


**4th**  
Asian  
**Semantic  
Web**  
Conference



 Google Research



Shanghai Key Laboratory of Intelligent  
Information Processing  
Fudan University



Semantic Technology  
Institute International

**7-9 December, 2009**  
**Fudan University,**  
**Shanghai, China**



## ASWC2009 Tentative Conference Program 7-9 December 2009 at Fuxuan Hotel, Shanghai, China

### Messages from the Conference Chairs

On behalf of the organizing committee, we are delighted to welcome you to the 4<sup>th</sup> Asian Semantic Web conference (ASWC'09) in Shanghai. We hope the conference proves to be interesting and beneficial.

The Asian Semantic Web Conference Series has been established to foster research and development of the Semantic Web and Semantic Web technologies in Asia. The ASWC conferences present the latest results in research and application in Semantic Web.

ASWC'09 received over 63 paper submissions this year, out of which 25 refereed papers were accepted as full papers. In addition to regular research tracks, ASWC'09 features 2 keynote speakers, 3 pre-conference tutorials, 2 workshops, 8 posters and 4 demos. It is difficult to estimate the effort required to organize this conference without the passion and dedication from many people.

First of all, we are honored to have 2 distinguished keynote speakers: Nigel Shadbolt and Aoying Zhou. We deeply appreciate their time and commitment to attend our conference and share their extraordinary research experience and insight into their research topics.

The task of the program chairs is particularly demanding. We thank Asuncion Gomez Perez, Yong Yu, and Ying Ding for their much work on the conference. The high quality of the program owes much to the efforts of the PC chairs and the program committee, as well as the Workshop Chair: Hong-Gee Kim; the Tutorial Chair: Jie Bao; the Poster and Demo Chair: Raúl Garcia-Castro. In particular, we would like to thank Riichiro Mizoguchi, the Steering Committee Chair, for his tremendous valuable suggestions.

We would like to express our appreciation to all of our sponsors: Google Research, Shanghai Key Laboratory of Intelligent Information Processing, Fudan University and Semantic Technology Institute International. Their generous sponsorships and support made this conference successful.

The Local Organizing Organizers: Xuanjing Huang, Xiangyang Xue and Mingmin Chi, and the volunteers have done a remarkable job in meeting the demands of such an international conference. Without their tireless work, this conference could not have been successful.

We also wish to thank all the presenters for their contributions. Thank you all for attending ASWC'09. Enjoy the ASWC'09 conference and your stay in Shanghai!

Ruqian Lu

James Hendler

Conference Chairs



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## ASWC2009 – Conference Program

Monday, 7 December 2009			
Time			
9:00 - 10:30	Tutorial: <b>Semantic Wikis and Applications</b> @ No. 1 meeting room [Chair: Mingmin Chi]	Tutorial: <b>Semantic Search</b> @ No. 3 meeting room [Chair: Jie Bao]	Workshop: <b>Scalable Semantic Data Processing</b> @ No. 5 meeting room
10:30 - 11:00	Coffee Break		
11:00 - 12:30	Tutorial: <b>Semantic Wikis and Applications</b> @ No. 1 meeting room [Chair: Mingmin Chi]	Tutorial: <b>Semantic Search</b> @ No. 3 meeting room [Chair: Jie Bao]	Workshop: <b>Scalable Semantic Data Processing</b> @ No. 5 meeting room
12:30 - 14:00	Lunch @ Banquet Hall		
14:00 - 15:30	Tutorial: <b>Explanation of OWL Entailments and Its Role in Inconsistency Handling in OWL</b> @ No. 1 meeting room [Chair: Jie Bao]	Tutorial: <b>Semantic Search</b> @ No. 3 meeting room [Chair: Jie Bao]	Workshop: <b>Social Web and Interoperability</b> @ No. 5 meeting room
15:30 - 16:00	Coffee Break		
16:00 - 17:30	Tutorial: <b>Explanation of OWL Entailments and Its Role in Inconsistency Handling in OWL</b> @ No. 1 meeting room [Chair: Jie Bao]	Tutorial: <b>Semantic Search</b> @ No. 3 meeting room [Chair: Jie Bao]	Workshop: <b>Social Web and Interoperability</b> @ No. 5 meeting room

**Note: Registration will be in the lobby of the Fuxuan hotel on Dec. 7 and Dec. 8.**



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# Workshops

Monday, 7<sup>th</sup> December

## Scalable Semantic Data Processing

- |                      |   |
|----------------------|---|
| <b>9:00 - 9:05</b>   | <b>Introduction</b>   |
| <b>9:05 - 9:40</b>   | <b>LarKC: The Large Knowledge Collider</b><br><i>(Invited Talk, Professor Ning Zhong, the LarKC Consortium)</i>   |
| <b>9:40 - 10:05</b>  | <b>Semantic Data Management Projects at Apex Lab</b><br><i>(Haofen Wang and Yong Yu)</i>  |
| <b>10:05 - 10:30</b> | <b>Dynamically Materializing Wild Pattern Rules Referring to Ontology Schema in Rete Framework</b><br><i>(Seungwoo Lee, Hanmin Jung, Pyung Kim and Beom-Jong You)</i>       |
| <b>10:30 - 10:45</b> | <b>Coffee Break</b>   |
| <b>10:45 - 11:10</b> | <b>Social Relation based Scalable Semantic Search Refinement</b><br><i>(Yi Zeng, Xu Ren, Ning Zhong, Zhisheng Huang, and Yan Wang)</i>                                      |
| <b>11:10 - 11:35</b> | <b>Approaches to Debugging Large Scale Ontologies</b><br><i>(Guilin Qi, Jianfeng Du and Qiu Ji)</i>   |
| <b>11:35 - 12:00</b> | <b>Towards Scalable Semantic Data Processing by Knowledge Summarization</b><br><i>(Zaiyue Zhang, Zhisheng Huang, Shang Gao, Xiaoru Zhang, Xiaofei Zhang and Aiping Shi)</i> |
| <b>12:00</b>         | <b>Close</b>  |



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### Social Web and Interoperability

- 14:00**      **Welcome: from the workshop chairs**
- 14:05**      **Invited Talk: The integration and portability of semantic social networks via OKKAM**  
*Paolo Bouquet, University of Trento, Italy*
- 14:35**      **Short Paper: Modeling User Interactions in On-line Social Networks**  
*Seokchan Yun, Seoul National University, Korea*  
*Hong-Gee Kim, Seoul National University, Korea*
- 14:55**      **Short Paper: The Talkative, The Popular, and The Influential Korean Twitter Users**  
*Hyun-joo Kong, KAIST, Korea*  
*Hyun-woo Park, KAIST, Korea*  
*Sang-ki Steve Han, KAIST, Korea*
- 15:15**      **Position Paper: Social Web Profiles**  
*Renato Iannella, NICTA, Australia*
- 15:35**      **Coffee Break**
- 16:00**      **Demo: MYID.TW: Taiwan's Identity and Authentication Service Provider**  
*Shih-Chieh Li, Academia Sinica, Taiwan*  
*Ching-Teng Hsiao, Academia Sinica, Taiwan*
- 16:15**      **Paper: NiceTag Ontology: tags as named graphs**  
*Freddy Limpens, INRIA Sophia-Antipolis, France*  
*Alexandre Monnin, Sorbonne University, France*  
*David Laniado, Politecnico di Milano, Italy*  
*Fabien Gandon, INRIA Sophia-Antipolis*



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- 16:45**      **Short Paper: Smiley Ontology**  
*Filip Radulovic, University of Belgrade, Serbia*  
*Nikola Milikic, University of Belgrade, Serbia*
- 17:05**      **Invited Talk: Web of Documents, Web of People and Web of Creativity**  
*Hideaki Takeda, National Institute of Informatics, Japan*
- 17:35**      **Close**



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Tuesday, 8 December 2009			
Time			
08:30 – 09:00	Opening Ceremony @ Lecture Hall		
09:00 – 10:00	Invited speaking @ Lecture Hall <i>Title:</i> Government Linked Data: A Tipping Point for the Semantic Web <i>Invited Speaker:</i> Nigel Shadbolt		
10:00 - 10:30	Coffee Break		
10:30 - 12:00	Research Track 1 @ No. 5 meeting room <i>Ontologies</i> [Chair: Hong-Gee Kim]	Research Track 2 @ Lecture Hall <i>Semantic Web Application</i> [Chair: Paolo Bouquet]	
12:00 – 14:00	Lunch @ Coffee Bar		
14:00 - 15:30	Research Track 3 @ No. 5 meeting room <i>Semantic Web Services</i> [Chair: Andriy Nikolov]	Research Track 4 @ No. 1 meeting room <i>Semantic Web Technology</i> [Chair: Harold Boley]	
15:30 - 16:00	Coffee Break		
16:00 - 18:00	Poster and Demo @ No. 1 meeting room		
18:00 – 21:00	Welcome banquet @ Banquet Hall		

Wednesday, 9 December 2009			
Time/Room			
09:00 – 10:00	Keynote II @ Lecture Hall <i>Title:</i> Chinese Web Infrastructure <i>Keynote Speaker:</i> Aoying Zhou		
10:00 - 10:30	Coffee Break		
10:30 - 12:00	Research Track 5 @ Lecture Hall <i>Ontologies</i> [Chair: Riichiro Mizoguchi]	Research Track 6 @ No. 5 meeting room <i>Semantic Web Application</i> [Chair: Raphaël Troncy]	
12:00 – 14:00	Lunch @ Banquet Hall		
14:00 - 15:30	Research Track 7 @ No. 2 meeting room <i>Semantic Web Technology</i> [Chair: Yuzhong Qu]	Research Track 8 @ No. 5 meeting room <i>Ontologies</i> [Chair: Raul Garcia-Castro]	
15:30 - 16:00	Coffee Break		
16:00 - 17:00	Closing Ceremony @ No. 2 meeting room		
17:30 - 19:00	Dinner @ Banquet Hall		
19:00 – 21:00	Excursion		

**Note:** all the conference rooms are in the fourth floor of the conference venue and the lunch and dinner are in the third floor of the conference venue.



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### Research Track 1: Ontologies

**Time:** Tuesday, Dec 8, 10:30 - 12:00

**Location:** No. 5 meeting room

[Chair: [Hong-Gee Kim](#)]

- **Cross-lingual Ontology Mapping – An Investigation of the Impact of Machine Translation**

*Bo Fu*

- **Modeling common real-word relations using triples extracted from n-grams**

*Ruben Sipos, Dunja Mladenic, Marko Grobelnik and Janez Brank*

- **Supporting the Development of Data Wrapping Ontologies**

*Lina Lubyte and Sergio Tessaris*

### Research Track 2: Semantic Web Application

**Time:** Tuesday, Dec 8, 10:30 - 12:00

**Location:** Lecture Hall

[Chair: [Paolo Bouquet](#)]

- **Merging and Ranking answers in the Semantic Web: The Wisdom of Crowds**

*Vanessa Lopez, Andriy Nikolov, Miriam Fernandez, Marta Sabou, victoria Uren  
and Enrico Motta*

- **LODE: Linking Open Descriptions of Events**

*Ryan Shaw, Raphael Troncy and Lynda Hardman*

- **A Semantic Wiki based Light-Weight Web Application Model**

*Jie Bao, Li Ding, Rui Huang, Paul Smart, Dave Braines and Gareth Jones*





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### Research Track 3: Semantic Web Services

**Time:** Tuesday, Dec 8, 14:00 - 15:30

**Location:** No. 5 meeting room

[Chair: [Andriy Nikolov](#)]

- **Utilising Task-Patterns in Organisational Process Knowledge Sharing**  
*Bo Hu*
- **Reasoning about Partially Ordered Web Service**  
*Michael Gruninger and Xing Tan*
- **Two-Fold Semantic Web Service Matchmaking – Combining Ontology Mapping and Service Discovery**  
*Stefan Dietze, Neil Benn and John Domingue*
- **An Approach to Analyzing Dynamic Trustworthy Service Composition**  
*Guisheng Fan, Huiqun Yu and Liqiong Chen*

### Research Track 4: Semantic Web Technology

**Time:** Tuesday, Dec 8, 14:00 - 15:30

**Location:** No. 1 meeting room

[Chair: [Harold Boley](#)]

- **Improving Folksonomies using Formal Knowledge: A Case Study on Search**  
*Sofia Anceletou, Marta Sabou and Enrico Motta*
- **Querying The Web Of Data: A Formal Approach**  
*Paolo Bouquet, Chiara Ghidini and Luciano Serafini*
- **A Relevance-directed Algorithm for Finding Justifications of DL Entailments**  
*Qiu Ji, Guilin Qi and Peter Haase*



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### Research Track 5: Ontologies

**Time:** Wednesday, Dec 9, 10:30 - 12:00

**Location:** Lecture Hall

[Chair: [Riichiro Mizoguchi](#)]

- **A Conceptual Model for a Web-scale Entity Name System**  
*Paolo Bouquet, Themis Palpanas, Heiko Stoermer and Massimiliano Vignolo*
- **What makes a good ontology?: A case-study in finegrained knowledge reuse**  
*Miriam Fernandez, Chwhynny Overbeeke, Marta Sabou and Enrico Motta*
- **Repairing the missing is-a structure of ontologies**  
*Patrick Lambrix, Qiang Liu and He Tan. Repairing*

### Research Track 6: Semantic Web Application

**Time:** Wednesday, Dec 9, 10:30 - 12:00

**Location:** No. 5 meeting room

[Chair: [Raphaël Troncy](#)]

- **Annotating Wikipedia Articles with Semantic Tags for Structured Retrieval**  
*Saravadee Sae Tan and Enya Kong Tang*
- **Guidelines for the Specification and Design of Large-Scale Semantic Applications**  
*Óscar Muñoz-García and Raúl García-Castro*
- **Semantic-Linguistic Feature Vectors for Search: unsupervised construction and experimental validation**  
*Stein L. Tomassen and Darijus Strasunskas*



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### Research Track 7: Semantic Web Technology

**Time:** Wednesday, Dec 9, 14:00 - 15:30

**Location:** No. 2 meeting room

[Chair: [Yuzhong Ou](#)]

- **Entropy-based metrics for evaluating schema reuse**  
*Xixi Luo and Joshua Shinaver*
- **Overcoming Schema Heterogeneity between Linked Semantic Repositories to Improve Coreference Resolution**  
*Andriy Nikolov, Victoria Uren, Enrico Motta and Anne de Roeck*
- **Social Semantic Rule Sharing and Querying in Wellness Communities**  
*Harold Boley, Taylor Osmun and Benjamin Craig*

### Research Track 8: Ontologies

**Time:** Wednesday, Dec 9, 14:00 - 15:30

**Location:** No. 5 meeting room

[Chair: [Raul Garcia-Castro](#)]

- **Entity Resolution in Texts Using Statistical Learning and Ontologies**  
*Tadej Štajner and Dunja Mladenić*
- **An Effective Similarity Propagation Model for Matching Ontologies without Sufficient or Regular Linguistic Information**  
*Peng Wang and Baowen Xu*
- **Deciding Query Entailment for Fuzzy SHIN Ontologies**  
*Jingwei Cheng, Z. M. Ma, Fu Zhang and Xing Wang*



## ASWC2009 Tentative Conference Program

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### Demos

**Time:** Tuesday, Dec 8, 16:00 - 18:00

**Location:** No. 1 meeting room

[Chair: [Raul Garcia-Castro](#)]

- **Semantic Rules on Drug Discovery Data**  
*Sashikiran Challa, David Wild, Ying Ding and Qian Zhu*
- **RepOSE: an environment for repairing missing ontological structure**  
*Patrick Lambrix, Qiang Liu and He Tan*
- **SHARE: A Semantic Web Query Engine for Bioinformatics**  
*Ben P Vandervalk, E Luke McCarthy and Mark D Wilkinson*
- **IP-Explorer: A Semantic Web Based Intellectual Property Knowledge Base and Trading Platform**  
*Lei Zhang, Hugh Glaser, Hai-Tao Zheng and Ian Millard*

### Posters

**Time:** Tuesday, Dec 8, 16:00 - 18:00

**Location:** No. 1 meeting room

[Chair: [Raul Garcia-Castro](#)]

- **Towards Representing Semantic Opposition Using Semantic Web Technologies**  
*Hend S. Al-Khalifa, Maha M. Al-Yahya, Alia Bahanshal and Iman Al-Odah*
- **Semantic Citation**  
*Ying Ding, Deepak Konidena, Yuyin Sun, ShanShan Chen and Erjia Yan*



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- **Building up a Large Ontology from Wikipedia Japan with Infobox and Category Tree**

*Shinya Sakurai, Takuya Tejima, Takeshi Morita, Noriaki Izumi and Takahira*

*Yamaguchi*

- **Linking US Patent Data with DBpedia**

*Mayank Singhi and Ying Ding*

- **OntoGear: A Platform for Externalization of Functional Knowledge and its Interoperability**

*Sunao Takafuji, Yoshinobu Kitamura and Riichiro Mizoguchi*

- **Research Profiling Based on Semantic Mining**

*Zhi-xiong Zhang, Jian-hua Liu, Ying Ding and Na Hong*

- **Learning Semantic Lexicons by Graph Mutual Reinforcement based Bootstrapping**

*Qi Zhang, Bingqing Wang, Xuanjing Huang*

- **Content and Context-Based Multi-Label Image Annotation**

*Hong Lu, Yingbin Zheng, Xiangyang Xue, Yuejie Zhang*