## **Table of Contents**

Keynotes Speakers (Abstracts and Short Papers)	
Business Executives Sharing Knowledge with Inference Engines: News from the ONTORULE Project	1
Rule-Enhanced Domain Models for Cloud Security Governance, Risk and Compliance Management	2
Rules, Tables and Decisions: A Family History Tale	10
Event-Driven Rules: Experiences in CEP	11
Invited Presentations (Abstracts)	
Efficient Rule and Query Execution with CLIF++	12
Recent Advances in the SILK Knowledge Representation and Its Usage  Benjamin Grosof	13
Rules and OMG Standards	14
Understanding NIEM and Rules Needs	15
Rules, Semantic Technology, and Cross-Industry Standards	
Design and Implementation of Highly Modular Schemas for XML:  Customization of RuleML in Relax NG	17
Towards RIF-OWL Combination: An Effective Reasoning Technique in Integrating OWL and Negation-Free Rules	33
Relaxed Safeness in Datalog-Based Policies	49



Knowledgebase Representation Language Interoperation Tool	58
Rules and Automated Reasoning	
Consistency and Provenance in Rule Processing  Eric Jui-Yi Kao	66
D2R2: Disk-Oriented Deductive Reasoning in a RISC-Style RDF Engine	81
Principles of the SymposiumPlanner Instantiations of Rule	97
Responder Zhili Zhao, Adrian Paschke, Chaudhry Usman Ali, and Harold Boley	
Extended Rules in Knowledge-Based Data Access	112
Rule-Based Event Processing and Reaction Rules	
Standards for Complex Event Processing and Reaction Rules	128
Supporting Data Consistency in Concurrent Process Execution with Assurance Points and Invariants	140
Probabilistic Event Calculus Based on Markov Logic Networks	155
On Applying Temporal Database Concepts to Event Queries Foruhar Ali Shiva and Susan D. Urban	171
Vocabularies, Ontologies and Business Rules	
Lexicalized Ontology for a Business Rules Management Platform:  An Automotive Use Case	179
Towards Directly Applied Ontological Constraints in a Semantic Decision Table	193

Table of Contents	XVII
Representing and Solving Rule-Based Decision Models with Constraint Solvers	208
SWRL-Based Context Awareness for Application Servers Hosting Digital Services	222
Cloud Computing and Rules	
Cloud Computing: Combining Governance, Compliance, and Trust Standards with Declarative Rule-Based Frameworks	230
Role Assignment in Institutional Clouds for Rule-Based Enterprise  Management	237
Clinical Semantics and Rules	
Standards, Data Models, Ontologies, Rules: Prerequisites for Comprehensive Clinical Practice Guidelines	252
Event Condition Expectation (ECE-) Rules for Monitoring Observable Systems	267
Rules and Norms	
Designing for Compliance: Norms and Goals	282
LegalRuleML: XML-Based Rules and Norms	298
Author Index	313