

Table of Contents

Posters of the 2008 CoopIS (Cooperative Information Systems) International Conference

Real-Time Reasoning Based on Event-Condition-Action Rules	1
<i>Ying Qiao, Xiang Li, Hongan Wang, and Kang Zhong</i>	
PASS It ON (PASSION): An Adaptive Online Load-Balancing Algorithm for Distributed Range-Query Specialized Systems	3
<i>Ioannis Konstantinou, Dimitrios Tsoumakos, and Nectarios Koziris</i>	
Dynamic Source Selection to Handle Changes of User's Interest in Continuous Query	6
<i>Kosuke Ohki, Yousuke Watanabe, and Hiroyuki Kitagawa</i>	
The (Similarity) Matrix Reloaded	8
<i>Avigdor Gal</i>	
Enabling Flexible Execution of Business Processes	10
<i>S. Jablonski, M. Faerber, F. Jochaud, M. Götz, and M. Iglér</i>	
Collaborative Environment for Engineering Simulations with Integrated VR Visualization	12
<i>Ismael H.F. Santos, Alberto B. Raposo, and Marcelo Gattass</i>	
A Method for Searching Keyword-Lacking Files Based on Interfile Relationships	14
<i>Tetsutaro Watanabe, Takashi Kobayashi, and Haruo Yokota</i>	
Really Simple Security for P2P Dissemination of Really Simple Syndication	16
<i>Anwitaman Datta and Liu Xin</i>	
Mining and Analyzing Organizational Social Networks Using Minimum Spanning Tree	18
<i>Victor Ströele A. Menezes, Ricardo Tadeu da Silva, Moisés Ferreira de Souza, Jonice Oliveira, Carlos E.R. de Mello, Jano Moreira de Souza, and Geraldo Zimbrão</i>	
MADIK: A Collaborative Multi-agent ToolKit to Computer Forensics	20
<i>Bruno W.P. Hoelz, Célia G. Ralha, Rajiv Geeverghese, and Hugo C. Junior</i>	
Modularizing Monitoring Rules in Business Processes Models	22
<i>Oscar González, Rubby Casallas, and Dirk Deridder</i>	

An Optimal Approach for Workflow Staff Assignment Based on Hidden Markov Models 24
Hedong Yang, Chaokun Wang, Yingbo Liu, and Jianmin Wang

Behavioral Compatibility of Web Services 27
Zhangbing Zhou, Sami Bhiri, Walid Gaaloul, Lei Shu, and Manfred Hauswirth

A Reverse Order-Based QoS Constraint Correction Approach for Optimizing Execution Path for Service Composition 29
Kaijun Ren, Nong Xiao, Jinjun Chen, and Junqiang Song

Posters of the 2008 ODBASE (Ontologies, DataBases, and Applications of Semantics) International Conference

Data Mining of Specific-Domain Ontology Components 31
J.R.G. Pulido, M.A. Aréchiga, and M.E.C. Espinosa

Distributed Data Mining by Means of SQL Enhancement 34
Marcin Gorawski and Ewa Pluciennik

Construction and Querying of Relational Schema for Ontology Instances Data 36
Maciej Falkowski and Czeslaw Jędrzejek

Evaluation of the Navigation through Image Parts in the ImageNotion Application 38
Andreas Walter, Gabor Nagypal, and Simone Braun

Instance-Based Ontology Matching Using Regular Expressions 40
Katrin Zaiß, Tim Schlüter, and Stefan Conrad

Workshop on Ambient Data Integration (ADI)

ADI 2008 PC Co-chairs' Message 43

Architectures

Modelling ETL Processes of Data Warehouses with UML Activity Diagrams 44
Lilia Muñoz, Jose-Norberto Mazón, Jesús Pardillo, and Juan Trujillo

Implementing Conceptual Data Integration in Process Modeling Methodologies for Scientific Applications 54
Bernhard Volz

Theoretical and Practical Challenges of Integrating Ecosystem Data 64
M. Hauhs, B. Trancón y Widemann, and O. Archner

Methods for Data Integration

The Health Problems of Data Integration	65
<i>Avigdor Gal</i>	
Computing Path Similarity Relevant to XML Schema Matching.....	66
<i>Amar Zerdazi and Myriam Lamolle</i>	
Improving Search and Navigation by Combining Ontologies and Social Tags	76
<i>Silvia Bindelli, Claudio Criscione, Carlo A. Curino, Mauro L. Drago, Davide Eynard, and Giorgio Orsi</i>	

Workshop on Agents and Web Services Merging in Distributed Environments (AWeSoMe)

AWESOME 2008 PC Co-chairs' Message.....	87
---	----

Agents, Grid and Applications

Teaching about Madrid: A Collaborative Agents-Based Distributed Learning Course	88
<i>José Luis Bosque, Pilar Herrero, and Susana Mata</i>	
The Principle of Immanence in GRID-Multiagent Integrated Systems ...	98
<i>Pascal Dugenie, Clement Jonquet, and Stefano A. Cerri</i>	
MASD: Towards a Comprehensive Multi-agent System Development Methodology	108
<i>T. Abdelaziz, M. Elammari, and C. Branki</i>	
A Mobile Device Based Multi-agent System for Structural Optimum Design Applications	118
<i>Cherif Branki, Tilmann Bitterberg, and Hanno Hildmann</i>	

Agent Communication and Coordination

Discovering Pragmatic Similarity Relations between Agent Interaction Protocols	128
<i>Maricela Bravo and José Velazquez</i>	
On the Relevance of Organizational Structures for a Technology of Agreement	138
<i>Holger Billhardt, Roberto Centeno, Alberto Fernández, Ramón Hermoso, Rubén Ortiz, Sascha Ossowski, and Matteo Vasirani</i>	

Learning, Information Exchange, and Joint-Deliberation through Argumentation in Multi-agent Systems	150
<i>Santi Ontañón and Enric Plaza</i>	

Web Services and SOA

A User-Centric Service Composition Approach	160
<i>Gabriela Vulcu, Sami Bhiri, Manfred Hauswirth, and Zhangbing Zhou</i>	
Towards Reliable SOA – An Architecture for Quality Management of Web Services	170
<i>Ingo J. Timm and Thorsten Scholz</i>	

Workshop on Community-Based Evolution of Knowledge-Intensive Systems (COMBEK)

COMBEK 2008 PC Co-chairs' Message	181
---	-----

Early Afternoon Session

Semi-automated Consensus Finding for Meaning Negotiation	183
<i>Christophe Debruyne, Johannes Peeters, and Allal Zakaria Arrassi</i>	
On Supporting HCOME-3O Ontology Argumentation Using Semantic Wiki Technology	193
<i>Konstantinos Kotis</i>	

Morning Session

Inferring Social Groups Using Call Logs	200
<i>Santi Phithakkitnukoon and Ram Dantu</i>	
Group Recommendation System for Facebook	211
<i>Enkh-Amgalan Baatarjav, Santi Phithakkitnukoon, and Ram Dantu</i>	

Late Afternoon Session

Towards a Scalable and Collaborative Information Integration Platform and Methodology	220
<i>Felix Van de Maele and Alicia Díaz</i>	
Methodological Approach to Determine Appropriately Annotated Resources in Narrow Folksonomies	230
<i>Céline Van Damme, Stijn Christiaens, and Damien Trog</i>	

IFAC/IFIP Workshop on Enterprise Integration, Interoperability and Networking (EI2N)

EI2N 2008 PC Co-chairs' Message.....	239
--------------------------------------	-----

Enterprise Networking

Business-IT Alignment Domains and Principles for Networked Organizations: A Qualitative Multiple Case Study.....	241
<i>Roberto Santana Tapia, Maya Daneva, Pascal van Eck, Nicté-Há Castro Cárdenas, and Leida van Oene</i>	
The View-Constraint Duality in Database Systems, Software Engineering, and Systems Engineering	253
<i>John A. Springer and Edward L. Robertson</i>	

Enterprise Integration and Interoperability

Mining Reference Process Models and Their Configurations	263
<i>Florian Gottschalk, Wil M.P. van der Aalst, and Monique H. Jansen-Vullers</i>	
Interoperability Maturity Models – Survey and Comparison	273
<i>Wided Guédria, Yannick Naudet, and David Chen</i>	
Using the Zachman Framework to Achieve Enterprise Integration Based-on Business Process Driven Modelling	283
<i>Javier Espadas, David Romero, David Concha, and Arturo Molina</i>	

Enterprise Modelling and Service Oriented Architecture

Enterprise Modelling Based Services Orchestration	294
<i>Qing Li, Canqiang Li, and Yun Wang</i>	
Service Oriented Architecture vs. Enterprise Architecture: Competition or Synergy?	304
<i>Ovidiu Noran and Peter Bernus</i>	
SCEP-SOA: An Applicative Architecture to Enhance Interoperability in Multi-site Planning	313
<i>Karim Ishak, Bernard Archimède, and Philippe Charbonnaud</i>	

Workshop on System/Software Architectures (IWSSA)

IWSSA 2008 PC Co-chairs' Message.....	323
---------------------------------------	-----

Workshop Introduction – Requirements and Architectural Design

Semantic-Aided Interactive Identification of Reusable NFR Knowledge Fragments	324
<i>Claudia López, Hernán Astudillo, and Luiz Marcio Cysneiros</i>	
Aspect-Oriented Modeling of Quality Attributes	334
<i>Mónica Pinto and Lidia Fuentes</i>	
Improving Security of Oil Pipeline SCADA Systems Using Service-Oriented Architectures	344
<i>Nary Subramanian</i>	

Evaluation

An Architecture to Integrate Automatic Observation Mechanisms for Collaboration Analysis in Groupware	354
<i>Rafael Duque, María Luisa Rodríguez, María Visitación Hurtado, Manuel Noguera, and Crescencio Bravo</i>	
A Case Study on Architectural Maturity Evaluation: Experience in the Consumer Electronics Domain	364
<i>Kangtae Kim</i>	
Evaluation of an Agent Framework for the Development of Ambient Computing	374
<i>Marcela D. Rodríguez and Jesús Favela</i>	

Architectural Design Based on Components, Services and Patterns

Defining Re-usable Composite Aspect Patterns: An FDAF Based Approach	384
<i>Kun Tian, Kendra M.L. Cooper, Kunwu Feng, and Yan Tang</i>	
Implementation Variants of the Singleton Design Pattern	396
<i>Krzysztof Stencel and Patrycja Węgrzynowicz</i>	
Semantic Interactions for Context-Aware and Service-Oriented Architecture	407
<i>Mehdi Khouja, Carlos Juiz, Ramon Puigjaner, and Farouk Kamoun</i>	
ReWiSe: A New Component Model for Lightweight Software Reconfiguration in Wireless Sensor Networks	415
<i>Amirhosein Taherkordi, Frank Eliassen, Romain Rouvoy, and Quan Le-Trung</i>	

Development

Tackling Automotive Challenges with an Integrated RE and Design Artifact Model.....	426
<i>Birgit Penzenstadler</i>	
A Q-Leaning-Based On-Line Planning Approach to Autonomous Architecture Discovery for Self-managed Software	432
<i>Dongsun Kim and Sooyong Park</i>	
Developing Collaborative Modeling Systems Following a Model-Driven Engineering Approach	442
<i>Jesús Gallardo, Crescencio Bravo, and Miguel Á. Redondo</i>	

Architectural Design Based on Components, Services and Frameworks

Assessing Component's Behavioral Interoperability Concerning Goals ...	452
<i>Weimin Ma, Lawrence Chung, and Kendra Cooper</i>	
A Reference Architecture for Automated Negotiations of Service Agreements in Open and Dynamic Environments	463
<i>Manuel Resinas, Pablo Fernández, and Rafael Corchuelo</i>	
Towards Checking Architectural Rules in Component-Based Design	473
<i>Sebastian Herold</i>	

Workshop on MOBILE and NETworking Technologies for Social Applications (MONET)

MONET 2008 PC Co-chairs' Message	479
--	-----

Challenges and New Approaches for Social Networking

Personal Sphere Information, Histories and Social Interaction between People on the Internet	480
<i>Maria Chiara Caschera, Fernando Ferri, and Patrizia Grifoni</i>	
Discovery of Social Groups Using Call Detail Records.....	489
<i>Huiqi Zhang and Ram Dantu</i>	
PALASS: A Portable Application for a Location-Aware Social System	499
<i>Martin Press, Daniel Goodwin, and Roberto A. Flores</i>	

Studies and Applications of Multimodality

Toward the Development of an Integrative Framework for Multimodal Dialogue Processing	509
<i>Arianna D’Ulizia, Fernando Ferri, and Patrizia Grifoni</i>	
A Comparison of Microphone and Speech Recognition Engine Efficacy for Mobile Data Entry	519
<i>Joanna Lumsden, Scott Durling, and Irina Kondratova</i>	
A GRID Approach to Providing Multimodal Context-Sensitive Social Service to Mobile Users	528
<i>Massimo Magaldi, Roberto Russo, Luca Bevilacqua, Stefania Pierno, Vladimiro Scotto di Carlo, Fabio Corvino, Luigi Romano, Luisa Capuano, and Ivano De Furio</i>	

Theories and Applications of Mobile Technology in Different Social Contexts

A Comparison of Pseudo-paper and Paper Prototyping Methods for Mobile Evaluations	538
<i>Joanna Lumsden and Ryan MacLean</i>	
A Model for Checking the Integrity Constraints of Mobile Databases ...	548
<i>Hamidah Ibrahim, Zarina Dzolkhifli, and Praveen Madiraju</i>	
Usability Issues of e-Learning Systems: Case-Study for Moodle Learning Management System	561
<i>Miroslav Minović, Velimir Štavljanin, Miloš Milovanović, and Dušan Starčević</i>	
CPL: Enhancing Mobile Phone Functionality by Call Predicted List	571
<i>Santi Phithakkitnukoon and Ram Dantu</i>	

Workshop on Ontology Content and Evaluation in Enterprise(OnToContent)+ Quantitative Semantic Methods for the Internet (QSI)

OnToContent+QSI 2008 PC Co-chairs’ Message	583
--	-----

Benefits of Ontologies and Human Factors

Measuring the Benefits of Ontologies	584
<i>Tobias Bürger and Elena Simperl</i>	
Towards a Human Factors Ontology for Computer-Mediated Systems ...	595
<i>Panagiotis Germanakos, Mario Belk, Nikos Tsianos, Zacharias Lekkas, Constantinos Mourlas, and George Samaras</i>	

Ontology Development in Collaborative Networks as a Process of Social Construction of Meaning	605
<i>Carla Pereira and António Lucas Soares</i>	

Folksonomies and Community Aspects

Toward a Community Vision Driven Topical Ontology in Human Resource Management	615
<i>Damien Trog, Stijn Christiaens, Gang Zhao, and Johanna de Laaf</i>	
Automatic Profiling System for Ranking Candidates Answers in Human Resources	625
<i>Rémy Kessler, Nicolas Béchet, Mathieu Roche, Marc El-Bèze, and Juan Manuel Torres-Moreno</i>	

Elements for Quantitative Semantics

Semantic Expansion of Service Descriptions	635
<i>Christian Sánchez and Leonid Sheremetov</i>	
Tuning Topical Queries through Context Vocabulary Enrichment: A Corpus-Based Approach	646
<i>Carlos M. Lorenzetti and Ana G. Maguitman</i>	
Measuring Heterogeneity between Web-Based Agent Communication Protocols	656
<i>Maricela Bravo and José Velazquez</i>	

Workshop on Object-Role Modeling (ORM)

ORM 2008 PC Co-chairs' Message	667
--------------------------------------	-----

Service Orientation

A Metamodel for Enabling a Service Oriented Architecture	668
<i>Baba Piprani, Chong Wang, and Keping He</i>	
Service-Oriented Conceptual Modeling	678
<i>Peter Bollen</i>	

Temporal Modeling and Dynamic Rules

Temporal Modeling and ORM	688
<i>Terry Halpin</i>	
Formal Semantics of Dynamic Rules in ORM	699
<i>Herman Balsters and Terry Halpin</i>	

Fact-Orientation and SBVR

Fact Orientation and SBVR: The Catalyst for Efficient and Fully Integrated Education	709
<i>Jos Vos</i>	
SBVR: A Fact-Oriented OMG Standard	718
<i>Peter Bollen</i>	

Requirements Analysis and Quality Assurance

An Adaptable ORM Metamodel to Support Traceability of Business Requirements across System Development Life Cycle Phases	728
<i>Baba Piprani, Marlena Borg, Josée Chabot, and Éric Chartrand</i>	
Requirements Specification Using Fact-Oriented Modeling: A Case Study and Generalization	738
<i>Gabor Melli and Jerre McQuinn</i>	
A Model for Data Quality Assessment	750
<i>Baba Piprani and Denise Ernst</i>	

Verbalization Issues

Verbalization for Business Rules and Two Flavors of Verbalization for Fact Examples	760
<i>Maurice Nijssen and Inge Lemmens</i>	
How to Avoid Redundant Object-References	770
<i>Andy Carver</i>	

Advanced Constraints and Tool Demos

A Closer Look at the Join-Equality Constraint	780
<i>Gerhard Skagestein and Ragnar Normann</i>	

Using Fact-Oriented Modeling Tools

Model Ontological Commitments Using ORM ⁺ in T-Lex	787
<i>Yan Tang and Damien Trog</i>	
DOGMA-MESS: A Tool for Fact-Oriented Collaborative Ontology Evolution	797
<i>Pieter De Leenheer and Christophe Debruyne</i>	
Evaluation and Enhancements for NORMA: Student User Suggestions	807
<i>Gordon C. Everest</i>	

Workshop on Pervasive Systems (PerSys)

PerSys 2008 PC Co-chairs' Message	819
---	-----

PerSys Opening and Workshop Keynote

Learning, Prediction and Mediation of Context Uncertainty in Smart Pervasive Environments	820
<i>Sajal K. Das and Nirmalya Roy</i>	

Middleware and Applications

Implicit Middleware: A Ubiquitous Abstract Machine	830
<i>T. Riedel, M. Beigl, M. Berchtold, C. Decker, and A. Puder</i>	
Uncertainty Management in a Location-Aware Museum Guide	841
<i>Pedro Damián-Reyes, Jesús Favela, and Juan Contreras-Castillo</i>	
Modeling Context Life Cycle for Building Smarter Applications in Ubiquitous Computing Environments	851
<i>Hyunjun Chang, Seokkyoo Shin, and Changshin Chung</i>	

Frameworks and Platforms

Game Development Framework Based Upon Sensors and Actuators	861
<i>Ray van Brandenburg, Arie Horst, Bas Burgers, and Nirvana Meratnia</i>	
HTTPStream Platform – Low Latency Data for the Web	873
<i>Marios Tziakouris and Paraskevas Evripidou</i>	
Password Streaming for RFID Privacy	883
<i>Victor K.Y. Wu and Roy H. Campbell</i>	

Workshop on Reliability in Decentralized Distributed Systems (RDDS)

RDDS 2008 PC Co-chairs' Message	893
---------------------------------------	-----

Peer-to-Peer

Reliable Peer-to-Peer Semantic Knowledge Sharing System	894
<i>Abdul-Rahman Mawlood-Yunis</i>	
How to Improve the Reliability of Chord?	904
<i>Jacek Cichoń, Andrzej Jasiński, Rafał Kapelko, and Marcin Zawada</i>	

Distributed Algorithms

A Performance Evaluation of g -Bound with a Consistency Protocol Supporting Multiple Isolation Levels.....	914
<i>R. Salinas, F.D. Muñoz-Escoí, J.E. Armendáriz-Iñigo, and J.R. González de Mendivil</i>	

Integrity Dangers in Certification-Based Replication Protocols	924
<i>M.I. Ruiz-Fuertes, F.D. Muñoz-Escoí, H. Decker, J.E. Armendáriz-Iñigo, and J.R. González de Mendivil</i>	

**Workshop on Semantic Extensions to Middleware:
Enabling Large Scale Knowledge (SEMELS)**

SEMELS 2008 PC Co-chairs' Message	935
---	-----

Extending Middleware with Semantics

Towards Semantically Enhanced Peer-to-Peer File-Sharing	937
<i>Alan Davoust and Babak Esfandiari</i>	

Efficient Content Location in Massively Distributed Triplespaces	947
<i>Kia Teymourian and Lyndon Nixon</i>	

Extending ESB for Semantic Web Services Understanding.....	957
<i>Antonio J. Roa-Valverde and José F. Aldana-Montes</i>	

Applications of Semantically Extended Middleware

Distributed Workflows: The OpenKnowledge Experience	965
<i>Paolo Besana, Vivek Patkar, David Glasspool, and Dave Robertson</i>	

SD-Core: A Semantic Middleware Applied to Molecular Biology.....	976
<i>Ismael Navas-Delgado, Amine Kerzazi, Othmane Chniber, and José F. Aldana-Montes</i>	

Towards Knowledge in the Cloud	986
<i>Davide Cerri, Emanuele Della Valle, David De Francisco Marcos, Fausto Giunchiglia, Dalit Naor, Lyndon Nixon, Kia Teymourian, Philipp Obermeier, Dietrich Rebholz-Schuhmann, Reto Krummenacher, and Elena Simperl</i>	

**Workshop On Semantic Web and Web Semantics
(SWWS)**

SWWS 2008 PC Co-chairs' Message	997
---------------------------------------	-----

SWWS I

A Deductive Approach for Resource Interoperability and Well-Defined Workflows	998
<i>Nadia Yacoubi Ayadi, Zoé Lacroix, and Maria-Esther Vidal</i>	
Ontology Robustness in Evolution.....	1010
<i>Paolo Ceravolo, Ernesto Damiani, and Marcello Leida</i>	
Learning to Get the Value of Quality from Web Data	1018
<i>Guzmán Llambías, Regina Motz, Federico Toledo, and Simon de Uvarow</i>	
Building the Semantic Utility with Standards and Semantic Web Services.....	1026
<i>Mathias Uslar, Sebastian Rohjans, Stefan Schulte, and Ralf Steinmetz</i>	

SWWS II

TICSA Approach: Five Important Aspects of Multi-agent Systems	1036
<i>Maja Hadzic and Elizabeth Chang</i>	
Applications of the ACGT Master Ontology on Cancer	1046
<i>Mathias Brochhausen, Gabriele Weiler, Luis Martín, Cristian Cocos, Holger Stenzhorn, Norbert Graf, Martin Dörr, Manolis Tsiknakis, and Barry Smith</i>	

SWWS III

An Ontology-Based Crawler for the Semantic Web	1056
<i>Felix Van de Maele, Peter Spyns, and Robert Meersman</i>	
Consensus Emergence from Naming Games in <i>Representative Agent</i> Semantic Overlay Networks	1066
<i>Gabriele Gianini, Ernesto Damiani, and Paolo Ceravolo</i>	
A Semantic Crawler Based on an Extended CBR Algorithm	1076
<i>Hai Dong, Farookh Khadeer Hussain, and Elizabeth Chang</i>	
Author Index	1087