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Riichiro Mizoguchi  
Zhongzhi Shi  
Fausto Giunchiglia (Eds.)

# The Semantic Web – ASWC 2006

First Asian Semantic Web Conference  
Beijing, China, September 2006  
Proceedings



Springer

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# Preface

The International Semantic Web Conference (ISWC) and the European Semantic Web Conference (ESWC) present the latest results in research and application of the Semantic Web technologies. Both have contributed to the promotion of research on the Semantic Web in their respective regions. Research on the Semantic Web needs global activity which necessarily requires the spread of the Semantic Web over Asia where it has been under development. The series of Asian Semantic Web Conferences (ASWC) have therefore been established with the intention of fostering research and development of the Semantic Web and its related technology in Asia by the East Web project, <http://odle.dit.unitn.it/eastweb/>, whose objectives include fostering and promoting the cooperation between European and Asian Institutions involved in IT education and research. The first ASWC was held in Beijing, during September 3–7, 2006, in this context.

We initially received 253 submissions and found 221 valid submissions of abstracts after a screening process. We finally received 208 full papers each of which was reviewed seriously by three Program Committee members and we accepted 36 full papers and 36 short papers. The acceptance rate of full papers is 18%, which we are proud of. The acceptance rate of all the accepted papers is 36%. Differently from ISWC/ESWC, industrial track papers of ASWC 2006 were reviewed by the Program Committee of the research track with the same quality level but with different criteria, that is, practicality was considered more important than originality. We accepted eight papers, four of them are full papers and four short papers, which are included in the above-mentioned 72 papers. The major characteristic of the topics of ASWC 2006 is that 1/4 of the total papers are ontology related. Topics covered by the accepted papers are as follows:

Ontology-related papers:	18
Ontology integration and interoperability	7
Ontology alignment	4
Ontology and theory	4
Ontology and tools	3
Applications	10
Semantic Web services	9
Reasoning	5
Annotation	4
Social network and RSS	4
Peer-to-Peer	4
Database	4
Information search	3
Document and recommendation	3
Industrial track	8

Accepted papers come from 18 countries, which shows that ASWC 2006 is quite international, and their statistics in terms of country are as follows:

China	30
Korea	11
Japan	10
Ireland	4
Austria	2
Finland	2
USA	2
Australia	1
Belgium	1
France	1
Germany	1
Greece	1
Iran	1
Italy	1
Kuwait	1
Norway	1
Thailand	1
UK	1

ASWC 2006 consisted of a three-day main conference which included paper and poster tracks and three invited talks, a two-day workshop/tutorial and an Industrial Day. The three invited speakers were Jim Hendler, University of Maryland at College Park, USA, Hai Zhgue, Institute of Computing Technology, Chinese Academy of Sciences, China and Enrico Motta, The Open University, UK.

Jim Hendler talked about KR issues in the Semantic Web era under the title of “The Semantic Web: A Network of Understanding.” He discussed major characteristics of the new-generation KR such as “extra-logical” infrastructure, semantic interoperability beyond a syntactic one, heterogeneity, scalability and so on. It was also his intention to confirm that Semantic Web KR is different from traditional AI. Hai Zhgue’s talk was entitled “Transformation from OWL Description to Resource Space Model.” He discussed the necessity of the synergy of semantics in the real world, the document world and the mental abstraction world. On the basis of his resource space model (RSM), he discussed an automatic translation of OWL descriptions into resource space as a step toward his ultimate goal. The killer applications of the Semantic Web were one of the serious topics. Enrico Motta discussed the topic in his talk on “Next-Generation Semantic Web Applications.” He analyzed the current state of the art of Semantic Web applications followed by their main features and stressed the importance of shifting from the first-generation to the second-generation applications by exploiting the increased heterogeneity of semantic sources.

Before the main conference, we had seven workshops:

- Making the Semantic Web Services Relevant to Industry
- Semantic e-science
- Semantic Web Education and Training
- Semantic Technologies, Educational Standards, e-Learning Application Vocabularies, and OpenCourseWare
- Semantic Web Applications and Tools Workshop
- Web Search Technology—from Search to Semantic Search
- Service Discovery on the WWW

and three tutorials:

- Semantic Web Services—State of Affairs
- XML Query Reformulation for XPath, XSLT and XQuery
- Tools and Applications for the Corporate Semantic Web

All the events arranged in ASWC 2006 were very successful and contributed to the facilitation of Semantic Web research in Asia as well as the cross-fertilization among researchers working in academia and industries. We believe we have made a good start to the ASWC series.

As Program Committee Co-chairs and Conference Chair, we are grateful to the Program Committee members listed below and to the additional reviewers for their enormous effort in reviewing to select these wonderful papers. Without their contribution, this conference would not have happened. Considering ASWC 2006 was the first conference in Asia, the organization went smoothly thanks to the strong leadership of the Local Organizing Committee Chair, Juanzi Li, to whom our special thanks go. We also would like to thank the sponsors listed below for their monetary support, which was another key factor of the great success of ASWC 2006.

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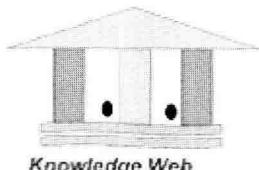
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