

OnTheMove 2007 – Workshop Program

SUNDAY 25 Nov

OTM Academy

Sun 25 Nov

09:00-10:30 Opening and Invited Talk

Welcome and Presentation

Antonia Albani, Torben Hansen, Johannes Maria Zaha

The journey of a doctoral student

Jan L.G. Dietz

10:30-12:30 Session label: **Information Systems (I)**
Session chair: **Johannes Maria Zaha**

Elaborating a Decentralized Market Information System

René Brunnerm (Polytechnic University of Catalonia, Barcelona, Spain), Felix

Freitag (Polytechnic University of Catalonia, Barcelona, Spain)

COPA-CASE: Methodological Environment for the Generation, Application and Validation of Coordination Patterns

Pedro Luis Pérez-Serrano (Universidad de Extremadura, Cáceres, Spain), Marisol

Sánchez-Alonso (Universidad de Extremadura, Cáceres, Spain)

12:30-14:00 Lunch

14:00-16:00 Session label: **Information Systems (II)**
Session chair: **Torben Hansen**

Providing Support For Data Replication Protocols With Multiple Isolation Levels

Josep Maria Bernabé-Gisbert (Instituto Tecnológico de Informática, Valencia, Spain)

Market Driven Product Ontologies

Davor Meersman (Vrije Universiteit Brussel / Synergetics, Belgium)

16:00-16:30 Coffee break

16:30-17:30 Session label: **Information Systems (III)**
Session chair: **Antonia Albani**

Smart Distribution of Bio-Signal Processing Tasks in M-health

Hailiang Mei (University of Twente, The Netherlands)

RDDS

Sun 25 Nov

10:30

Opening

11:00-12:30

Session label: **Distributed Algorithms**

Session chair: **Pascal Felber**

Improving on Version Stamps

Paulo Sergio Almeida, Carlos Baquero, and Victor Fonte (Universidade do Minho, Portugal)

Self-Healing in Binomial Graph Networks

Thara Angskun (The University of Tennessee, USA), George Bosilca (Oak Ridge National Laboratory, USA) and Jack Dongarra (The University of Manchester, UK)

A Self-stabilizing Distributed Algorithm For Resolving Conflicts

Brahim Hamid, Mohamed Mosbah and Akka Zemhari (LaBRI-University of Bordeaux-1, France)

12:30-14:00

Lunch

14:00-15:00

Session label: **Self Adaptive Systems**

Session chair: **Sebastian Voss**

A Metaprotocol Outline for Database Replication Adaptability

M.I. Ruiz-Fuertes, R. de Juan-Marin, J. Pla-Civera, F. Castro-Company, and F.D. Munoz-Esco (Instituto Tecnológico de Informática Universidad Politécnica de Valencia, Spain)

A Reliable Context-Aware Intrusion Tolerant System

Ayda Saidane (University of Trento, Italy)

15:30-16:00

Coffee break

16:00-17:00

Session label: **Fault Tolerant Systems**

Session chair: **Eiko Yoneki**

Scheduling in Time-Triggered Networks

Sebastian Voss (EADS Deutschland GmbH, Germany)

17:00-18:00

Discussion

18:00

Wrap-up

OTM Academy

Mon 26 Nov

09:00-10:00 OTM Opening, DOA'07 Keynote
Mark Little, Red Hat
Transaction processing in a Service Oriented Architecture

10:00-10:30 Coffee break

10:30-12:30 Session label: **Service-Oriented Approaches (I)**
Session chair: **Johannes Maria Zaha**

Towards a Service-Oriented methodology: business-driven guidelines for service identification

Dieter Van Nuffel, (University of Antwerp, Belgium)

Collaborative Management of Distributed Business Processes - A Service-Based Approach

Sonja Zaplata, (University of Hamburg, Germany)

12:30-14:00 Lunch

Session label: **Service-Oriented Approaches (II)**

14:00-16:00 Session chair: **Torben Hansen**

SemanticWeb Service Offer Discovery

Jacek Kopecky (Digital Enterprise Research Institute, Innsbruck, Austria)

Top-down Modeling Methodology for Model-Driven SOA Construction

Jan Ricken, (University of Namur, Belgium)

16:00-16:30 Coffee break

16:30-17:30 Closing

Practical hints for the doctoral thesis

Jan L.G. Dietz

17:30- 18:30 **IS'07 Keynote**

Whitfield Diffie, Sun Microsystems

The Past, Present, and Future of Information Security

19:00 **OTM Welcome Reception**

AWeSOMe

Mon 26 Nov

08:00-09:00 Registration

09:00-10:00 OTM Opening, DOA'07 Keynote
Mark Little, Red Hat
Transaction processing in a Service Oriented Architecture

10:00-10:30 Coffee break

10:30-12:30 Session label: **Resource Allocation and Workflows**
Session chair: **Rainer Unland**

An Agents-Based Cooperative Awareness Model to Cover Load Balancing Delivery in grid environments

Pilar Herrero (Universidad Politécnica de Madrid, Spain), Jose L. Bosque (Universidad de Cantabria, Spain), María S. Pérez (Universidad Politécnica de Madrid, Spain)

Workflow Management in Grid Era: from Process-Driven Paradigm to Goal-Driven One

Jinlei Jiang (Tsinghua University, China), Shaohua Zhang (Tsinghua University, China)
Johann Schlichter (Technische Universitaet Muenchen, Germany), Guangwen Yang (Tsinghua University, China)

Business Process Quality Metrics: Entropy and the Uncertainty of Workflows

Jae-Yoon Jung (Seoul National University, Korea), Jorge Cardoso (University of Madeira, Portugal)

DyMRA:Dynamic Market Deployment for Decentralized Resource Allocation

Daniel Lázaro, (Universitat Oberta de Catalunya Spain), Xavier Vilajosana, (Universitat Oberta de Catalunya Spain), Joan Manuel Marques, (Universitat Oberta de Catalunya Spain)

12:30-14:00 Lunch

14:00-15:30 Session label: **Agent-Based Approaches**
Session chair: **Rainer Unland**

Measuring Semantic Similarity Agent between Documents

Yumiko Mizoguchi (Corporate Research & Development Center, Toshiba Corp Japan), Shinichi Nagano (Corporate Research & Development Center, Toshiba Corp Japan), Masumi Inaba (Corporate Research & Development Center, Toshiba Corp Japan), Takahiro Kawamura (Corporate Research&Development Centr, Toshiba Corp Japan), Toshiaki Nakamoto (Toshiba Information Systems Corporation Japan), Kazuma Asakawa (Toshiba Information Systems Corporation Japan)

Engineering a MAS Platform for Semantic Service Integration based on the SWSA

Özgür Gümüş (Ege University, Bornova, Turkey), Önder Gürçan (Ege University, Bornova, Turkey), Geylani Kardas (Ege University, Bornova, Turkey), Erdem Eser Ekinci (Ege University, Bornova, Turkey), Oguz Dikenelli (Ege University, Bornova, Turkey)

A Planner Infrastructure for Semantic Web Enabled Agents

Erdem Eser Ekinci (Ege University, Bornova, Turkey), Ali Murat Tiryaki (Ege University, Bornova, Turkey), Onder Gurcan (Ege University, Bornova, Turkey), Oguz Dikenelli (Ege University, Bornova, Turkey)

15:30-16:00 Coffee break

16:00-17:30 Session label: **Semantic Web Approaches**
Session chair: **José Luis Bosque**

Semantically Resolving Type Mismatches in Scientific Workflows

Kheiredine Derouiche (University of Southampton, Highfield, Southampton, UK), Denis A Nicole (University of Southampton, Highfield, Southampton, UK)

BPEL for Semantic Web Services (BPEL4SWS)

Jörg Nitzsche (University of Stuttgart, Germany), Tammo van Lessen (University of Stuttgart, Germany), Dimka Karastoyanova (University of Stuttgart, Germany), Frank Leymann (University of Stuttgart, Germany)

A Framework for Generation of AXML Web Services for Data Integration Web Applications

Vânia M. P. Vidal (Federal University of Ceará, Brazil), Fernando Cordeiro Lemos (Federal University of Ceará, Brazil)

17:30- 18:30 **IS'07 Keynote**

Whitfield Diffie, Sun Microsystems

The Past, Present, and Future of Information Security

19:00 **OTM Welcome Reception**

PPN

Mon 26 Nov

08:00 - 09:00 Registration

09:00-10:00 OTM Opening, DOA '07 Keynote
Mark Little, Red Hat
Transaction processing in a Service Oriented Architecture

10:00-10:30 Coffee break

10:30 - 12:30 Session label: **P2P security**
Session chair: **TBA**

Nomad: Virtual Environments On P2P Voronoi Overlays

Laura Ricci (University of Pisa, Italy), Andrea Salvadori (University of Pisa, Italy)

A Novel Overlay Network for a Secure Global Home Agent Dynamic Discovery

Angel Cuevas (University Carlos III of Madrid, Spain), Ruben Cuevas (University Carlos III of Madrid, Spain), Carmen Guerrero (University Carlos III of Madrid, Spain), Manuel Urueña (University Carlos III of Madrid, Spain), Jose Gutierrez (Aalborg University, Denmark)

Recursive Replication: A Survival Solution for Structured P2P Information Systems to Denial of Service Attacks

Xavier Bonnaire (University of Santa Maria, Chile), Olivier Marin (University of Paris 6, France)

10:30-11:00 Coffee break

11:00-12:30 Session label: **P2P routing**
Session chair: **TBA**

Adaptive Expression based Routing Protocol for P2P Systems

Imran Rao (University of Melbourne, Australia), Aaron Harwood (University of Melbourne, Australia), Shanika Karunasekera (University of Melbourne, Australia)

A Socially Inspired Peer-to-Peer Resource Discovery Service for Delay Tolerant Networks

Tuan Dung Nguyen (GET/ENST Bretagne, France), Siegfried Rouvrais, (GET/ENST Bretagne, France)

12:30-14:00 Lunch

14:00-15:30 Session label: **Content distribution**
Session chair: **TBA**

Structured peer-to-peer network for live-content distribution

Sergio Machado (Technical University of Catalonia, Spain), Javier Ozon (Technical University of Catalonia, Spain), Xavier Hesselbach (Technical University of Catalonia, Spain)

Bittella: A Novel Content Distribution Overlay based on Bittorrent and Social Groups

Ruben Cuevas (University Carlos III of Madrid, Spain), Carmen Guerrero (University Carlos III of Madrid, Spain), Isaias Martinez-Yelmo (University Carlos III of Madrid, Spain), Carlos Navarro (University Carlos III of Madrid, Spain), Angel Cuevas (University Carlos III of Madrid, Spain)

CAP: A Context-Aware Peer-to-Peer System

Marguerite Fayçal (GET/ENST Paris – France Telecom R&D, France), Ahmed Serhrouchni, (GET/ENST Paris, France)

15:30-16:00 Coffee break

16:00-17:30 Session label: **General**
Session chair: **TBA**

Managing Difference-based Objects with Sub-networks in Peer-to-Peer Environments

Daisuke Fukuchi (The University of Tokyo, Japan), Yuichi Sei (The University of Tokyo, Japan), Shinichi Honiden (The University of Tokyo, Japan)

Peer Enterprises: Possibilities, Challenges and Some Ideas Towards Their Realization

Ankur Gupta (Model Institute of Engineering and Technology, India), Lalit Awasthi, (National Institute of Technology, India)

In-Network Event Processing in a Peer to Peer Broker Network for the Internet of Things

Holger Ziekow (Humboldt-University of Berlin, Germany)

17:30- 18:30 **IS'07 Keynote**
Whitfield Diffie, Sun Microsystems
The Past, Present, and Future of Information Security

19:00 **OTM Welcome Reception**

PerSys

Mon 26 Nov

08:00-09:00 Registration

09:00-10:00 OTM Opening, DOA'07 Keynote
Mark Little, Red Hat
Transaction processing in a Service Oriented Architecture

10:00-10:30 Coffee break

10:30-11:00 Session label: **PerSys Opening and Keynote**
Session chair: **Skevos Evripidou**

Social Computing on Mobiles

Roy Campbell (University of Illinois, Urbana-Champaign, USA)

- 11:00-12:30 Session label: **Semantics for Pervasive Systems**
 Session chair: **Skevos Evripidou**
- COMITY - Conflict Avoidance in Pervasive Computing Environments**
 Verena Tuttlies (University of Mannheim, Germany), Gregor Schiele (University of Mannheim, Germany), Christian Becker (University of Mannheim, Germany),
- An OSGi-based Semantic Service-Oriented Device Architecture**
 Panagiotis Gouvas (National Technical University of Athens, Greece)
 Athanasios Bouras (National Technical University of Athens, Greece)
 Gregoris Mentzas (National Technical University of Athens, Greece)
- A Semantic Framework for Priority-based Service Matching in Pervasive Environments**
 Ayomi Bandara (University of Southampton, UK), Terry Payne (University of Southampton, UK), David De Roure (University of Southampton, UK), Tim Lewis (Toshiba Research Europe Ltd, Bristol, UK)
- 12:30-14:00 Lunch
- 14:00-15:30 Session label: **Privacy in Pervasive Environments**
 Session chair: **Susana Alcalde Bagües**
- Enhancing Privacy by Applying Information Flow Modelling in Pervasive Systems**
 Steffen Ortmann, Peter Langendörfer, Michael Maaser (IHP microelectronics, Germany)
- Managing Pervasive Environment Privacy using the "Fair Trade" Metaphor**
 Abraham Esquivel, Pablo A. Haya, Manuel García-Herranz, Xavier Alamán (Escuela Politécnica Superior, Universidad Autónoma de Madrid, Spain)
- Spontaneous Privacy Policy Negotiations in Pervasive Environments**
 Sören Preibusch (German Institute for Economic Research, Berlin, Germany)
- 15:30-16:00 Coffee break
- 16:00-17:30 Session label: **Brief Presentations from Workshop Attendees not in program**
 Session chair: **Roy Campbell**
- 17:30- 18:30 **IS'07 Keynote**
 Whitfield Diffie, Sun Microsystems
 The Past, Present, and Future of Information Security
- 19:00 **OTM Welcome Reception**

SSWS

Tue 27 Nov

08:00-09:00 Registration

09:00-10:00 ODBASE'07 Keynote
York Sure, SAP
Towards Next Generation Value Networks

10:00-10:30 Coffee break

10:30-12:30 Session label: **Large Scale Knowledge Bases and Data Integration**
Session chair: **Bijan Parsia**

A Pragmatic Approach for RDFS Reasoning over Large Scale Instance Data
Tugba Ozacar, Ovunc Ozturk, Murat Osman Unalir, (Ege University, Izmir, Turkey)

URI Identity Management for Semantic Web Data Integration and Linkage
Afriz Jaffri, Hugh Glaser, Ian Millard (University of Southampton, UK)

Hawkeye: A Practical Large Scale Demonstration of Semantic Web Integration
Zhengxiang Pan, Abir Qasem, Sudhan Kanitkar, Fabiana Prabhakar, Jeff Heflin (Lehigh University, PA, USA)

An Evaluation of Triple-Store Technologies for Large Data Stores
Kurt Rohloff, Mike Dean, Ian Emmons, Dorene Ryder, John Sumner (BBN Technologies, MA, USA)

12:30-14:00 Lunch

14:00-15:30 Session label: **Query Languages and Semantic Mapping**
Session chair: **Thorsten Liebig**

Modular Web Queries—From Rules to Stores
Uwe Aßmann (Technische Universität Dresden, Germany), Sacha Berger (Ludwig-Maximilians-Universität München, Germany), François Bry (Ludwig-Maximilians-Universität München, Germany), Tim Furche (Ludwig-Maximilians-Universität München, Germany), Jakob Henriksson (Technische Universität Dresden, Germany), Jendrik Johannes (Technische Universität Dresden, Germany)

Adaptive Semantic Interoperability Strategies for Knowledge Based Networking
Song Guo, John Keeney, Declan O'Sullivan, David Lewis (Trinity College Dublin, Ireland)

Leveraging the Expressivity of Grounded Conjunctive Query Languages,
Alissa Kaplunova, Ralf Moeller, Michael Wessel (TU Hamburg-Harburg, Germany)

15:30-16:00 Coffee break

16:00-17:30 Session label: **Scalable Reasoning and discussion on OWL benchmarks**
Session chair: Bijan Parsia

Scalability of OWL Reasoning: Role condensates
Ralf Möller, Sebastian Wandelt (TU Hamburg-Harburg, Germany)

Parallelizing Tableaux-Based Description Logic Reasoning
Thorsten Liebig, Felix Müller (Inst. of AI, Ulm University, Germany)

Open discussion on OWL benchmarks

AWeSOMe

Tue 27 Nov

08:00-09:00 Registration

09:00-10:00 ODBASE'07 Keynote
York Sure, SAP
Towards Next Generation Value Networks

10:00-10:30 Coffee break

10:30-12:30 Session label: **Agent-Based Applications**
Session chair: **Rainer Unland**

From a Goal-Oriented methodology to a BDI agent language: the case of Tropos and Alan
Francesco Pagliarecci (Università Politecnica delle Marche, Italy)
Loris Penserini (Centre for Scientific and Technological Research, Trento, Italy)
Luca Spalazzi (Università Politecnica delle Marche, Italy)

A Human-like SOA-based Interdisciplinary Framework for Intelligent Virtual Agents
Mauricio Paletta (Universidad Nacional Experimental de Guayana, Venezuela), Pilar Herrero (Universidad Politécnica de Madrid, Spain)

A Group Selection Pattern optimizing agent-based Virtual Organizations in Grids
Isaac Chao (Polytechnic University of Catalonia, Spain), Oscar Ardaiz (Public University of Navarra, Spain), Ramon Sanguesa (Polytechnic University of Catalonia, Spain)

12:30-14:00 Lunch

14:00-15:30 Session label: **Web Services Approaches**
Session chair: **Pilar Herrero**

WSBL: Web Service Architecture for Financial Products
Marcos Aza (Fund Research Investment Consulting, Madrid, Spain), Jose Luis Bosque (Universidad de Cantabria, Santander, Spain)

Web Services System for distributed technology upgrade within an e-maintenance framework.
Eduardo Gilabert (Fundación Tekniker, Eibar, Spain), Susana Ferreiro (Fundación Tekniker, Eibar, Spain), Aitor Arnaiz (Fundación Tekniker, Eibar, Spain)

15:30-16:00 Coffee break

16:00-17:30 **IEEE FIPA Agent and Web Services Interoperability (AWSI) Working Group Meeting**

PerSys

Tue 27 Nov

08:00-09:00 Registration

09:00-10:00 ODBASE'07 Keynote
York Sure, SAP
Towards Next Generation Value Networks

10:00-10:30 Coffee break

- 10:30-12:00 Session label: **Context-aware Computing**
Session chair: **Anja Schanzenberger**
- Combining Pragmatics and Intelligence in Semantic Web Service Discovery**
Electra Tamani (University of Cyprus, Nikosia, Cyprus), Paraskevas Evripidou (University of Cyprus, Nikosia, Cyprus)
- Modelling Context-aware Multimedia Community Content on Mobile Devices**
Diana Weiss (Ludwig-Maximilians-University, Munich, Germany)
- Towards a Versatile Problem Diagnosis Infrastructure for Large Wireless Sensor Networks**
Konrad Iwanicki (Vrije University, Amsterdam, Netherlands), Maarten van Steen (Vrije University, Amsterdam, Netherlands)
- 12:00-12:30 Session label: **Panel: Social Computing and Surveillance**
Session chair: **Roy Campbell**
- 12:30-14:00 Lunch
- 14:00-15:30 Session label: **Location Sensing and Management**
Session chair: **Irina Kondratova**
- Processing Location-Dependent Queries with Location Granules**
Sergio Ilarri (University of Zaragoza, Spain), Eduardo Mena (University of Zaragoza, Spain), Carlos Bobed (University of Zaragoza, Spain)
- A Model Checking-Based Approach for Location Query Processing in Pervasive Computing Environments**
Christian Hoareau (National Institute of Informatics, Japan), Ichiro Satoh (National Institute of Informatics, Japan)
- Scalable Inter-Vehicular Applications,**
Jonathan Davies (University of Cambridge, UK), Alastair Beresford (University of Cambridge, UK)
- 15:30-16:00 Coffee break
- 16:00-17:00 Session label: **Mobility in Pervasive Systems**
Session chair: **Patrizia Grifoni**
- Towards Personal Privacy Control**
Susana Alcalde Bagües (Public University of Navarra, Navarra, Spain), Andreas Zeidler (Siemens AG, Munich, Germany), Carlos Fernandez Valdivielso (Public University of Navarra, Spain), Ignacio R. Matias (Public University of Navarra, Spain)
- Supporting Adaptive Application Mobility**
Francis David, Bill Donkervoet, Jeffrey Carlyle, Ellick Chan, Roy Campbell (University of Illinois, Urbana-Champaign, USA)

ORM

Wed 28 Nov

08:00-09:00 Registration

09:00-10:00 CoopIS'07 Keynote
Donald Ferguson, Microsoft
The Internet Service Bus

10:00-10:30 Coffee break

10:30-12:30 Session label: **Metamodeling**
Session chair: **Terry Halpin**

Welcome, and Introduction of Participants

A NIAM2007 Conceptual Analysis of the ISO and OMG MOF Four Layer Metadata Architectures

Inge Lemmens, Maurice Nijssen and Sjr Nijssen (PNA, The Netherlands)

A Meta-Model for Ontologies with ORM2

Christina Tziviskou (Politecnico di Milano, Italy), C. Maria Keet (Free University of Bozen-Bolzano, Italy)

12:30-14:00 Lunch

14:00-15:30 Session label: **Description Logics and OWL**
Session Chair: **Sjr Nijssen**

Mapping ORM into the SHOIN/OWL Description Logic

Mustafa Jarrar (Vrije Universiteit Brussel, Belgium)

Mapping OWL-DL into ORM/RIDL

Dang Bui Bach, Robert Meersman, Peter Spyns and Damien Trog (Vrije Universiteit Brussel, Belgium)

15:30-16:00 Coffee

16:00-17:30 Session label: **Banking Applications**
Session chair: **Baba Piprani**

Promising Chance of Innovation for Conceptual Modeling in Commerzbank

Mario Gutknecht (Commerzbank, Germany)

Industrial Experience with Fact Based Modeling at a Large Bank

Jos Rozendaal (UCademy BV, The Netherlands)

OnToContent

Wed 28 Nov

08:00-09:00 Registration

09:00-10:00 CoopIS'07 Keynote
Donald Ferguson, Microsoft
The Internet Service Bus

10:00-10:30 Coffee break

10:30-12:30 Session label: **Ontology Design and Evaluation**
Session chair: **Mustafa Jarrar**

Introduction: Ontologies - Reaching Out to the Real World

Mustafa Jarrar (Vrije Universiteit Brussel, Belgium), Andreas Schmidt (FZI Research Center for Information Technologies, Karlsruhe, Germany on behalf of the Ontology Outreach Advisory)

Evaluation Framework for Automatic Ontology Extraction Tools: An Experiment

Jinsoo Park, Wonchin Cho, Sangkyu Rho (Seoul National University, South Korea)

Ontology Design Risk Analysis

Carlos Ferreira, Helena Pinto, Andre Martins (IST/INESC-ID, Lisbon, Portugal)

12:30-14:00 Lunch

14:00-15:30 Session label: **Ontology-based Decisions and Dialogues**
Session chair: **Andreas Schmidt**

On Conducting a Decision Group to Construct Semantic Decision Tables

Yan Tang

Ontological modeling for Interactive Question Answering

Roberto Basili (University of Rome Tor Vergata, Italy), Diego De Cao (University of Rome Tor Vergata, Italy), Cristina Giannone, (University of Rome Tor Vergata, Italy)

15:30-16:00 Coffee break

16:00-17:30 Session label: **Ontology-based Medical Applications**
Session chair: **Andreas Schmidt**

Federated Ontology Search for the Medical Domain

Vasco Pedro, Lucian Lita, Radu Niculescu, Jaime Carbonell, Bharat Rao

An Ontology-Based Technique for Validation of MRI Brain Segmentation Methods

Bruno Alfano (National Research Council, CNR, Napoli, Italy), Giuseppe De Pietro (National Research Council, CNR, Napoli, Italy), Amalia Esposito (National Research Council, CNR, Napoli, Italy)

Discussion and Closing Remarks

Mustafa Jarrar, (Vrije Universiteit Brussel, Belgium)

Andreas Schmidt (FZI Research Center for Information Technologies, Karlsruhe, Germany - on behalf of the Ontology Outreach Advisory)

ORM

Thu 29 Nov

08:00-09:00 Registration

09:00-10:00 GADA'07 Keynote
Dennis Gannon, Indiana University
A Service Architecture for eScience Grid Gateways

10:00-10:30 Coffee break

10:30-12:30 Session Label: **Formal Extensions**
Session Chair: **Herman Balsters**

Reduction Transformations in ORM

Terry Halpin, Andy Carver, Kevin Owen (Neumont University, USA)

Advances in FCO-IM: A Shorter Algorithm for Determining Intra Fact Type Uniqueness Constraints

Jan Pieter Zwart, Guido Bakema (HAN University of Applied Science, The Netherlands)

Visualizing Formalisms with ORM Models

Sietse Overbeek, Patrick van Bommel, Erik Proper, Daan Rijsenbrij (Radboud University, The Netherlands)

12:30-14:00 Lunch

14:00-15:30 **Session 5: Data Integration** (Chair: Mario Gutknecht)

Object Role Modeling Enabled Metadata Repository

Bryan Shelstad and Necito Dela Cruz (Boston Scientific, USA)
Patrick Hallock (InConcept, USA)
Dick Barden (Fujitsu Consulting, USA)

Using ORM in an Ontology Based Approach for a Common Mapping

Baba Piprani (SICOM, Canada)

15:30-16:00 Coffee

16:00-17:30 **Session 6: Data Integration and Tool Demos** (Chair: Tony Morgan)

Modeling Data Federations in ORM

Herman Balsters (University of Groningen, The Netherlands), Terry Halpin (Neumont University, USA)

Demonstrations of Fact-oriented Tools

(Belgium, The Netherlands, USA)

MONET

Thu 29 Nov

08:00-09:00 Registration

09:00-10:00 GADA'07 Keynote
Dennis Gannon, Indiana University
A Service Architecture for eScience Grid Gateways

10:00-10:30 Coffee break

10:30-12:30 Session label: **Personalization in Networked Systems**
Session chair: **Arianna D'Ulizia**

Personalized Information Access in a Wiki using Structured Tagging
Anmol Tomar, Andreas Wombacher, Karl Aberer (Ecole Polytechnique Federale de Lausanne, Switzerland)

A Collection-Oriented Framework for Social Applications
Alexandre de Spindler, Michael Grossniklaus, Moira C. Norie (Institute for Information Systems, Zurich, Switzerland)

A Virtual Shopper Customer Assistant in Pervasive Environments
Antonella Santangelo (University of Palermo, Palermo, Italy), Agnese Augello (University of Palermo, Italy), Salvatore Sorce (University of Palermo, Italy), Giovanni Pilato (University of Palermo, Italy), Antonio Gentile (University of Palermo, Italy), Alessandro Genco (University of Palermo, Italy) Salvatore Gaglio (Italian National Research Council, Italy)

Profiling nomadic users considering preferences and contexts of use
Angela Carrillo-Ramos, Marlène Villanova-Oliver, Jérôme Gensel, Hervé Martin (LIG Laboratory, Saint Martin D'Hères, France)

12:30-14:00 Lunch

14:00-15:30 Session label: **Mobile Learning Environments**
Session chair: **Patrizia Grifoni**

Social knowledge building in a mobile learning environment
Marco Arrigo, Onofrio Di Giuseppe, Giovanni Fulantelli, Manuel Gentile, Gaspare Novara, Luciano Seta, Davide Taibi (Italian National Research Council, Palermo)

Improving Collaboration and Interaction in Distributed B-learning Environment
Nidia Moncallo R. (Universidad Nacional Experimental Politécnica "Antonio José de Sucre", Barquisimeto, Venezuela), Pilar Herrero, Universidad Politécnica de Madrid, Spain), Luis Joyanes (Universidad Pontificia de Salamanca, Spain)

Re-experiencing History in Archaeological Parks by Playing a Mobile Augmented Reality Game
Carmelo Ardito (Università degli Studi di Bari, Italy), Paolo Buono (Università degli Studi di Bari, Italy), Maria Francesca Costabile (Università degli Studi di Bari, Italy), Rosa Lanzilotti (Università degli Studi di Bari, Italy), Thomas Pederson (Università degli Studi di Bari, Italy)

15:30-16:00 Coffee break

16:00-17:30 Session label: **Theories and applications of Multimodal systems**
Session chair: **Maurizio Rafanelli**

An Approach for Managing Ambiguities in Multimodal Interaction
Maria Chiara Caschera, Fernando Ferri, Patrizia Grifoni (IRPPS-CNR, Rome, Italy)

A hybrid grammar-based approach to multimodal languages specification

Arianna D'Ulizia, Fernando Ferri, Patrizia Grifoni (IRPPS-CNR, Italy)

Enabling Rapid Development of Multimodal Data Entry Applications

Irina Kondratova, Scott Durling (Institute for Information Technology – NRC, Fredericton, Canada)

SWWS

Thu 29 Nov

08:00-09:00 Registration

09:00-10:00 GADA'07 Keynote

Dennis Gannon, Indiana University

A Service Architecture for eScience Grid Gateways

10:00-10:30 Coffee break

10:30-11:10 Session label: **Ontology Development, Management and Evolution**

Session chair: **Tharam S. Dillon**

An Ontology-Driven Architecture for re-using Semantic Web Services

Carlos Granell, Dolores María Llidó, Rafael Berlanga, Michael Gould (Department of Information Systems Universtiat Jaume I, Castellón, Spain)

From Data to Ontology: An Overview

Shuxin Zhao, Elizabeth Chang (Digital Ecosystems & Business Intelligence Institute, Curtin University of Technology, Perth, Australia)

11:10-11:30 Coffee

11:30-12:10 **OntoGame: Towards Overcoming the Incentive Bottleneck in Ontology Building**

Katharina Siorpaes (Digital Enterprise Research Institute, University of Innsbruck, Austria), Martin Hepp (Digital Enterprise Research Institute, University of Innsbruck, Austria)

Towards Social Network based Approach for Software Engineering Ontology Sharing and Evolution

Pornpit Wongthongtham, Elizabeth Chang, Ahmed Aseeri (Digital Ecosystems & Business Intelligence Institute; Curtin University of Technology, Perth, Australia)

12:10-13:10 Session label: **Process Semantics and Mining**

Session chair: **Elizabeth Chang**

An Outlook on Semantic Business Process Mining and Monitoring

A.K. Alves de Medeiros (Eindhoven University of Technology, Netherlands), C. Pedrinaci (Knowledge Media Institute, The Open University, Milton Keynes UK), W.M.P. van der Aalst (Eindhoven University of Technology, Netherlands), J. Domingue (Knowledge Media Institute, The Open University, Milton Keynes UK), M. Song, (Eindhoven University of Technology, Netherlands), A. Rozinat (Eindhoven University of Technology, Netherlands) B. Norton (Knowledge Media Institute, The Open University, Milton Keynes, UK), L. Cabral, (Knowledge Media Institute, The Open University, Milton Keynes, UK)

A Role and Attribute Based Access Control System Using Semantic Web Technologies

Lorenzo Cirio (University of Illinois at Chicago, USA), Isabel F. Cruz (University of Illinois at Chicago USA), Roberto Tamassia (Brown University, USA)

13:10-14:10 Lunch

14:10-15:10 Session label: **Semantic Interoperability**

Session chair: **Elizabeth Chang**

Detecting Semantic Relations between Nominals using Support Vector Machines and Linguistic-Based Rules

Isabel Segura-Bedmar, Jose L. Martínez-Fernández, Paloma Martínez-Fernández (University Carlos III of Madrid, Spain)

The Effect of Context on Semantic Similarity Measurement

Carsten Keßler (Institute for Geoinformatics, University of Münster, Germany), Martin Raubal (Department of Geography, University of California at Santa Barbara, USA), Krzysztof Janowicz (Institute for Geoinformatics, University of Münster, Germany)

Using Ontologies to map Concept Relations in a Data Integration System

Paolo Ceravolo, Ernesto Damiani, Alex Gusmini, Marcello Leida (Dipartimento di Tecnologie dell'Informazione, Università degli studi di Milano, Italy)

15:30-16:00

Coffee break

16:00-17:00

Session label: **Ontology and Knowledge Matching I**

Session chair: **Tharam S. Dillon**

Management of Inconsistent Data

Sylvia Encheva (Stord/Haugesund University College, Norway), Sharil Tumin (University of Bergen, Norway)

Approaches to inconsistency handling in description-logic based ontologies

David Bell, Guilin Qi, Weiru Liu (School of Electronics, Electrical Engineering and Computer Science, Queen's University Belfast, UK)

Fuzzy-DL Reasoning over Unknown Fuzzy Degrees

Stasinos Konstantopoulos, Georgios Apostolikas (Institute of Informatics and Telecommunications, Athens, Greece)

ORM

Fri 30 Nov

10:30-12:30

Session label: **Process Modeling**
Session Chair: **Inge Lemmens**

Business process modeling and ORM

Tony Morgan (Neumont University, USA)

Fact-Oriented Modeling in the Data-, Process- and Event Perspectives

Peter Bollen (University of Maastricht, The Netherlands)

Declarative Process Modeling with Business Vocabulary and Business Rules

Stijn Goedertier, Jan Vanthienen (Katholieke Universiteit Leuven, Belgium)

12:30-14:00

Lunch

14:00-15:30

Session Label: **Educational Perspectives** (Chair: Jos Rozendaal)

Is there Fact Orientation Life Preceding Requirements?

Jos Vos (ABP/AMC, The Netherlands)

Collaborative ORM Data Modeling: Educational Experience using a Wiki

Gordon Everest (University of Minnesota, USA)

15:30-16:00

Coffee break

16:00-17:30

Session 9: Panel on “Unifying Fact-Orientation” (Moderator: Jos Vos)

Panelists: Guido Bakema, Terry Halpin, Robert Meersman, Sjir Nijssen, Baba Piprani

MONET

Fri 30 Nov

10:30-11:30

Session label: **Networking for Distibuted Knowledge Management**
Session chair: **Simon Courtenage**

ANN-agent for distributed Knowledge Source Discovery

Georgina Stegmayer (CIDISI-CONICET, Santa Fe, Argentina), M. Laura Caliusco (CIDISI-CONICET, Santa Fe, Argentina), Omar Chiotti (INGAR-CONICET, Santa Fe, Argentina), M.Rosa Galli (INGAR-CONICET, Santa Fe, Argentina)

P2P Routing-by-Content on a Lightweight Community Basis

Silvana Castano, Alfio Ferrara, Stefano Montanelli (Università degli Studi di Milano, Italy)

11:30-12:30

Session label: **Collaborative systems**
Session chair: **Arianna D’Ulizia**

Towards a Society of Peers: Expert and Interest Groups in Peer-to-peer Systems

Achmad Nizar Hidayanto (University of Indonesia, Indonesia), Stephane Bressan (National University of Singapore, Singapore)

Self-organization of wireless networks through declarative local communication

Stephane Grumbach (INRIA LIAMA, Beijing, China), Jia-liang Lu (INRIA ARES, INSA Lyon, France), Wenwu Qu (CAS USTC, Beijing, China)

- 12:30-14:00 Lunch
- 14:00-15:30 Session label: **Applications of Mobile Technology in Different Social Contexts**
Session chair: **Fernando Ferri**
- Supporting Social Networks by Event-Driven Mobile Notification Services**
Adam Wojciechowski (Poznan University of Technology, Poland)
- Realising Context-Sensitive Mobile Messaging**
Jill Freyne, Emil Varga, Daragh Byrne, Alan F. Smeaton, Barry Smyth (University College Dublin, Ireland)
- The Mobile Interfaces for Geo-Hypermedia Databases**
Yiwei Cao, Ralf Klamma, Satish Srirama, Kaifei Wang (RWTH Aachen University, Aachen, Germany)

SWWS

- 10:30-11:10 Session label: **Ontology and Knowledge Matching II**
Session chair: **Tharam S. Dillon**
- Applying Tree Mining to Matching of Heterogeneous Knowledge Representations**
Fedja Hadzic, Tharam S. Dillon (Digital Ecosystems & Business Intelligence Institute, Curtin University of Technology, Australia)
- 11:10-11:30 Coffee
- 11:30-12:10 **Approximate Query Answering exploiting a Dissimilarity Measure based on Local Models**
Claudia d'Amato, Nicola Fanizzi, Floriana Esposito (Department of Computer Science, University of Bari, Italy)
- A New Expanding Tree Ontology Matching Method**
Feiyu Lin, Kurt Sandkuhl (School of Engineering, Jönköping University, Sweden)
- 12:30-13:30 Lunch
- 13:30-14:30 Session label: **Biomedical Ontologies**
Session chair: **Amandeep S. Sidhu**
- Deductive Web Services: An Ontology-driven approach for Service Interoperability in Life Science**
Nadia Yacoubi Ayadi (Scientific Data Management Lab, Arizona State University, USA), Zoé Lacroix (Scientific Data Management Lab, Arizona State University, USA), María-Esther Vidal (Dept. of Computer Science and Information Technology, Universidad Simón Bolívar, Venezuela), Edna Ruckhaus (Dept. of Computer Science and Information Technology, Universidad Simón Bolívar, Venezuela)
- Protein Ontology Instance Store**
Amandeep S. Sidhu, Tharam S. Dillon, Elizabeth Chang (Digital Ecosystems & Business Intelligence Institute, Curtin University of Technology, Australia)
- Three Fold System (3FS) for Mental Health Domain**
Maja Hadzic, Cowan Roberta (Digital Ecosystems & Business Intelligence Institute, Curtin University of Technology, Australia)

CAMS

Fri 30 Nov

10:30-12:30

Session Label: **User-oriented Approaches**
Session Chair: **George Buchanan**

CAMS opening (Annika Hinze and George Buchanan)

Browsing Semantics in Context-Aware Mobile Hypermedia

Cecilia Challiol, Agustin Muñoz, Gustavo Rossi, Silvia E. Gordillo, Andres Fortier, Robert Laurini

Context-Awareness in the Wild: an Investigation into the Current Use of Context in Everyday Life

Jason Pascoe, Kirsten Thomson, Helena Rodrigues

'Guess A Who, Why, Where, When?': The Visualization of Context Data to Aid the Authoring and Orchestration of a Mobile Pervasive Game

Michael Wright, Alan Chamberlain, Chris Greenhalgh, Steve Benford, Nick Tandavanitj, Amanda Oldroyd, Jon Sutton

12:30-14:00

Lunch

14:00-15:30

Session Label: **Modelling**
Session Chair: **Annika Hinze**

Modeling Context Life Cycle for Building Smarter Applications in Ubiquitous Computing Environments

Hyunjun Chang, Seokkyoo Shin, Changshin Chung

Context, Data and Queries

Annika Hinze, George Buchanan, Andrea Schweer, Matt Jones

Open Panel

15:30-16:00

Coffee

16:00-17:30

Session Label: **Technical Aspects**
Session Chair: **George Buchanan**

Issues in Location-based Indexing for Co-operatiing Mobile Information Systems

Wendy Osborn, Annika Hinze

A Peer-to-Peer based Infrastructure for Context Distribution in Mobile and Ubiquitous Environments

Xiaoming Hu, Yun Ding, Nearchos Paspallis, Pyrros Bratskas, George A Papadopoulos, paolo barone, Alessandro Mamelli, Yves Vanrompay

Workshop Discussion