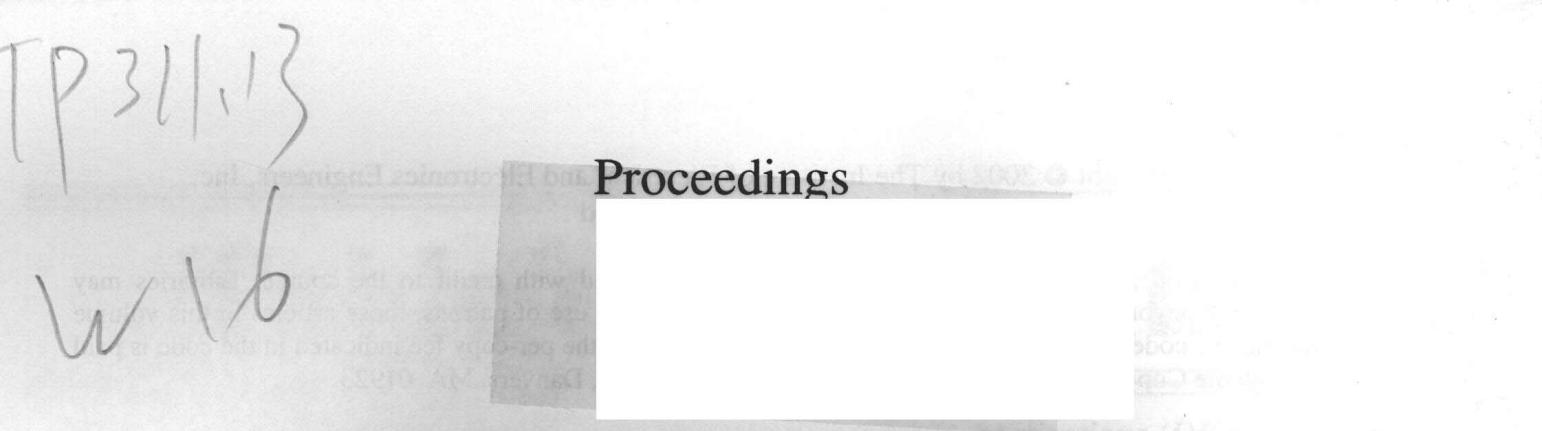
Proceedings

**DEXA 2002**

**Thirteenth International Workshop on**

# **Database and Expert Systems Applications**

**2-6 September 2002  
Aix-en-Provence, France**



## Proceedings

# 13th International Workshop on Database and Expert Systems Applications

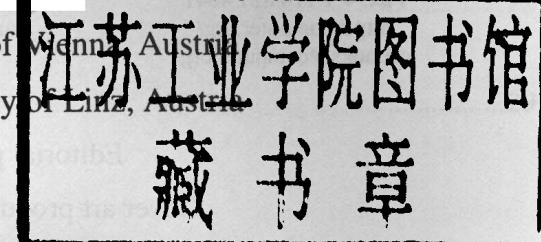
2-6 September 2002

Aix-en-Provence, France

Edited by

A Min Tjoa, Technical University of Vienna, Austria

Roland R. Wagner, FAW, University of Linz, Austria



Los Alamitos, California

Washington • Brussels • Tokyo

Copyright © 2002 by The Institute of Electrical and Electronics Engineers, Inc.  
All rights reserved

*Copyright and Reprint Permissions:* Abstracting is permitted with credit to the source. Libraries may photocopy beyond the limits of US copyright law, for private use of patrons, those articles in this volume that carry a code at the bottom of the first page, provided that the per-copy fee indicated in the code is paid through the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

Other copying, reprint, or republication requests should be addressed to: IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331.

*The papers in this book comprise the proceedings of the meeting mentioned on the cover and title page. They reflect the authors' opinions and, in the interests of timely dissemination, are published as presented and without change. Their inclusion in this publication does not necessarily constitute endorsement by the editors, the IEEE Computer Society, or the Institute of Electrical and Electronics Engineers, Inc.*

IEEE Computer Society Order Number PR01668

ISBN 0-7695-1668-8

ISBN 0-7695-1669-6 (case)

ISBN 0-7695-1670-X (microfiche)

ISSN 1529-4188

*Additional copies may be ordered from:*

IEEE Computer Society  
Customer Service Center  
10662 Los Vaqueros Circle  
P.O. Box 3014  
Los Alamitos, CA 90720-1314  
Tel: +1 714 821 8380  
Fax: +1 714 821 4641  
<http://computer.org/>  
csbooks@computer.org

IEEE Service Center  
445 Hoes Lane  
P.O. Box 1331  
Piscataway, NJ 08855-1331  
Tel: +1 732 981 0060  
Fax: +1 732 981 9667  
<http://shop.ieee.org/store/>  
[customer-service@ieee.org](mailto:customer-service@ieee.org)

IEEE Computer Society  
Asia/Pacific Office  
Watanabe Bldg., 1-4-2  
Minami-Aoyama  
Minato-ku, Tokyo 107-0062  
JAPAN  
Tel: +81 3 3408 3118  
Fax: +81 3 3408 3553  
[tokyo.ofc@computer.org](mailto:tokyo.ofc@computer.org)

Editorial production by Danielle C. Martin

Cover art production by Joe Daigle/Studio Productions

Printed in the United States of America by The Printing House



---

---

# DEXA 2002

---

---

楊  
大  
學  
院

# Message from the Program Chairs

William Bruce Croft, Linz

John Debenham, University of

The Database and Expert Systems Applications (DEXA) are thought as a platform for the exchange of ideas, experiences, and opinions among the theoretical and practitioners - those who are defining requirements for the future systems in the areas of database and artificial technologies.

The DEXA workshop papers include papers that are primarily concerned with very specialised topics on applications of database and expert systems technology. We want to thank all workshop organisers for their excellent work.

It is the seventh time that DEXA workshop papers were published by IEEE society press. The cooperation with IEEE society press was a very good one, which we would like to continue in the next year. Special thanks to Danielle Martin as the supervisor of the edition of DEXA proceedings 2002.

DEXA 2002 is the 13th annual scientific platform on Database and Expert Systems Applications after Vienna, Berlin, Valencia, Prague, Athens, London, Zurich, Toulouse, Vienna, Florence, Greenwich, and Munich. This year DEXA takes place at the Université Aix - Marseille II. Many thanks to Rosine Cicchetti and Lofti Lakhal, University of Marseille, France, who have organised the conference site.

We would like to express our thanks to all institutions actively supporting this event, namely:

- IUT, Université Aix-Marseille II
- DEXA Association
- Austrian Computer Society
- Research Institute for Applied Knowledge Processing (FAW)
- Applied Knowledge Processing Company (AWSoft Ges.m.b.H)
- Microsoft Research

Many persons contributed numerous hours to organise DEXA. Special thanks to A. Dreiling (FAW, Linz), M. Neubauer (FAW, Linz), I. Tjoa (FAW, Linz), H. Trixl (Technical University of Vienna), and G. Wagner (FAW Linz). Many thanks to all the members of the PC's and others who have very carefully reviewed the submitted papers. Our special thanks are dedicated to our personal friend Prof. Dr. Abdelkader Hameurlain, IRIT, Université Paul Sabatier, France, for his continuous help and expertise as general chairperson of DEXA 2002.

*A Min Tjoa, Technical University of Vienna, Austria*

*Roland R. Wagner, FAW, University of Linz, Austria*

---

---

# Program Committee

---

---

**General Chairperson**

Abdelkader Hameurlain, IRIT, Université Paul Sabatier, France

**Conference Program Chairpersons**

Lotfi Lakhal, University of Marseille, France

Roland Traunmüller, University of Linz, Austria

**Workshop Chairpersons**

A Min Tjoa, Technical University of Vienna, Austria

Roland R. Wagner, FAW, University of Linz, Austria

**Publication Chairperson**

Vladimir Marik, Czech Technical University, Czech Republic

**Program Committee Members**

Michel Adiba, IMAG - Laboratoire LSR, France

Hamideh Afsarmanesh, University of Amsterdam, The Netherlands

Jens Albrecht, Oracle GmbH, Germany

Ala Al-Zobaidie, University of Greenwich, UK

Bernd Amann, CNAM, France

Frederic Andres, NII, Japan

Kurt Bauknecht, University of Zurich, Switzerland

Trevor Bench-Capon, University of Liverpool, United Kingdom

Alfs Berztiss, University of Pittsburgh, USA

Sourav S Bhowmick, Nanyang Technological University, Singapore

Jon Bing, University of Oslo, Norway

Omran Bukhres, Purdue University, USA

Luis Camarinah-Matos, New University of Lisbon, Portugal

Antonio Cammelli, IDG-CNR, Italy

Wojciech Cellary, University of Economics at Poznan, Poland

Stavros Christodoulakis, Technical University of Crete, Greece

Panos Chrysanthis, University of Pittsburgh & Carnegie Mellon University, USA

Paolo Ciaccia, University of Bologna, Italy  
Rosine Cicchetti, University of Marseille, France  
Christine Collet, LSR-IMAG, France  
Carlo Combi, University of Verona, Italy  
William Bruce Croft, University of Massachusetts, USA  
John Debenham, University of Technology, Sydney, Australia  
Misbah Deen, University of Keele, United Kingdom  
Nina Edelweiss, University of Rio Grande do Sul, Brazil  
Johann Eder, University of Klagenfurt, Austria  
Thomas Eiter, Technical University of Vienna, Austria  
Gregor Engels, University of Paderborn, Germany  
Peter Fankhauser, GMD-IPSI, Germany  
Eduardo Fernandez, Florida Atlantic University, USA  
Simon Field, IBM Research Division, Switzerland  
Burkhard Freitag, University of Passau, Germany  
Peter Funk, Mälardalen University, Sweden  
Antonio L. Furtado, University of Rio de Janeiro, Brazil  
Georges Gardarin, University of Versailles, France  
Parke Godfrey, The College of William and Mary, Canada  
Paul Grefen, University of Twente, The Netherlands  
William Grosky, University of Michigan, USA  
Igor T. Hawryszkiewycz, University of Technology, Sydney, Australia  
Mohamed Ibrahim, University of Greenwich, UK  
Yahiko Kambayashi, Kyoto University, Japan  
Magdi N. Kamel, Naval Postgraduate School, USA  
Nabil Kamel, American University in Cairo, Egypt  
Gerti Kappel, University of Linz, Austria  
Kamalar Karlapalem, University of Science and Technology, Hong Kong  
Randi Karlsen, University of Tromsö, Norway  
Rudolf Keller, Zühlke Engineering AG, Switzerland  
Myoung Ho Kim, KAIST, Korea  
Masaru Kitsuregawa, Tokyo University, Japan  
Gary J. Koehler, University of Florida, USA  
Donald Kossmann, Technical University of Munich, Germany  
Jaques Kouloumdjian, INSA, France  
Petr Kroha, Technical University Chemnitz-Zwickau, Germany  
Josef Küng, University of Linz, Austria

Jiri Lazansky, Czech Technical University, Czech Republic  
Michel Leonard, University of Geneve, Switzerland  
Tok Wang Ling, National University of Singapore, Singapore  
Mengchi Liu, University of Regina, Canada  
Fred Lochoovsky, Hong Kong University of Science & Technology, Hong Kong  
Peri Loucopoulos, UMIST, United Kingdom  
Sanjai Kumar Madria, University of Missouri-Rolla, USA  
Akifumi Makinouchi, Kyushu University, Japan  
Heinrich C. Mayr, University of Klagenfurt, Austria  
Vladimir Marik, Czech Technical University, Czech Republic  
Simone Marinai, University of Florence, Italy  
Subhasish Mazumdar, New Mexico Tech, USA  
Robert Meersman, Free University Brussels, Belgium  
Elisabeth Metais, CEDRIC/CNAM of Paris, France  
Mukesh Mohania, IBM-IRL, India  
Tadeusz Morzy, Poznan University of Technology, Poland  
Noureddine Mouaddib, University of Nantes, France  
Günter Müller, University of Freiburg, Germany  
Erich J. Neuhold, Fraunhofer-IPSI, Germany  
Gultekin Ozsoyoglu, University Case Western Research, USA  
Georgios Pangalos, University of Thessaloniki, Greece  
Stott Parker, University of Los Angeles (UCLA), USA  
Oscar Pastor, Technical University of Valencia, Spain  
Marco Patella, University of Bologna, Italy  
Barbara Pernici, Politecnico di Milano, Italy  
Günter Pernul, University of Essen, Germany  
Gerald Quirchmayr, University of Vienna, Austria  
Fausto Rabitti, CNUCE-CNR, Italy  
Isidro Ramos, Technical University of Valencia, Spain  
Harald Reiterer, University of Konstanz, Germany  
Norman Revell, Middlesex University, UK  
Sally Rice, University of South Australia, Australia  
John Roddick, Flinders University of South Australia, Australia  
Colette Rolland, University Paris I, Sorbonne, France  
Elke Rundensteiner, Worcester Polytechnic Institute, USA  
Domenico Sacca, University of Calabria, Italy  
Marinette Savonnet, University of Bourgogne, France

Erich Schweighofer, University of Vienna, Austria  
Michael H. Smith, University of California, USA  
Giovanni Soda, University of Florence, Italy  
Harald Sonnberger, EUROSTAT, Luxembourg  
Günther Specht, University of Ulm, Germany  
Uma Srinivasan, CSIRO, Australia  
Bala Srinivasan, Monash University, Australia  
Olga Stepankova, Czech Technical University, Czech Republic  
Zbigniew Struzik, CWI, Amsterdam, The Netherlands  
Makoto Takizawa, Tokyo Denki University, Japan  
Katsumi Tanaka, Kyoto University, Japan  
Zahir Tari, University of Melbourne, Australia  
Stephanie Teufel, University of Fribourg, Germany  
Jukka Teuhola, University of Turku, Finland  
Bernd Thalheim, Technical University of Cottbus, Germany  
Jean Marc Thevenin, University of Toulouse, France  
Helmut Thoma, IBM Global Services Basel, Switzerland  
A Min Tjoa, Technical University of Vienna, Austria  
Aphrodite Tsalgatidou, University of Athens, Greece  
Susan Urban, Arizona State University, USA  
Krishnamurthy Vidyasankar, Memorial University of Newfoundland, Canada  
Pavel Vogel, Technical University of Munich, Germany  
Roland R. Wagner, University of Linz, Austria  
Michael Wing, Middlesex University, UK  
Werner Winiwarter, EC3, Austria  
Vilas Wuwongse, Asian Institute of Technology, Thailand  
Gian Piero Zarri, CNRS, France  
Arkady Zaslavsky, Monash University, Australia  
Aidong Zhang, State University of New York at Buffalo, USA

---

---

# Table of Contents

---

---

## *13th International Workshop on Database and Expert Systems Applications (DEXA 2002)*

Message from the Program Chairs .....	xvii
Program Committee .....	xviii
 <hr/>	
<b>W01: Fifth International Workshop on Network-Based Information Systems – NBiS</b>	
<hr/>	
Message from the Chair .....	3
<b>Session 1: Distributed Systems</b>	
A Genetic Algorithm Based Routing Method Using Two QoS Parameters .....	7
<i>L. Barolli, A. Koyama, K. Matsumoto, T. Suganuma, and N. Shiratori</i>	
Protocol for Large-Scale Group .....	12
<i>K. Taguchi and M. Takizawa</i>	
Security Analysis and the DSM Model .....	17
<i>B. Zhou</i>	
Architectural Defects of the Secure Shell .....	22
<i>T. Saito, T. Kito, K. Umesawa, and F. Mizoguchi</i>	
Optimizing Remote Method Invocation in Java .....	29
<i>T. Sysala and J. Janeček</i>	
<b>Session 2: Mobile Communication and Networks</b>	
An Agent Based Mobile Phone Groupware System Using Location Information .....	37
<i>A. Koyama, L. Barolli, S. Takami, N. Kamibayashi, and N. Shiratori</i>	
A Distributed Multimedia Multiple Access Protocol for Ad Hoc Networks .....	42
<i>N. Fukagawa, N. Iida, and T. Watanabe</i>	
<b>Session 3: Web-Based Systems</b>	
Features of a Web-Oriented Information System .....	49
<i>P. Kroha and D. Loeffler</i>	
Persistent Cache in a Distributed Search Engine .....	54
<i>N. Sato, M. Uehara, Y. Sakai, and H. Mori</i>	
ESOW: Parallel/Distributed Programming on the Web.....	59
<i>D. Lopes, S. Hammoudi, and Z. Abdelouahab</i>	

The Experience of Using Java-Based Message-Oriented Middleware to Build a Distributed Training Simulator .....	64
--	----

*H.-T. Chiao, C.-H. Lin, K.-C. Liang, and S.-M. Yuan*

---

## W02: First International Workshop on Web Semantics – WebS

---

Message from the Chairs .....	71
-------------------------------	----

### Session 1

Semantic Web and Knowledge Representation .....	75
---	----

*G. Zarri*

Domain-Specific Information Extraction Structures .....	80
---	----

*S. Lyons and D. Smith*

Using Preference Order in Ontologies .....	85
--	----

*S. Heymans and D. Vermeir*

### Session 2

Linking the Semantic Web with Existing Sources.....	93
---	----

*W. May*

Image Classification Using Neural Networks and Ontologies.....	98
--	----

*C. Breen, L. Khan, and A. Ponnusamy*

A Disciplined Approach for the Integration of Heterogeneous XML Datasources .....	103
---	-----

*S. Castano, A. Ferrara, G. Ottathycal, and V. De Antonellis*

### Session 3

ACTISE. Advanced e-Commerce Technology Laboratory's Integrated Services Environment – A User-Centric Office Framework for Knowledge Workers .....	111
---	-----

*H.-S. Chiu, T.-M. Tsai, H.-K. Yu, S.-H. Huang, P.-Y. Liao, H.-T. Shih, and S-C. Chou*

A Mental Cognitive Model of Web Semantic for e-Customer Profile.....	116
--	-----

*I. Kwan*

A Clustering Approach for XML Linked Documents .....	121
--	-----

*B. Catania and A. Maddalena*

---

## W03: Third International Workshop on Theory and Applications of Knowledge Management – TAKMA

---

Message from the Chairs .....	129
-------------------------------	-----

### Session 1: Knowledge Modelling Concepts and Systems

Combining Ontologies and Document Retrieval Techniques: A Case Study for an E-Learning Scenario .....	133
---	-----

*S. Baumann, A. Dengel, M. Junker, and T. Kieninger*

Business Process Knowledge Modelling: Method and Tool .....	138
<i>A. Papavassiliou, S. Ntioudis, G. Mentzas, and A. Abecker</i>	
The PROMOTE® Prototype: A Meta <sup>2</sup> Model Based Process Oriented KMS.....	143
<i>D. Karagiannis and R. Woitsch</i>	
Knowledge-Based Self-Support System for Corporate Users .....	149
<i>F. Noël and K. Delic</i>	
<b>Session 2: Issues on Knowledge Management</b>	
Individual Knowledge Management with <i>MailTack</i> .....	157
<i>M. Betttoni, R. Ottiger, R. Todesco, and K. Zwimpfer</i>	
Capability Maturity for Knowledge Management .....	162
<i>A. Berztiss</i>	
Defining Basic Units for Knowledge Interchange .....	167
<i>T.-H. Lê and L. Lamontagne</i>	
<b>Session 3: Motivation and Learning in KM</b>	
The Dreaming Knowledge Base .....	177
<i>P. Assogna</i>	
Motivational Factors for Bringing in and Demanding Contents from Knowledge Management Systems .....	183
<i>V. Milijic</i>	
Knowledge Integration: Its Relation to Organisational Learning, to Knowledge Management (KM) Methods (e.g. BSC) and to Measuring the Benefits of KM .....	188
<i>R. Born</i>	
Multimedia Interaction for Learning and Knowing: Inspirational Knowledge Management to Create Value for Individuals in Organizations.....	193
<i>S. Albolino and M. Mesenzani</i>	
<b>W04: Third International Workshop on Natural Language and Information Systems – NLIS</b>	
<hr/>	
Message from the Chairs.....	201
<b>Session 1: Text Analysis</b>	
Discovering Relationships between Topics of Conferences by Filtering, Extracting and Clustering .....	205
<i>T. Mine, S. Lu, and M. Amamiya</i>	
Using NLP to Efficiently Visualize Text Collections with SOMs.....	210
<i>J. Henderson, P. Merlo, I. Petroff, G. Schneider</i>	
Tailoring Text Using Topic Words: Selection and Compression .....	215
<i>T. Euler</i>	

## **Session 2: HLT Architectures**

Developing Reusable and Robust Language Processing Components for Information Systems Using GATE .....	223
<i>K. Bontcheva, H. Cunningham, D. Maynard, V. Tablan, and H. Saggion</i>	

English as a Formal Specification Language .....	228
<i>R. Schwitter</i>	

Balancing Conciseness, Readability and Salience in Generated Text .....	233
<i>B. Eddy and A. Cawsey</i>	

## **Session 3: Information Retrieval**

Applying Cascaded Feature Selection to SVM Text Categorization .....	241
<i>T. Masuyama and H. Nakagawa</i>	

Tokenization and Proper Noun Recognition for Information Retrieval.....	246
<i>F. Barcala, J. Vilares, M. Alonso, J. Graña, and M. Vilares</i>	

A Combined Statistical Query Term Disambiguation in Cross-Language Information Retrieval.....	251
<i>F. Sadat, A. Maeda, M. Yoshikawa, and S. Uemura</i>	

Similarity Model and Term Association for Document Categorization .....	256
<i>H. Kou and G. Gardarin</i>	

Long-Term Relevance Feedback Using Simple PCA and Linear Transformation.....	261
<i>X. Tai, F. Ren, and K. Kita</i>	

---

## **W05: Second International Workshop on Web Based Collaboration – WBC**

---

<b>Message from the Chair .....</b>	269
-------------------------------------	-----

## **Session 1: Collaboration Architectures**

Action Synchronization over the Web .....	275
<i>B. Czejdo and M. Zakrzewicz</i>	

Toward an Agent Oriented Virtual Organization Dedicated to Risk Prevention in Small and Medium Size Companies .....	280
<i>E. Rigaud and F. Guarnieri</i>	

Business-to-Employee Cooperation Support through Online Job Interviews.....	286
<i>G. Dafoulas, A. Pateli, and M. Turega</i>	

An Architecture for Collaboratively Assembled Moderated Information Bearing Web Sites.....	293
<i>R. Cooper</i>	

## **Session 2: Collaborative Applications**

E-discourses with Zeno.....	301
<i>A. Voss</i>	

XFolders: A Flexible Workflow System Based on Electronic Circulation Folders.....	307
<i>S. Castellani and F. Pacull</i>	
The Wargo System: Semi-automatic Wrapper Generation in Presence of Complex Data Access Modes.....	313
<i>J. Raposo, A. Pan, M. Álvarez, J. Hidalgo, and A. Viña</i>	
<b>Session 3: Collaboration Support</b>	
Supporting Self-Facilitation in Distributed Group Decisions .....	321
<i>C. Zamfirescu and F. Filip</i>	
Delivering Collaborative Programme Management .....	326
<i>M. Suchocki</i>	
<b>W06: Third International Workshop on Management of Information on the Web – MIW</b>	
<hr/>	
Message from the Chair .....	333
<b>Invited Paper 1</b>	
The Story of e-Learning in HKU SPACE- .....	337
<i>B. Cheung</i>	
<b>Session 1</b>	
WebCMS: A Web-Based Course Management System .....	345
<i>O. Siew and J. Shepherd</i>	
Web Informetrics: Extending Classical Informetrics to the Web .....	351
<i>D. Dhyani, S. Bhowmick, and W.-K. Ng</i>	
Distance Learning and CPD: Special Education and Knowledge Management .....	356
<i>P. Bayliss</i>	
An Open Framework for Integrated Qualification Management Portals .....	361
<i>M. Fuchs, C. Muscogiuri, C. Niederée, and M. Hemmje</i>	
Combining Structure Search and Content Search for Online Courses.....	366
<i>C. Lecon and S. Seehusen</i>	
<b>Invited Paper 2</b>	
Global Campus: Learning to Walk with Webbed Feet .....	373
<i>C. Sadler, W. Bakry, P. Chera, S. Hatzipanagos, M. Milankovic-Atkinson, and A. Murphy</i>	
<b>Invited Paper 3</b>	
An OPEN Learning Model for the Distance Learning Architecture.....	381
<i>R. Shen, P. Han, and F. Yang</i>	

## Session 2

DMASC: A Tool for Visualizing User Paths through a Web Site .....	389
<i>C. Stones and S. Sobol</i>	

Clustering Web Sessions by Sequence Alignment .....	394
<i>W. Wang and O. Zaïane</i>	

User-Centric Portals for Managed Learning Environments.....	399
<i>B. Ling and C. Allison</i>	

## W07: International Workshop on Trust and Privacy in Digital Business – TrustBus

---

---

Message from the Chairs.....	409
------------------------------	-----

### Session 1: Electronic Payment and Auctions

Electronic Payment in Mobile Environment.....	413
<i>H. Zheng and C. KeFei</i>	

STREAMOBILE: Pay-per-View Video Streaming to Mobile Devices over the Internet .....	418
<i>J. Domingo-Ferrer and A. Martínez-Ballesté</i>	

Private Auctions with Multiple Rounds and Multiple Items .....	423
<i>A.-R. Sadeghi, M. Schunter, and S. Steinbrecher</i>	

An Electronic Payment Scheme Allowing Special Rates for Anonymous Regular Customers.....	428
<i>C. Tan and J. Zhou</i>	

### Invited Session: Electronic Voting: Dream or Reality?

Building a Reliable e-Voting System: Functional Requirements and Legal Constraints.....	435
<i>C. Lambrinoudakis, D. Gritzalis, and S. Katsikas</i>	

Protection against Hackers on Client Computers for e-Voting Systems.....	436
<i>G. Salomonsen</i>	

Internet Voting: Do People Accept It? Do They Trust It? .....	437
<i>D. Bruschi, F. De Cindio, D. Ferrazzi, G. Poletti, and E. Rosti</i>	

### Session 2: Access Control

Ubiquitous Internet Access Control: The PAPI System .....	441
<i>D. López and R. Castro-Rojo</i>	

A Decentralized Authorization Mechanism for E-Business Applications.....	446
<i>Z. Miklós</i>	

Notes on Application-Orientated Access Control.....	451
<i>A. Spalka and H. Langweg</i>	

Simple and Secure Mobile Access under the Flexible Organization Management .....	456
<i>M. Mambo, E. Okamoto, Y. Sengoku, and T. Tanaka</i>	

**Session 3: Theoretical Issues**

Efficient Identification of Traitors in Fingerprinted Multimedia Contents.....463

*M. Fernandez and M. Soriano*

Using a Formal Technique for Protocol Idealization: A Cautionary Note.....468

*A. Mathuria*

Role Based Specification and Security Analysis of Cryptographic Protocols Using

Asynchronous Product Automata .....473

*S. Gürgens, P. Ochsenschläger, and C. Rudolph***Session 4: Privacy Issues**

Privacy-Enabled Services for Enterprises.....483

*G. Karjoth, M. Schunter, and M. Waidner*

Data Privacy, U.S. Common Practices .....488

*N. Ashrafi and J.-P. Kuilboer*

Privacy in a Mobile Environment .....493

*S. Holtmanns*

Privacy of Trust in Similarity Estimation through Secure Computations.....498

*J. Carbo, J. Molina, and J. Davila***Session 5: PKI and Trust**Simplifying PKI Usage through a Client-Server Architecture and Dynamic  
Propagation of Certificate Paths and Repository Addresses.....505*B. Hunter*

Evaluation of Certificate Revocation Policies: OCSP vs. Overissued-CRL.....511

*J. Muñoz, J. Forne, and J. Castro***W08: International Workshop on Presenting and Exploring Heritage on the Web – PEH**

Message from the Chairs.....519

Designing Vector-Based Ontologies: Can Technology Empower Open  
Interpretation of Cultural Heritage Objects?.....521*L. Díaz-Kommonen and M. Kaipainen*Using Digital Narratives to Support the Collaborative Learning and Exploration  
of Cultural Heritage .....527*P. Mulholland and T. Collins*

An Environment for Mobile Context-Based Hypermedia Retrieval.....532

*J. Carswell, A. Eustace, K. Gardiner, E. Kilfeather, and M. Neumann*

Virtual Reality Cultural Heritage Information Portal .....537

*N. Webb and J. Brotherhood*

On Accessing and Customizing Cultural Heritage Objects in Tiscover .....	541
<i>B. Pröll and J. Palkoska</i>	
Inventory Record Keeping for Historical Artefacts .....	546
<i>P. Mikšovský, Z. Kouba, and J. Uhlíř</i>	
A Cultural Heritage Forum Celebrating Technological Innovation at Station X.....	550
<i>T. Collins and P. Mulholland</i>	
Knowledge Exploration in Historical Artefact Record Keeping .....	555
<i>K. Matoušek and Z. Kouba</i>	
Tools for Personalised Annotation and Organisation of Diverse Web Resources .....	559
<i>A. Wolff, Z. Zdrahal, and Z. Kouba</i>	

---

**W09: Third International Workshop on  
Industrial Applications of Holonic and Multi-agent Systems – HoloMAS**

---

Message from the Chairs.....	567
<b>Session 1: Architectures, Methodologies and Techniques I</b>	
Preference Based Task Allocation in Holonic Manufacturing.....	573
<i>S. Deen and R. Jayousi</i>	
Dynamic Multi-agent Dispatching Control for Flexible Manufacturing Systems .....	578
<i>Y. Indrayadi, Hadeli, P. Valckenaers, and H. Van Brussel</i>	
Comparing Two Approaches to Modelling Decentralised Manufacturing Control Systems with UML Capsules.....	583
<i>R. Brennan, S. Olsen, M. Fletcher, and D. Norrie</i>	
Agent-Based Holonic Production Control .....	589
<i>P. Leitão and F. Restivo</i>	
<b>Session 2: Architectures, Methodologies and Techniques II</b>	
Ontologies for Multi-agent Systems in Manufacturing Domain.....	597
<i>M. Obitko and V. Mařík</i>	
The Holonic Enterprise: Modeling Holarchies as MAS to Enable Global Collaboration.....	603
<i>M. Ulieru</i>	
A Study of the HMS Operational Architecture.....	608
<i>T. Neligwa and S. Deen</i>	
Using Dynamically Created Decision-Making Organizations (Holarchies) to Plan, Commit, and Execute Control Tasks in a Chilled Water System .....	613
<i>F. Maturana, P. Tichy, R. Staron, and P. Slezcta</i>	
<b>Session 3: Applications</b>	
Devising Best Practices for Customization of a Multi-agent Production Planning Technology .....	623
<i>P. Koutsakas and A. Koumpis</i>	