

Lecture Notes in Business Information Processing

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Ontology, Conceptualization and Epistemology for Information Systems, Software Engineering and Service Science

4th International Workshop, ONTOSE 2010
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Revised Selected Papers

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Preface

As in the previous editions, ONTOSE 2010 once again was a discussion platform for all kinds of aspects on ontologies, service sciences, information systems and software engineering. The ONTOSE 2010 proceedings reflect this open discourse and hence contain contributions on various aspects of the above-mentioned research areas. A total of 25 contributions were received. These contributions underwent a full peer review with at least two referees, and finally 10 papers were presented at the Workshop and collected in these proceedings. The presentations particularly focused on enterprise and service architectures, ontology application, visualization and query expansion as well as on ontologies for services.

In the area of enterprise and service architecture the paper written by Thomas Kohlborn, Christian Luebeck, Axel Korthaus, Erwin Fieft, Michael Rosemann, Christoph Riedl and Helmut Krcmar outlines how relationships between services can be a basis for service bundling. The work of Remigijus Gustas describes an approach which better supports the integration of static and dynamic aspects in service architectures. The third paper by Sabine Buckl, Florian Matthes, Christopher Schulz and Christian M. Schweda addresses research questions concerning interrelating enterprise architecture (EA) (i.e., questions concerning the structure of the framework for interrelating EA, the types of relationship used, utilization of the framework for development and evolution of EA).

The three papers in the Ontology Application section are devoted to ontologies as formal descriptions for several applications. The first paper, written by Benjamin Diemert, Marie-Hélène Abel and Claude Moulin, discusses the usage of ontologies for digital information exchange. In the second paper, Jin-songdi Yu, Xia Wang and Peter Baumann present its usage for geospatial coverage information. Finally, Diego Bernini, Daniela Micucci and Francesco Tisato present their research work about an interoperability model based on spatial concepts, which can be used in software components in the ubiquitous computing domain.

Two papers were subsumed to the third section of these proceedings. The first one, written by Juan Garcia, Francisco Garcia and Roberto Theron, focuses on several strategies to view the coupling between ontology elements. In the second paper, Fabio Sartori and Matteo Palmonari describe query expansion and how ontologies can be used therein.

The last section, Ontology for Services, completes these proceedings and focuses once again on the two key topics of the workshop (i.e., ontology and services). Florie Bugeaud and Eddie Soulier present a formalization of service upstream in the telecommunication domain. Finally, Miguel-Angel Sicilia and Manuel Mora address the need to use the REA enterprise ontology.

The production of these proceedings, with all these interesting research results, was possible because many people supported the workshop. We would like to thank the authors for their valuable contributions, the reviewers for their substantial reviews and the CAiSE workshops organization chairs Jolita Ralyté and Pierluigi Plebani who supported the process.

June 2010

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