ISWC
2009

The 8th International Semantic Web Conference

October 25 - 29, 2009
Chantilly, Virginia

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We would like to express our special thanks to all sponsors.

Welcome Address

Dear participant,

It is a great pleasure to welcome you to the Eighth International Semantic Web Conference, the major international forum where the latest research results and technical innovations on all aspects of the Semantic Web are presented. The past 12 months have been extremely exciting for our community with several key developments and announcements by major companies and governments providing a strong indication that the Semantic Web is rapidly moving beyond the research and academic world and is now entering the mainstream. Hence, this is a great time to be part of the Semantic Web community and I am sure that the 'buzz' pervading the community will be reflected in a great atmosphere at the conference.

It is no surprise then that ISWC 2009 boasts an incredibly busy programme, which includes events for the business community, researchers, students, practitioners, as well as a number of co-located events for the user communities, including the heritage and life science sectors. Specifically, the programme kicks off on Saturday with a doctoral consortium, followed on Sunday and Monday by twelve tutorials and sixteen workshops. The main conference starts then on Tuesday and includes three keynote talks; presentations of the papers accepted in the research and in-use tracks; a panel; poster presentations; demonstrations; a series of lightning talks; the Semantic Web Challenge, which is both a competition and a showcase for leading edge Semantic Web Applications; an industry track featuring presentations by users and vendors of Semantic Web products; a commercial exhibition; as well as some unmissable social events.

In addition, there are seven co-located events which have been planned in conjunction with ISWC 2009. These include the Sixth International Workshop on OWL: Experiences and Directions; the Third International Conference on Web Reasoning and Rule Systems; the Semantic Web and CIDOC CRM Workshop at the Smithsonian Institution; the Life Science Special Interest Group; a Meetup with Sir Tim Berners-Lee; a Linked Data-a-thon; and a VoCamp at the Library of Congress.

Putting together such a massive event requires a talented and hard-working team and I am very grateful to all the members of the Organizing Committee for doing such an excellent job. In particular, I would like to reserve a special acknowledgement for Mike Dean, who has taken care of so many organizational issues with brilliant efficiency, thus making my job as general chair both very easy and also very enjoyable.

I would also like to acknowledge the support of the Semantic Web Science Association (SWSA), a non-profit organization established to promote and encourage scholarly work in the Semantic Web area and related fields. Many thanks also to our sponsors, who have provided generous financial support. Finally, I would like to thank the SWSA and the United States National Science Foundation for providing funds for 28 student travel fellowships.

I wish you a very enjoyable ISWC 2009.

Enrico Motta
General Chair, ISWC 2009

ISWC 2009 Organizing Committee

General Chair:	Enrico Motta
Local Chairs:	Mike Dean and Leo Obrst
Sponsorship Chairs:	Pete Pflugrath and Fabio Ciravegna
Program Chairs:	Abraham Bernstein and David Karger
Semantic Web in Use Chairs:	Tom Heath and Lee Feigenbaum
Semantic Web Challenge Chairs:	Peter Mika and Chris Bizer
Workshop Chairs:	Jeff Heflin and Philippe Cudré-Mauroux
Tutorial Chairs:	Marta Sabou and Jennifer Golbeck
Industry Track Chairs:	Matt Fisher and John Callahan
Poster and Demonstration Chairs:	Harith Alani, Tania Tudorache and Oscar Corcho
Doctoral Consortium Chair:	Diana Maynard
Publicity Chair:	Todd Schneider
Metadata Chairs:	Knud Möller and Richard Cyganiak
Proceedings Chair:	Krishnaprasad Thirunarayan
Fellowship Chair:	Joel Sachs
Conference website:	http://iswc2009.semanticweb.org/
Metadata site:	http://data.semanticweb.org
Official tag:	iswc2009 (no spaces, no dashes, no dots)

Welcome
to Northern Virginia

Welcome to Northern Virginia and metropolitan Washington DC!

As host to the US Government and a wide range of technology companies, greater Washington is a major center of Semantic Web activity. Sixteen government, academic, commercial, and non-profit organizations endorsed our proposal to host ISWC 2009 and continued to support the conference, along with many others.

A phenomenon this year has been the growing network of Semantic Web Meetups (http://semweb.meetup.com). Building on the success of the first Meetup of Meetups at last spring's Semantic Technology Conference, and in collaboration with the local Washington Semantic Web Meetup, a new feature of ISWC 2009 will be an open meetup featuring Tim Berners-Lee. We encourage you to attend and to look for (or start) a local Semantic Web meetup at home.

We hope you'll have an opportunity to venture beyond the conference hotel during your trip. The nearby Smithsonian National Air and Space Museum Udvar-Hazy Center displays many unique and historic air- and spacecraft. Downtown Washington DC, a little farther away, offers a variety of museums, historic sites, government buildings, and international restaurants. The Virginia countryside also offers a range of activities from shopping to hiking.

We thank the great team that made ISWC 2009 possible, but would especially like to acknowledge the tremendous help and wisdom provided by our professional organizers, Jimmy Ervin and Valerie Sumner.

We hope you enjoy the conference!

Mike Dean and Leo Obrst
Local Co-Chairs, ISWC 2009

Mike Dean

Leo Obrst

Invited Speakers

Pat Hayes
Institute for Human and Machine Cognition

BLOGIC; or, *Now* What's in a Link

Abstract: Putting logic on the Web has seemed like an intellectual one-way street: the logic was all worked out a century ago or more, the technology is 20 years old, and we are simply dealing with the dirty practical business of putting it into XML and getting it onto the Web. But there needs to be some intellectual traffic in the other direction. When logic meets the Web we have to re-think several of the basic assumptions of logic itself, to the point that it should be seen as a new subject, with a new name: blogic. This talk surveys several foundational issues in blogic that either never arose previously in logic, or have to now be reconsidered, focussing particularly on issues arising from linked data and the need for an 'intimatelyRelatedButMaybeNotActuallySameAs' relation.

Bio: Pat Hayes received a BA in mathematics from Cambridge University and a PhD in Artificial Intelligence from Edinburgh. He has held academic positions in computer science at the University of Essex (England), in philosophy at the University of Illinois and as the Luce Professor of cognitive science at the University of Rochester. He has been a visiting scholar at Universite de Geneve and the Center for Advanced Study in the Behavioral Studies at Stanford, and has directed applied AI research at Xerox-PARC, SRI and Schlumberger, Inc. At various times, Pat has been secretary of AISB, chairman and trustee of IJCAI, associate editor of Artificial Intelligence, a governor of the Cognitive Science Society and president of AAAI.

Pat's current research interests include knowledge representation and automatic reasoning, especially the representation of space and time; the semantic web; ontology design; and the philosophical foundations of AI and computer science. He also restores antique mechanical clocks, remodels old houses, draws portraits, and enjoys arguing with anyone about almost anything. Pat is a charter Fellow of AAAI and of the Cognitive Science Society, and has professional competence in domestic plumbing, carpentry, and electrical work.

Nova Spivak
Radar Networks

Present, Personalized and Precise: Defining Search for Web 3.0

Abstract: The next generation of web search is coming sooner than expected. In fact, we are already seeing several shifts in the way people search and the way major search engines provide functionality to consumers.

Whereas Web 1.0 (1989-99) was defined by hierarchical rankings and Web 2.0 (1999-2009) by social search, as we begin to realize the Semantic Web, the new paradigm of search will shift from the past to the present,

and from the social to the personal. Relevancy will not just be defined by keywords and graph algorithms, but by semantic precision.

Why should searches return the same results for everyone? When two different people search for the same information, they may want to get very different kinds of results. Someone who is a novice in a given field may want beginner-level information to rank higher in the results than someone who is an expert. Other use cases may emphasize things that are novel over things that have been seen before, or that have happened in the past — in these instances, the more timely something is, the more relevant it might be as well.

Two themes -- present and personal -- will come to define great search experiences. And although timeliness and relevance are familiar (if nascent) concepts in the context of search today, this talk will focus in particular on exploring some of the new realities and long-term consequences of the decade to come.

Bio: Nova Spivack is a technology visionary and entrepreneur with nearly two decades of experience in pioneering ventures. He is CEO and Founder of Radar Networks, a technology venture located in San Francisco that is developing a fundamental new technology for enriching content that will open up a new dimension of the Web. The company's first product, Twine, helps people track their interests, using the Semantic Web and collective intelligence. In 1994, Nova co-founded EarthWeb, one of the first Internet companies. While at Earth-Web he helped key cultural institutions and businesses develop their first large-scale Web presences, including the New York Stock Exchange, the Metropolitan Museum of Art, BMG Music Club, Sony, AT&T, US West, and others. He also helped to catalyze the adoption of Java technology by leading the production of large on-line communities for the IT professionals, including Gamelan.com, Developer.com, and Datamation.com. Prior to EarthWeb, Nova worked in a variety of roles from technology marketing to software engineering at artificial intelligence and next-generation computing ventures including Individual, Inc., Ray Kurzweil's pioneering OCR company, Kurzweil Computer Products, and at Danny Hillis' legendary supercomputing venture, Thinking Machines. Nova has extensive experience working on knowledge representation and the Semantic Web and has authored and helped to design several large (500 to 3000 class) ontologies in the OWL language, the W3C open standard for ontology specifications.

Tom Mitchell
Carnegie Mellon University

Populating the Semantic Web by Macro-Reading Internet Text

Abstract: A key question to the future of the semantic web is "how will we acquire structured information to populate the semantic web on a vast scale?" One approach is to enter this information manually. A second approach is to take advantage of the great deal of structured information already present in various databases, and to develop common ontologies, publishing standards, and reward systems to make this data widely accessible. We consider here a third approach: developing software that automatically extracts structured information from unstructured text present on the web.

This talk will survey attempts to extract structured knowledge from unstructured text, and will focus on an approach with three characteristics that we hypothesize make it viable. First, in contrast to the very difficult problem of reading information from a single document, we consider the much easier problem of reading hundreds of millions of documents simultaneously, so that our system can extract facts that are stated many

times by combining evidence from many documents. Second, our system begins with a given ontology that defines the types of information to be extracted, enabling it to focus its effort and to ignore most of the text that is irrelevant to the target ontology. Third, the system uses a new class of semi-supervised learning algorithms to learn how to extract information from web pages -- algorithms designed to achieve greater accuracy when given more complex ontologies. Our experiments show that this approach can produce knowledge bases containing tens of thousands of facts to populate given ontologies with approximately 90% accuracy, starting with only a handful of labeled training examples and 200 million unlabeled web pages.

Bio: Tom M. Mitchell is the E. Fredkin University Professor, and Chair of the Machine Learning Department at Carnegie Mellon University. His research interests are generally in machine learning, natural language processing, cognitive neuroscience and artificial intelligence. Mitchell is a AAAS Fellow, AAAI Fellow, and past President of the AAAI. His web home page is www.cs.cmu.edu/~tom

Mitchell's current research includes the development of machine learning methods to study natural language processing by both computers and humans. For example, his group has recently developed semi-supervised machine learning algorithms that learn to extract tens of thousands of factual assertions from unstructured text in millions of web pages, providing a possible route toward large scale semantic annotation of web text. In another project, he uses brain imaging methods (fMRI, MEG) to model the neural representations of English words in the human brain. Mitchell believes the field of machine learning will be the fastest growing branch of computer science during the 21st century.
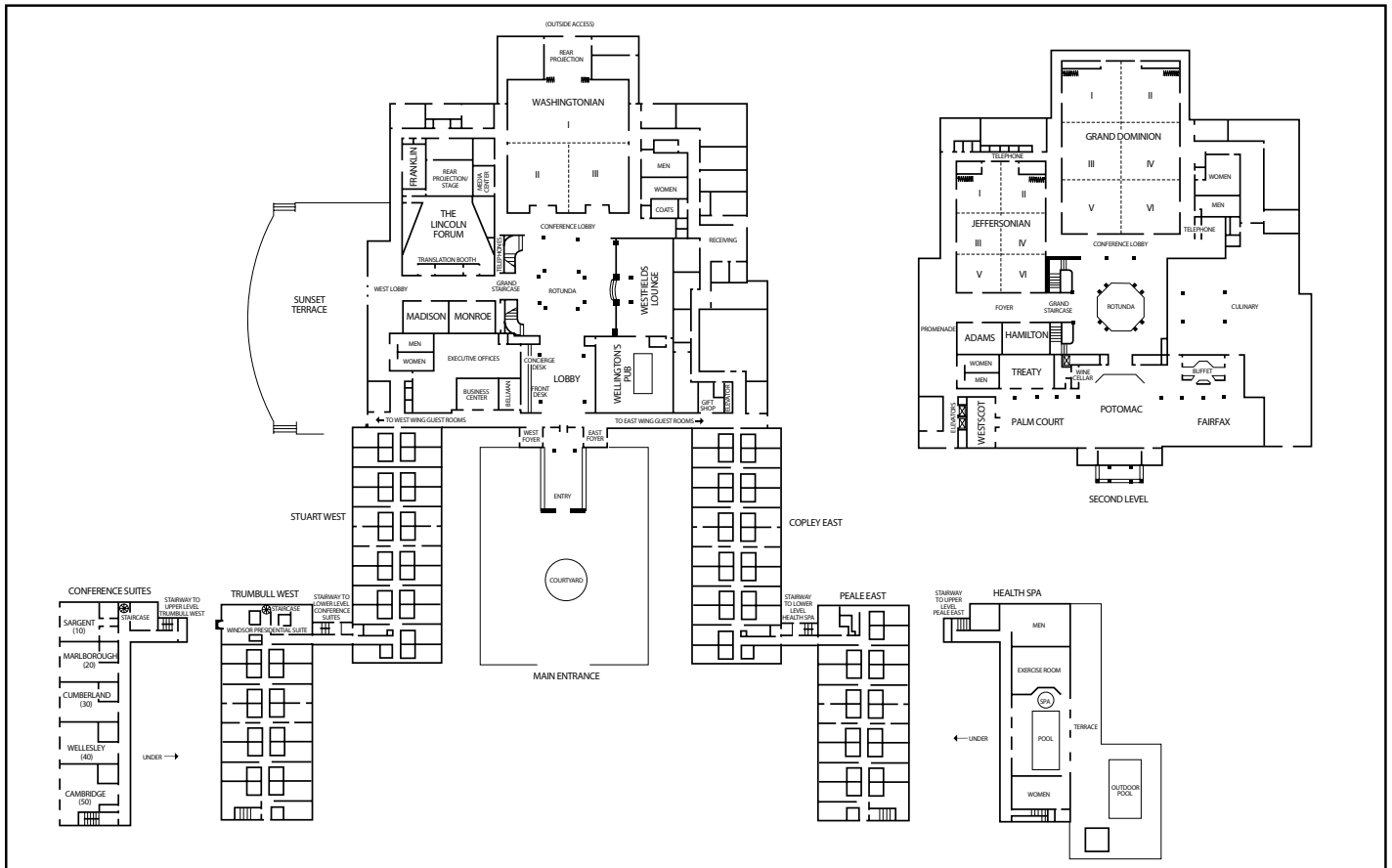
Conference Venue

Westfields Marriott Conference Center
14750 Conference Center Drive
Chantilly, Virginia 20151 USA

Registration Desk and Exhibits Opening Times

Saturday, October 24: 10:00AM – 5:00PM
Sunday, October 25: 7:30AM -7:00PM
Monday, October 26: 7:30AM - 5:30PM
Tuesday, October 27: 7:30AM - 5:30PM
Wednesday, October 28: 7:30AM - 5:30PM
Thursday, October 29: 7:30AM - 6:30PM

Conference Dining:

Breakfast and lunch are included daily in the conference package for ISWC participants.
Coffee breaks throughout the day are also included for ISWC participants.
Breakfast and Lunch are served in the Fairfax Dining Room.
For dinner reservations at local restaurants, please contact guest services

Program at a Glance

FRIDAY, OCTOBER 23

7:00 AM - 8:00 AM	OWLED Breakfast	Fairfax Dining Room
8:00 AM - 5:00 PM	OWLED Registration	Grand Dominion V, VI Foyer
7:00 AM - 11:00 AM	ISWC Coffee Break	Upper Rotunda
9:00 AM - 5:30 PM	OWLED Meeting	Grand Dominion I
12:30 PM - 1:30 PM	OWLED Lunch	Fairfax Dining Room
7:00 - 9:00 PM	OWLED Dinner	Fairfax Dining Room

SATURDAY, OCTOBER 24

7:00 AM - 8:00 AM	OWLED & DC Breakfast	Fairfax Dining Room
8:00 AM - 5:00 PM	Registration: OWLED & ISWC Doctoral Consortuim	Grand Dominion V, VI Foyer
9:00 AM - 5:30 PM	OWLED Meeting	Grand Dominion I
9:30 AM - 5:30 PM	ISWC Doctoral Consortium	Franklin
10:00 AM - 5:00 PM	ISWC Registration	Promenade
12:45 PM - 2:00 PM	OWLED Lunch	Fairfax Dining Room
12:00 PM - 1:00 PM	ISWC Doctoral Consortium Lunch	Fairfax Dining Room

SUNDAY, OCTOBER 25

7:00 AM - 8:00 AM	ISWC Breakfast	Fairfax Dining Room
8:15 AM - 8:45 AM	RR Breakfast	Fairfax Dining Room
7:30 AM - 7:00 PM	ISWC Exhibits	Promenade
7:30 AM - 7:00 PM	ISWC Registration	Promenade
8:30 AM - 6:00 PM	Workshop: Collaborative Construction, Management and Linking of Structural Knowledge Ontology Matching	Jeffersonian I
8:30 AM - 6:30 PM	Workshop: Ontology Matching	Grand Dominion III
8:30 AM - 6:30 PM	Workshop: Ontology Patterns	Jeffersonian III
8:30 AM - 6:00 PM	Workshop: Role of Semantic Web in Provernance Management	Jeffresonian IV
8:30 AM - 6:00 PM	Workshop: Service Matchmaking and Resource Retrieval in the Semantic Web	Jeffresonian V
8:30 AM - 6:00 PM	Workshop: Sharing Ideas for Complex Problems in User Interaction	Jeffersonian VI
8:30 AM - 6:00 PM	Workshop: Social Data on the Web	Grand Dominion V
8:30 AM - 6:00 PM	Tutorial: LarKC Early Adopters	Jeffersonian II
8:30 AM - 6:00 PM	Tutorial: The Web of Data for E-Commerce in Brief	Hamilton
8:30 AM - 12:30 PM	Tutorial: How to Consume Linked Data on the Web	Grand Dominion IV
8:30 AM - 12:30 PM	Tutorial: Working with Explanation of OWL Entailments	Grand Dominion VI
8:45 AM - 5:30 PM	RR 2009	Lincoln Forum
9:00 AM - 5:00 PM	Linked Data Mash A Thon	Franklin
12:30 PM - 2:00 PM	RR Lunch	Fairfax Dining Room
12:30 PM - 2:00 PM	ISWC Lunch	Fairfax Dining Room
2:00 PM - 6:00 PM	Tutorial: Connecting OWL 2 aware Components via OWLink	Grand Dominion IV
2:00 PM - 6:00 PM	Tutorial: Legal and Social Frameworks for Sharing Data on the Web	Grand Dominion VI

Program at a Glance

MONDAY, OCTOBER 26

7:30 AM - 5:30 PM	Registration	Promenade
7:30 AM - 5:30 PM	Exhibits	Promenade
7:00 AM - 8:00 AM	ISWC Breakfast	Fairfax Dining Room
7:30 AM - 5:30 PM	Linked Data Mash a Thon	Franklin
8:15 AM - 9:00 AM	RR Breakfast	Fairfax Dining Room
8:30 AM - 6:00 PM	Workshop: Scalable Semantic Web Knowledge Based Systems	Grand Dominion VI
8:30 AM - 6:00 PM	Workshop: Uncertainty Reasoning for the Semantic Web	Jeffersonian IV
8:00 AM - 12:00 PM	Life Sciences SIG	Washingtonian III
8:30 AM - 12:30 PM	Workshop: Semantics for the Rest of Us	Jeffersonian II
8:00 AM - 12:30 PM	Workshop: Living Web: Making Web Diversity a True Asset	Jeffersonian I
8:30 AM - 12:30 PM	Workshop: Semantic Sensor Networks	Grand Dominion V
8:30 AM - 12:30 PM	Workshop: Semantic Web Enabled Software Engineering	Jeffersonian VI
8:30 AM - 6:00 PM	Tutorial: Ontology Engineering: The NeOn Methodology through the NeOn Toolkit	Hamilton
8:30 AM - 12:30 PM	Tutorial: Semantic Web Basics	Jeffersonian III
8:30 AM - 12:30 PM	Tutorial: Multimedia Semantics: Metadata, Analysis, and Interaction	Jeffersonian V
8:30 AM - 12:30 PM	Tutorial: Building Ontology Based Applications Using Pellet	Grand Dominion IV
9:00 AM - 6:00 PM	RR 2009 Meeting	Lincoln Forum
12:30 PM - 2:00 PM	ISWC Lunch	Fairfax Dining Room
12:30 PM - 2:00 PM	RR Lunch	Fairfax Dining Room
2:00 PM - 6:00 PM	Workshop: Ontology Dynamics	Jeffersonian I
2:00 PM - 7:00 PM	Workshop: Semantic Web Applications in Scientific Discourse	Jeffersonian II
2:00 PM - 6:00 PM	Workshop: Terrra Cognita	Jeffersonian V and VI
2:00 PM - 6:00 PM	Tutorial: Building Semantic Web Applications for Government	Jeffersonian III
2:00 PM - 6:00 PM	Tutorial: Semantic Rules on the Web	Grand Dominion V
2:00 PM -6:00 PM	Scalable Scientific Web Knowledge Based Systems	Grand Dominion VI

TUESDAY, OCTOBER 27

7:00 AM - 8:00 AM	ISWC Breakfast	Fairfax Dining Room
7:00 AM - 8:00 AM	ISWC Coffee Break	Upper Rotunda
7:30 AM - 5:30 PM	ISWC Exhibits	Promenade
7:30 AM - 5:30 PM	ISWC Registration	Promenade
8:45 AM - 9:00 AM	ISWC Opening Ceremony	Grand Dominion
9:00 AM - 10:00 PM	ISWC Keynote: Pat Hayes	Grand Dominion
10:00 AM - 10:30 AM	Coffee Break	
10:30 AM - 12:30 PM	ISWC Research Track 1: User and the Social Semantic Web	Jeffersonian
10:30 AM - 12:30 PM	ISWC Research Track 2: Management Robust and Scalable Knowledge Management and Reasoning on the Web	Washingtonian I
10:30 AM - 12:30 PM	ISWC In Use Track: The Linked Data Web	Lincoln Forum
12:30 PM - 2:00 PM	ISWC Lunch	Fairfax Dining Room
12:00 PM - 2:00 PM	JWS Editorial Board Lunch (Invitation Only)	Wescott Room
2:00 PM - 3:30 PM	ISWC Research Track 1: Semantics: Ontology Modeling, Reuse, Extraction, and Evolution	Jeffersonian
2:00 PM - 3:30 PM	ISWC Research Track 2: Semantics: Alignment	Washingtonian I
2:00 PM - 3:30 PM	ISWC In Use Track: Integrating Systems, Vocabularies and Views	Lincoln Forum
3:30 - 4:00	Coffee Break	

Program at a Glance

TUESDAY, OCTOBER 27   continued

4:00 PM - 5:30 PM	ISWC Industry Track	Lincoln Forum
4:00 PM - 4:45 PM	Lightning Talks	Washingtonian I
4:00 PM - 5:30 PM	ISWC In Use Track: Social Web and Networks	Jeffersonian
4:45 PM - 5:45 PM	Panel: Does the Semantic Web Need Ontologies?	Lincoln Forum
6:00 PM - 8:00 PM	Meetup with Sir Tim Berners-Lee	Lincoln Forum
7:15 PM - 9:15 PM	ISWC Poster & Demonstration Reception	Grand Dominion & Grand Dominion Foyer

WEDNESDAY, OCTOBER 28

7:00 AM - 8:30 AM	ISWC Breakfast	Fairfax Dining Room
7:30 AM - 6:00 PM	ISWC Exhibits	Promenade
7:30 AM - 5:30 PM	ISWC Registration	Promenade
9:00 AM - 10:00 AM	ISWC Keynote: Tom Mitchell	Grand Dominion
10:00 AM - 10:30 AM	Coffee Break	
10:30 AM - 12:30 PM	ISWC Research Track 1: Applications: Semantic Web Technologies for Services	Jeffersonian III, IV, V VI
10:30 AM - 12:30 PM	ISWC Research Track 2: Semantics: Reasoning with Rules or Modules	Jeffersonian I, II
10:30 AM - 12:30 PM	ISWC In Use Track: Search & Query	Lincoln Forum
12:30 PM - 2:00 PM	ISWC Lunch	Fairfax Dining Room
12:30 PM - 2:00 PM	ISWC Mentoring Lunch	Westcot Dining Room
2:00 PM - 3:30 PM	ISWC Research Track 1: Applications: Semantic Web Technologies for Software and Systems Engineering - Process Models	Jeffersonian III, IV, V VI
2:00 PM - 3:30 PM	ISWC Research Track 2: Management: Search & Query 1	Jeffersonian I, II
2:00 PM - 3:30 PM	ISWC In Use Track: Combining Tools & Technologies	Lincoln Forum
3:30 PM - 4:00 PM	Coffee Break	
4:00 PM - 6:00 PM	ISWC Semantic Web Challenge and Billion Triple Challenge	Grand Dominion
6:00 PM - 6:30 PM	Linked Data-a-thon Presentation	Grand Dominion
6:30 PM - 7:00 PM	Town Meeting	Grand Dominion
7:30 PM - 8:00 PM	ISWC Reception	Washingtonian Ballroom Foyer
8:00 PM - 11:00 PM	ISWC Gala Dinner	Washingtonian Ballroom

THURSDAY, OCTOBER 29

7:00 AM - 8:00 AM	ISWC Breakfast	Fairfax Dining Room
7:00 Am - 11:00 AM	ISWC Coffee Break	Upper Rotunda
7:30 AM - 6:30 PM	ISWC Exhibits	Promenade
7:30 AM - 5:30 PM	ISWC Registration	Promenade
9:00 AM - 10:00 AM	ISWC Keynote: Nova Spivack	Grand Dominion
10:00 AM - 10:30 AM	Coffee Break	
10:30 AM - 12:30 PM	ISWC Research Track 1: Management: Search & Query 2	Jeffersonian III, IV, V VI
10:30 AM - 12:30 PM	ISWC Research Track 2: Semantics: Reasoning and Provenance	Grand Dominion
10:30 AM - 12:30 PM	ISWC Industry Track	Jeffersonian I, II
11:00 AM -2:00 PM	ISWC Coffee Break	Upper and Lower Rotundas
12:30 PM - 2:00 PM	ISWC Lunch	Fairfax Dining Room
2:00 PM - 5:00 PM	ISWC Coffee Break	Upper and Lower Rotundas
2:00 PM - 3:30 PM	ISWC Research Track 1: Management: Database Technology	Jeffersonain III, IV, V VI
2:00 PM - 3:30 PM	ISWC Research Track 2: Discovering Semantics	Grand Dominion
2:00 PM - 4:00 PM	ISWC Industry Track	Jeffersonian I, II
3:30 PM - 4:00 PM	Coffee Break	
4:00 PM - 5:30 PM	ISWC Closing Ceremony and Awards	Grand Dominion

Doctoral Consortium

9:30 - 09:45   Welcome and Introduction

9:45 - 10:45   Oral Presentations
                Elena Cardillo: A Lexical - Ontological Resource for Consumer Healthcare
                Jessica Gronski: Semantic Web for Search
                Sebastian Speiser: Semantic Usage Policies for Web Services

11:15 - 11:45   Coffee Break

11:45 – 12:45   Oral Presentations
                Markus Luczak-Rösch: Towards Agile Ontology Maintenance
                Heiko Paulheim: Ontologies for User Interface Integration

12:45 - 2:00   Lunch

2:00 - 2:30   Oral Presentations
                Eric Wolf: Ontology-driven Generalization of Cartographic Representations by Aggregation and Dimensional Collapse

2:30 - 3:00   Short Poster Presentations (5 minutes each)
                Ronald Denaux: Multi-perspective Ontology Engineering

                Jing Li: LIZZ: A Graded Matrix-based Semantic Web Services Discovery

                Benjamin Adrian: Incorporating Ontological Background Knowledge into Information Extraction

                Nor Azlinayati Abdul Manaf: Exploring the Relationships between OWL and SKOS

                Maximilian Walther: Towards Federated Product Information Search and Comparison Backed by Ontologies

                Christina Feilmayr: ONTOSOPHIA Ontology-driven Information Extraction Supported by Corrective Feedback

3:00 - 4:00   Coffee and Poster Session

4:00 - 4:30   Wrap-up and Discussion

Program

8:30 - 6:00   Full Day Tutorials
LarKC Early Adopters Tutorial
Location: Jeffersonian II

The Web of Data for E-Commerce in Brief: A Hands-on Introduction to the GoodRelations Ontology, RDFa, Yahoo! SearchMonkey, and Linked Open Commerce
Location: Hamilton

8:30-12.30   Morning Tutorials
Working with Explanations of OWL Entailments
Location: Grand Dominion VI

How to Consume Linked Data on the Web
Location: Grand Dominion IV

1:00 - 6:00   Afternoon Tutorials
Legal and Social Frameworks for Sharing Data on the Web
Location: Grand Dominion VI

Connecting OWL 2-aware Components via OWLlink
Location: Grand Dominion IV

8:30 - 6:00   Full Day Workshops
Collaborative Construction, Management and Linking of Structured Knowledge (CK)
Location: Jeffersonian I

Ontology Matching (OM)
Location: Grand Dominion III

Ontology Patterns (WOP)
Location: Jeffersonian III

Role of Semantic Web in Provenance Management (SWPM)
Location: Jeffersonian IV

Service Matchmaking and Resource Retrieval in the Semantic Web (SMR2)
Location: Jeffersonian V

Sharing Ideas for Complex Problems in User Interaction (SWUI)
Location: Jeffersonian VI

Social Data on the Web (SDoW)
Location: Grand Dominion V

9:00 AM - 5:00 PM   Linked Data-a-thon
Location: Franklin
Organizers: Juan Sequeda, Jamie Taylor

New this year, the Linked Data-a-thon will unite Linked Data practitioners in order to create "quick and dirty" innovative applications that make use of Linked Data. Prizes will be awarded.
See www.linkeddata-a-thon.com.

Program

8.30 - 6:00   **Full Day Tutorials**
Ontology Engineering: the NeOn Methodology through the NeOn Toolkit
Location: Hamilton

8:30-12:30   **Morning Tutorials**
Building Ontology-based Applications Using Pellet
Location: Grand Dominion IV

Multimedia Semantics: Metadata, Analysis and Interaction
Location: Jeffersonian V

Semantic Web Basics
Location: Jeffersonian III

2:00 - 6:00   **Afternoon Tutorials**
Semantic Rules on the Web
Location: Grand Dominion V

Building Semantic Web Applications for Government
Location: Grand Dominion VI

8:30 - 6:00   **Full Day Workshops**
Scalable Semantic Web Knowledge Base Systems (SSWS)
Location: Jeffersonian III

Uncertainty Reasoning for the Semantic Web (URSW)
Location: Jeffersonian IV

8:30 - 12:30   **Morning Workshops**
Living Web: Making Web Diversity a True Asset (8:00 AM Start)
Location: Jeffersonian I

Semantics for the Rest of Us (SemRUs)
Location: Jeffersonian IV

Semantic Sensor Networks (SSN)
Location: Grand Dominion V

Semantic Web Enabled Software Engineering (SWESE)
Location: Jeffersonian VI

2:00 - 6:00   **Afternoon Workshops**
Ontology Dynamics (IWOD)
Location: Jeffersonian I

(2:00 - 7:00)   Semantic Web Applications in Scientific Discourse
Location: Jeffersonian II

Terra Cognita
Jeffersonian V, VI

9:00 AM - 5:00 PM   **Linked Data-a-thon**
Location: Franklin
Organizers: Juan Sequeda, Jamie Taylor

This is a continuation of Sunday's session

10:30   Research Track 1: User and the Social Semantic Web (Collaboration, Policy, and Trust)
Chair: Natasha Noy
Location: Jeffersonian

Analysis of a Real Online Social Network Using Semantic Web Frameworks - *General Interest*
Guillaume Ereteo, Michel Buffa, Fabien Gandon, Olivier Corby

Policy Aware Content Reuse on the Web- *General Interest*
Oshani Seneviratne, Lalana Kagal, Tim Berners-Lee

Social Trust Based Web Service Composition- *General Interest*
Ugur Kuter, Jennifer Golbeck

Multi Visualisation and Dynamic Query for Effective Exploration of Semantic Data- *General Interest*
Daniela Petrelli, Suvodeep Mazumdar, Aba-Sah Dadzie, Fabio Ciravegna

10:30   Research Track 2: Management: Robust and Scalable Knowledge Management and Reasoning on the Web
Chair: Umberto Straccia
Location: Washingtonian I

Parallel Materialization of the Finite RDFS Closure for Hundreds of Millions of Triples
Jesse Weaver, James Hendler

A Decomposition-based Approach to Optimizing Conjunctive Query Answering in OWL DL
Jianfeng Du, Guilin Qi, Jeff Z. Pan, Yi-Dong Shen

Scalable Distributed Reasoning Using MapReduce
Jacopo Urbani, Spyros Kotoulas, Eyal Oren, Frank van Harmelen

Towards Lightweight and Robust Large Scale Emergent Knowledge Processing
Vit Novacek, Stefan Decker

10:30   In Use Track: The Linked Data Web
Location: Lincoln Forum

LinkedGeoData - Adding a Spatial Dimension to the Web of Data
Sören Auer, Jens Lehmann, Sebastian Hellmann

Extracting Enterprise Vocabularies Using Linked Open Data
Julian Dolby, Achille Fokoue, Aditya Kalyanpur, Edith Schonberg, Kavitha Srinivas

Bridging the Gap Between Linked Data and the Semantic Desktop
Tudor Groza, Laura Dragan, Siegfried Handschuh, Stefan Decker

RAPID: Enabling Scalable Ad Hoc Analytics on the Semantic Web
Radhika Sridhar, Padmashree Ravindra, Kemafor Anyanwu

2:00   Research Track 1: Semantics: Ontology Modeling, Reuse, Extraction, and Evolution
Chair: Thomas Lukasiewicz
Location: Jeffersonian

On Detecting High-Level Changes in RDF/S KBs
Vicky Papavassiliou, Giorgos Flouris, Irini Fundulaki, Dimitris Kotzinos, Vassilis Christophides

Graph-Based Ontology Construction from Heterogenous Evidences- *General Interest*
Christoph Boehm, Philip Groth, Ulf Leser

OntoCase - Automatic Ontology Enrichment Based on Ontology Design Patterns- *General Interest*
Eva Blomqvist

2:00   Research Track 2: Semantics: Alignment
Chair: Valentina Tamma
Location: Washingtonian I

What Four Million Mappings Can Tell You About Two Hundred Ontologies

Program

Amir Ghazvinian, Natalya Noy, Clement Jonquet, Nigam Shah, Mark Musen

Actively Learning Ontology Matching via User Interaction
Feng Shi, Juanzi Li, Jie Tang, Guotong Xie, Hanyu Li

A Conflict-based Operator for Mapping Revision--Theory and Implementation
Guilin Qi, Qiu Ji, Peter Haase

2:00   In Use Track: Integrating Systems, Vocabularies, and Views
Location: Lincoln Forum

A Case Study in Integrating Multiple E-commerce Standards via Semantic Web Technology
Yang Yu, Donald Hillman, Basuki Setio, Jeff Heflin

Supporting Multi-view Network Analysis to Understand Company Value Chains
Landong Zuo, Manuel Salvadores, SM Hazzaz Imtiaz, John Darlington, Nicholas Gibbins, Nigel R Shadbolt, James Dobree

Vocabulary Matching for Book Indexing Suggestion in Linked Libraries – A Prototype Implementation & Evaluation
Antoine Isaac, Dirk Kramer, Lourens van der Meij, Shenghui Wang, Stefan Schlobach, Johan Stapel

4:00   In Use Track: Social Web and Networks
Location: Jeffersonian

Live Social Semantics
Harith Alani, Martin Szomszor, Ciro Cattuto, Wouter Van den Broeck, Gianluca Correndo, Alain Barrat

Enrichment and Ranking of the YouTube Tag Space and Integration with the Linked Data Cloud
Smitashree Choudhury, John G. Breslin, Alexandre Passant

Produce and Consume Linked Data with Drupal!
Stephane Corlosquet, Renaud Delbru, Tim Clark, Axel Polleres, Stefan Decker

4:00   Industry Track
Location: Lincoln Forum

Open Architectures for Open Government
Cory Casanave

Strengthen your SOA with Semantics
John Hebeler

4:00   Lightning Talks
Location: Washingtonian I

Chaired by Abraham Bernstein and David R. Karger

4:45   Panel: Does the Semantic Web Need Ontologies?
Location: Washingtonian I

Moderator Joel Sachs. Panelists: Enrico Motta, Frank van Harmelen, Michael Witbrock, Tom Heath.

6:00   Meetup with Sir Tim Berners-Lee
Location: Lincoln Forum

Organized by the Washington Semantic Web Meetup, this is an open session. Tim is expected to finish talking by 7:00 so ISWC attendees can proceed to the Poster & Demonstration Reception.

7:15   Poster & Demonstration Reception
Location: Grand Dominion and Foyer

This is a social event combined with the opportunity to view posters, demonstrations, and Semantic Web Challenge entries.

10:30   **Research Track 1: Applications: Semantic Web Technologies for Services**
          Chair: David Martin
          Location: Jeffersonian III, IV, V, VI

          Automatically Constructing Semantic Web Services from Online Sources
          Jose Luis Ambite, Sirish Darbha, Aman Goel, Craig A. Knoblock, Kristina Lerman, Rahu Parundekar, Thomas Russ

          Optimizing QoS-Aware Semantic Web Service Composition
          Freddy Lécué

          Optimizing Web Service Composition while Enforcing Regulations
          Shirin Sohrabi, Sheila A. McIlraith

          Exploiting User Feedback to Improve Semantic Web Service Discovery
          Anna Averbakh, Daniel Krause, Dimitrios Skoutas

10:30   **Research Track 2: Semantics: Reasoning with Rules or Modules**
          Chair: Frank van Harmelen
          Location: Jeffersonian I, II

          Queries to Hybrid MKNF Knowledge Bases through Oracular Tabling
          Jose Alferes, Matthias Knorr, Terrance Swift

          Goal-Directed Module Extraction for Explaining OWL DL Entailments
          Jianfeng Du, Guilin Qi, Qiu Ji

          Task Oriented Evaluation of Module Extraction Techniques
          Ignazio Palmisano, Valentina Tamma, Terry Payne, Paul Doran

          Decidable Order-Sorted Logic Programming for Ontologies and Rules with Argument Restructuring
          Ken Kaneiwa, Philip Nguyen

10:30   **In Use Track: Search and Query**
          Location: Lincoln Forum

          Semantic Query and Analysis for Customer Data Management
          Li Ma, XingZhi Sun, Feng Cao, Chen Wang, Xiaoyuan Wang, Nick Kanellos, Dan Wolfson, Yue Pan

          Using Hybrid Search and Query for E-discovery
          Dave Grosvenor, Andy Seaborne

          What's new for SPARQL? Panel, Discussion & QA
          Members of the SPARQL Working Group

12:30   **Mentoring Lunch**
          Westcot Dining Room

          New this year, the Semantic Web Mentoring Lunch brings together graduate students and early-career researchers with researchers and faculty for a lively discussion and question-answering session on a variety of topics. Due to space limitations, sign up in advance by sending email to iswc09-mentoring-lunch@csail.mit.edu.

2:00   **Research Track 1: Applications: Semantic Web Technologies for Software and Systems Engineering- Process Models**
          Chair: Evren Sirin
          Location: Jeffersonian III, IV, V, VI

          Semantically-Aided Business Process Modeling
          Chiara Di Francescomarino, Chiara Ghidini, Marco Rospocher, Luciano Serafini, Paolo Tonella

Modeling and Query Patterns for Process Retrieval in OWL
Gerd Groener, Steffen Staab

Synthesizing Semantic Web Service Compositions with jMosel and Golog
Tiziana Margaria, Daniel Meyer, Christian Kubczak, Malte Isberner, Bernhard Steffen

2:00   **Research Track 2: Management: Search and Query 1**
        Chair: Peter Mika
        Location: Jeffersonian I, II

        TripleRank: Ranking Semantic Web Data By Tensor Decomposition
        Thomas Franz, Antje Schultz, Sergej Sizov, Steffen Staab

        Using Naming Authority to Rank Data and Ontologies for Web Search
        Andreas Harth, Sheila Kinsella, Stefan Decker

        Executing SPARQL Queries over the Web of Linked Data
        Olaf Hartig, Christian Bizer, Johann-Christoph Freytag

2:00   **In Use Track: Combining Tools & Technologies**
        Location: Lincoln Forum

        Reasoning about Resources and Hierarchical Tasks Using OWL and SWRL
        Daniel Elenius, David Martin, Reginald Ford, Grit Denker

        Semantic Web Technologies for the Integration of Learning Tools and Context-aware Educational Services
        Zoran Jeremic, Jelena Jovanovic, Dragan Gasevic

        Lifting Events in RDF from Interactions with Annotated Web Pages
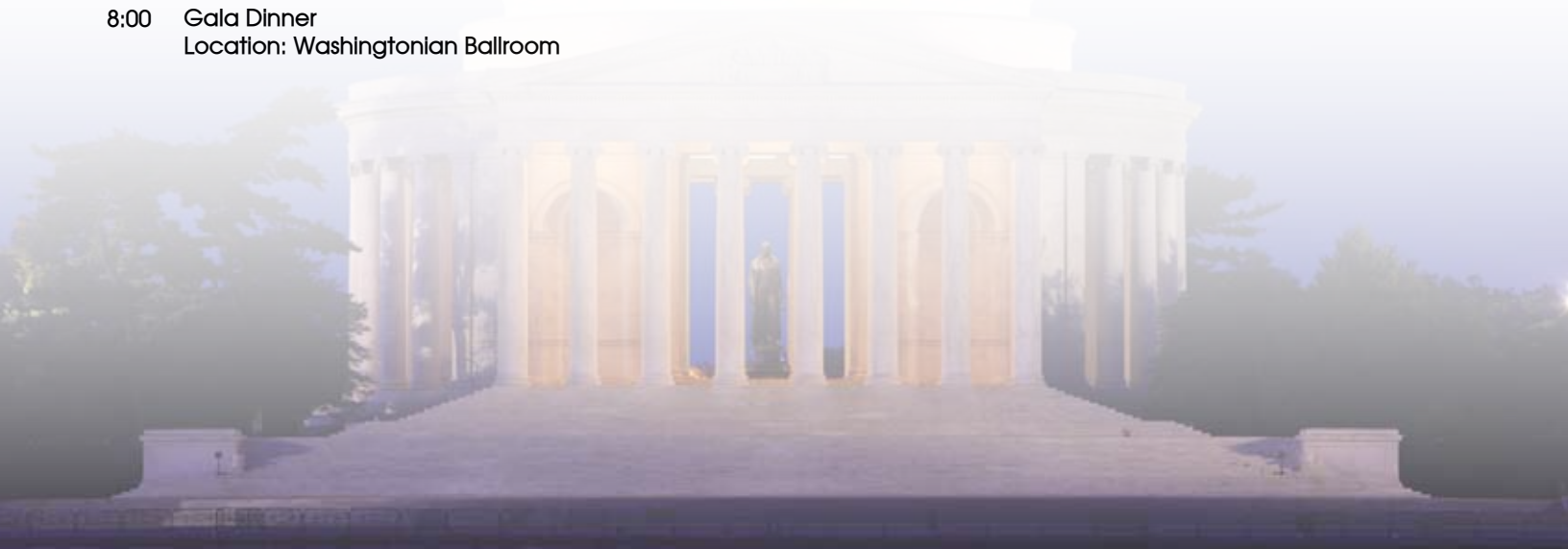   Roland Stühmer, Darko Anicic, Sinan Sen, Jun Ma, Kay-Uwe Schmidt, Nenad Stojanovic

6:00   **Linked Data-a-thon Presentation**
        Location: Grand Dominion

6:30   **Town Meeting**
        Location: Grand Dominion

        New this year, the Town Meeting provides an opportunity for attendees to provide feedback on the conference and suggestions for future years.

7:30   **ISWC Reception**
        Location: Washingtonian Ballroom Foyer

8:00   **Gala Dinner**
        Location: Washingtonian Ballroom

Program

10:30   **Research Track 1: Management: Search and Query 2**
Chair: Chris Bizer
Location: Jeffersonian III, IV, V, VI

XLWrap -Querying and Integrating Arbitrary Spreadsheets with SPARQL
Andreas Langegger, Wolfram Wöß

Functions over RDF Language Elements
Bernhard Schandl

Investigating the Semantic Gap through Query Log Analysis
Peter Mika, Edgar Meij, Hugo Zaragoza

A Practical Approach for Scalable Conjunctive Query Answering on Acyclic EL+ Knowledge Base
Jing Mei, Shengping Liu, Guotong Xie, Aditya Kalyanpur, Achille Fokoue, Yuan Ni, Hanyu Li,Yue Pan

10:30   **Research Track 2: Semantics: Reasoning and Provenance**
Chair: Claudio D'Amato
Location: Grand Dominion

Exploiting Partial Information in Taxonomy Construction
Rob Shearer, Ian Horrocks

A Weighted Approach for Partial Matching in Mobile Reasoning
Luke Steller, Shonali Krishnaswamy, Mohamed Gaber

Concept and Role Forgetting in ALC Ontologies
Kewen Wang, Zhe Wang, Rodney Topor, Jeff Z. Pan, Grigoris Antoniou

A Generic Approach for Large- Scale Ontological Reasoning in the Presence of Access Restrictions
Franz Baader, Martin Knechtel, Rafael Peñaloza

Coloring RDF Triples to Capture Provenance
Giorgos Flouris, Irini Fundulaki, Panagiotis Pediaditis, Yannis Theoharis, Vassilis Christophides

10:30   **Industry Track**
Location: Jeffersonian I, II

Knoodl: Semantic SOA Governance
Greg Milbank

Bigdata: Enabling the Semantic Web at Web-Scale
Mike Personick

Semantics in the US Navy
Gary Sikora

2:00   **Research Track 1: Management: Database Technologies**
Chair: Steffen Staab
Location: Jeffersonian III, IV, V, VI

Dynamic Querying of Mass-Storage RDF Data with Rule-Based Entailment Regimes
Giovambattista Ianni, Thomas Krennwallner, Alessandra Martello, Axel Polleres

DOGMA: A Disk-Oriented Graph Matching Algorithm for RDF Databases
Matthias Broecheler, Andrea Pugliese, V. S. Subrahmanian

Program

Efficient Query Answering for OWL 2
Héctor Pérez-Urbina, Ian Horrocks, Boris Motik

2:00 **Research Track 2: Discovering Semantics**
Chair: Fabio Ciravegna
Location: Grand Dominion

Discovering and Maintaining Links on the Web of Data
Julius Volz, Christian Bizer, Martin Gaedke, Georgi Kobilarov

Context and Domain Knowledge Enhanced Entity Spotting in Informal Text
Daniel Gruhl, Meena Nagarajan, Jan Pieper, Christine Robson, Amit Sheth

Learning Semantic Query Suggestions
Edgar Meij, Marc Bron, Laura Hollink, Bouke Huurnink, Maarten de Rijke

2:00 **Industry Track**
Location: Jeffersonian I, II

Moving Objects: Look in the Past, Manage the Present and Predict the Future
Craig Norvell

Linked Data And The New York Times
Evan Sandhaus

4:00 **Closing Ceremony and Awards**
Grand Dominion

Notes