

Contents

On The Move Academy (OTMA) 2015

The 12th OnTheMove Academy PC Chairs' Message

Adaptation Mechanisms for Role-Based Software Systems	3
<i>Martin Weißbach</i>	
Time Management in Workflows with Loops	5
<i>Margareta Ciglic</i>	
Intercloud Communication for Value-Added Smart Home and Smart Grid Services	10
<i>Philipp Grubitzsch</i>	
Dynamics in Linked Data Environments	20
<i>Tobias Käfer</i>	

Industry Case Studies Program (ICSP) 2015

ICSP 2015 PC Chair's Message

Applications in Manufacturing

Continuous Data Collection Framework for Manufacturing Industries	29
<i>Sudeep Ghimire, Raquel Melo, Jose Ferreira, Carlos Agostinho, and Ricardo Goncalves</i>	
Determination of Manufacturing Unit Root-Cause Analysis Based on Conditional Monitoring Parameters Using In-Memory Paradigm and Data-Hub Rule Based Optimization Platform	41
<i>Prabal Mahanta and Saurabh Jain</i>	
“Wear” Is the Manufacturing Future: The Latest Fashion Hitting the Workplace	49
<i>Gurbaksh Bhullar</i>	
Evaluating the Utilization of the ProcessGene Repository for Generating Enterprise-Specific Business Processes Models	57
<i>Maya Lincoln and Avi Wasser</i>	

IoT and CPS Applications

Impact of Internet of Things in the Retail Industry 61
*Pradeep Shankara, Prabal Mahanta, Ekta Arora,
and Guruprasad Srinivasamurthy*

An Internet of Things (IoT) Based Cyber Physical Framework
for Advanced Manufacturing 66
Yajun Lu and J. Cecil

**International Workshop on Enterprise Integration, Interoperability
and Networking (EI2N) 2015**

EI2N’2015 Co-Chairs’ Message

Subject-Oriented BPM as the Glue for Integrating Enterprise Processes
in Smart Factories 77
Udo Kannengiesser, Matthias Neubauer, and Richard Heining

Extended Service Modelling Language for Enterprise Network Integration . . . 87
*Qing Li, Peixuan Xie, Xiaoqian Feng, Hongzhen Jiang,
and Qianlin Tang*

SAIL: A Domain-Specific Language for Semantic-Aided Automation
of Interface Mapping in Enterprise Integration 97
*Željko Vuković, Nikola Milanović, Renata Vaderna, Igor Dejanović,
and Gordana Milosavljević*

Propelling SMEs Business Intelligence Through Linked Data Production
and Consumption 107
*Barbara Kapourani, Eleni Fotopoulou, Dimitris Papaspyros,
Anastasios Zafeiropoulos, Spyros Mouzakitis, and Sotirios Koussouris*

A Domain Specific Language for Organisational Interoperability 117
Georg Weichhart and Christian Stary

Understanding Personal Mobility Patterns for Proactive Recommendations . . . 127
*Ruben Costa, Paulo Figueiras, Pedro Oliveira,
and Ricardo Jardim-Goncalves*

A Real-Time Architecture for Proactive Decision Making in Manufacturing
Enterprises 137
*Alexandros Bousdekis, Nikos Papageorgiou, Babis Magoutas,
Dimitris Apostolou, and Gregoris Mentzas*

Osmotic Event Detection and Processing for the Sensing-Liquid Enterprise . . . 147
*Artur Felic, Spiros Alexakis, Carlos Agostinho,
Catarina Marques-Lucena, Klaus Fischer, and Michele Sesana*

PiE - Processes in Events: Interconnections in Ambient Assisted Living 157
Monica Vitali and Barbara Pernici

International Workshop on Fact Based Modeling (FBM) 2015

FBM PC Co-Chairs' Message

Developing and Maintaining Durable Specifications for Law or Regulation
 Based Services 169
Diederik Dulfer, Sjir Nijssen, and Mariette Lokin

Fact Based Legal Benefits Services 178
Gert Veldhuijzen van Zanten, Paul Nissink, and Diederik Dulfer

Integrating Modelling Disciplines at Conceptual Semantic Level 188
Inge Lemmens

Using Fact-Based Modelling to Develop a Common Language:
 A Use Case 197
Inge Lemmens, Jan Mark Pleijasant, and Rob Arntz

Achieving Interoperability at Semantic Level 206
Inge Lemmens, Jean-Paul Koster, and Serge Valera

The Great Work of Michael Senko as a Part of a Durable Application
 Model 216
Peter Bollen

The Evolution Towards a Uniform Referencing Mode
 in Fact-Based Modeling 226
Peter Bollen

CogniLex: A Legal Domain Specific Fact Based Modeling Protocol 235
Mariette Lokin, Sjir Nijssen, and Inge Lemmens

Business Object Model: A Semantic-Conceptual Basis for Transition
 and Optimal Business Management 245
*Roel Moberths, Ralph Nieuwland, Yves Janse, Martijn Peters,
 Hennie Bouwmeester, and Stan Dieteren*

A Sustainable Architecture for Durable Modeling of Laws and Regulations
 and Main Concepts of the Durable Model 254
Marco Brattinga and Sjir Nijssen

1975-2015: Lessons Learned with Applying FBM in Professional Practice . . . 266
Sjir Nijssen and Baba Piprani

Developing the Uniform Economic Transaction Protocol: A Fact Based Modeling Approach for Creating the Economic Internet Protocol 276
Johan Saton and Floris Kleemans

Workshop on Industrial and Business Applications of Semantic Web Technologies (INBAST) 2015

INBAST 2015 PC Co-Chairs’ Message

Benchmarking Applied to Semantic Conceptual Models of Linked Financial Data 289
José Luis Sánchez-Cervantes, Lisbeth Rodríguez-Mazahua, Giner Alor-Hernández, Cuauhtémoc Sánchez-Ramírez, Jorge Luis García-Alcaráz, and Emilio Jimenez-Macias

Ontology-Driven Instant Messaging-Based Dialogue System for Device Control 299
José Ángel Noguera-Arnaldos, Miguel Ángel Rodríguez-García, José Luis Ochoa, Mario Andrés Paredes-Valverde, Gema Alcaraz-Mármol, and Rafael Valencia-García

Ontology-Based Integration of Software Artefacts for DSL Development 309
Hele-Mai Haav, Andres Ojamaa, Pavel Grigorenko, and Vahur Kotkas

Towards an Adaptive Tool and Method for Collaborative Ontology Mapping 319
Ramy Shosha, Christophe Debruyne, and Declan O’Sullivan

Data Access in Cloud HICM Solutions. An Ontology-Driven Analytic Hierarchy Process Based Approach 329
Ricardo Colomo-Palacios, Eduardo Fernandes, and Juan Miguel Gómez-Berbís

Knowledge Management for Virtual Education Through Ontologies 339
Ana Muñoz, Victor Lopez, Katty Lagos, Mitchell Vásquez, Jorge Hidalgo, and Nestor Vera

Semantic Model of Possessive Pronouns Machine Translation for English to Bulgarian Language. 349
Velislava Stoykova

Machine-Assisted Generation of Semantic Business Process Models 357
Avi Wasser and Maya Lincoln

International Workshop on Information Systems in Distributed Environment (ISDE) 2015

ISDE 2015 PC Co-Chairs' Message

Tool Chains in Agile ALM Environments: A Short Introduction	371
<i>Saed Imran, Martin Buchheit, Bernhard Hollunder, and Ulf Schreier</i>	
Scale Up Internet-Based Business Through Distributed Data Centers	381
<i>Liguo Yu, Alok Mishra, and Deepti Mishra</i>	
Distributed Architecture for Supporting Collaboration	391
<i>Claude Moulin, Kenji Sugawara, Yuki Kaeri, and Marie-Hélène Abel</i>	
Evolving Mashup Interfaces Using a Distributed Machine Learning and Model Transformation Methodology	401
<i>Antonio Jesus Fernandez-Garcia, Luis Iribarne, Antonio Corral, and James Z. Wang</i>	
An Architectural Model for System of Information Systems	411
<i>Saleh Majd, Abel Marie-Hélène, and Mishra Alok</i>	
A Software Development Process Model for Cloud by Combining Traditional Approaches	421
<i>Tuna Hacaloglu, P. Erhan Eren, Deepti Mishra, and Alok Mishra</i>	
Semantic Matching of Components at Run-Time in Distributed Environments	431
<i>Javier Criado, Luis Iribarne, Nicolás Padilla, and Rosa Ayala</i>	

Workshop on Methods, Evaluation, Tools and Applications for the Creation and Consumption of Structured Data for the e-Society (META4eS) 2015

META4eS 2015 PC Co-Chairs' Message

Creating and Consuming Metadata from Transcribed Historical Vital Records for Ingestion in a Long-Term Digital Preservation Platform (Short Paper)	445
<i>Dolores Grant, Christophe Debruyne, Rebecca Grant, and Sandra Collins</i>	
CoolMind: Collaborative, Ontology-Based Intelligent Knowledge Engineering for e-Society	451
<i>Ioana Ciuciu and Bazil Pârv</i>	
Improving Software Quality Using an Ontology-Based Approach	456
<i>Simona Motogna, Ioana Ciuciu, Camelia Serban, and Andreea Vescan</i>	

Historical Data Preservation and Interpretation Pipeline for Irish Civil Registration Records	466
<i>Oya Beyan, P.J. Mealy, Dolores Grant, Rebecca Grant, Natalie Harrower, Ciara Breathnach, Sandra Collins, and Stefan Decker</i>	
Academic Search. Methods of Displaying the Output to the End User	476
<i>Svetlana Popova, Ivan Khodyrev, Artem Egorov, and Vera Danilova</i>	
Estimating Keyphrases Popularity in Sampling Collections.	481
<i>Svetlana Popova, Gabriella Skitalinskaya, and Ivan Khodyrev</i>	
Semantic HMC: Ontology-Described Hierarchy Maintenance in Big Data Context	492
<i>Rafael Peixoto, Christophe Cruz, and Nuno Silva</i>	
A Conceptual Relations Reference Model to the Construction and Assessment of Lightweight Ontologies.	502
<i>Cristóvão Sousa and António Soares</i>	
Motivators and Deterrents for Data Description and Publication: Preliminary Results (Short Paper)	512
<i>Cristina Ribeiro, João Rocha da Silva, João Aguiar Castro, Ricardo Carvalho Amorim, and Paula Fortuna</i>	
Mobile and Social Computing for Collaborative Interactions (MSC) 2015	
MSC 2015 PC Co-Chairs' Message	
The mATHENA Inventory for Free Mobile Assistive Technology Applications	519
<i>Georgios Kouroupetroglou, Spyridon Kousidis, Paraskevi Riga, and Alexandros Pino</i>	
Improving Social Collaborations in Virtual Learning Environments	528
<i>Daniel González, Regina Motz, and Libertad Tansini</i>	
A Platform for Measuring Susceptibility and Authority of Social Network Members	536
<i>Gregorio D'Agostino and Antonio De Nicola</i>	
Multimodal Systems: An Excursus of the Main Research Questions	546
<i>Maria Chiara Caschera, Arianna D'Ulizia, Fernando Ferri, and Patrizia Grifoni</i>	
Co-creativity Process by Social Media within the Product Development Process	559
<i>Alessia D'Andrea, Fernando Ferri, Patrizia Grifoni, and Tiziana Guzzo</i>	

Ontologies, DataBases, and Applications of Semantics (ODBASE) 2015 Posters

ODBASE 2015 PC Co-Chairs' Message

Towards Flexible Similarity Analysis of XML Data 573
Jesús M. Almdros-Jiménez and Alfredo Cuzzocrea

Author Index 577

<http://www.springer.com/978-3-319-26137-9>

On the Move to Meaningful Internet Systems: OTM 2015
Workshops

Confederated International Workshops: OTM Academy,
OTM Industry Case Studies Program, EI2N, FBM, INBAST,
ISDE, META4eS, and MSC 2015, Rhodes, Greece,
October 26-30, 2015. Proceedings

Ciuciu, I.; Panetto, H.; Debruyne, C.; Aubry, A.; Bollen,
P.; Valencia-García, R.; Mishra, A.; Fensel, A.; Ferri, F.
(Eds.)

2015, XXIX, 578 p. 193 illus. in color., Softcover

ISBN: 978-3-319-26137-9