

This volume contains the papers presented at the 5th Semantic Web Applications and Perspectives Workshop (SWAP 2008) held in Rome, Italy, 15th-17th December 2008.

The Semantic Web is currently one of the most interesting and ambitious challenges that the scientific and technological community is facing. While great progresses have been made in terms of consolidation of base philosophy and infrastructure, new issues, technologies and tools are emerging. These issues include creating, presenting and managing Semantic Web content, making semantics explicit in order to automatically integrate data from different sources, and to search for information based on its meaning rather than its syntactic form. New and advanced methods, models, tools, and technologies for services related to creation, access, retrieval, integration, and filtering of Web content are being developed at the intersection of relevant disciplines that are making the Semantic Web fly, such as Artificial Intelligence, Databases, Distributed Computing, Multimedia Systems, Natural Language Processing, and Human-Computer Interaction.

While applications that demonstrate the value of Semantic Web technologies are critically important, building applications that use Semantic Web technologies is still a relatively new practice for most software developers. This happens in the context of a widespread interest in semantic techniques for web data integration, e.g. Linking Open Data is growing very fast, microformats are blowing up on the web, social networks are blossoming, etc. How to leverage them toward the goal of having a smarter web, call it Web 3.0 or not? SWAP aims at a relaxed meeting for brainstorming and debating among international researchers and developers on the Semantic Web, with a special focus on aspects that can enable wide-scale use of Semantic Web technologies.

Formerly an Italian-focused workshop (rate of Italian submissions still retain this heritage), this year SWAP 2008 goes fully international, and features two tutorials and two keynote lectures by renowned researchers from the Semantic Web community. The tutorials cover: *Publishing Linked Data on the Semantic Web* by Danny Ayers (TALIS), and *Ontology-based Data Integration* by Giuseppe De Giacomo (University of Rome). The lectures include: *Semantic Web technologies: where next?* by Dan Brickley (The FOAF Project), and *Where will meaning emerge from?* by Massimiliano Ciaramita (Google). Taken together, tutorials and lectures cover the core perspectives of the Semantic Web: the web of data, both in “webby” and formal varieties, the core technologies, and the relation between the Semantic Web and the world of natural language processing.

The workshops program includes scientific papers presentations and a poster session (see below for statistics). Novel ways of reviewing (double-openness, new criteria), and author feedback for this year’s edition have been proposed (see below for details), and have proved successful from both reviewers’ and authors’ feedback.

As a joint event with SWAP, the artist Gerry Turano presents an exhibition including drawings, reliefs, and sculptures that are metaphorically associated with the themes of the workshop. For more information, please refer to <http://swapconf.it/2008/> or visit the artist's web site at <http://www.gerryturano.it>.

SWAP 2008 is organized and hosted by the United Nation's FAO agency in Rome headquarters, with the scientific coordination of the Semantic Technology Laboratory of ISTC-CNR Rome (<http://stlab.istc.cnr.it>) and the University of Trento (<http://www.di.unitn.it>). Sponsors include the EU projects NeOn (<http://www.neon-project.org>) and OKKAM (<http://www.okkam.org>), the Italian Office of the W3C, and the SEMEDIA Group of Università Politecnica delle Marche.

We thank the Program Committee for their effort in the reviewing process, as well as the local organizers and the SWAP steering committee for their solid support.

Rome, December 15th, 2008

The SWAP 2008 Chairs

Aldo Gangemi
Johannes Keizer
Valentina Presutti
Heiko Stoermer

Appendices

Statistics

We received 47 clean submissions. The accepted papers are 25 (53% acceptance rate), and are distributed as follows:

by topic:

Applications of Semantic Web technologies (17)
Languages, Tools and Methodologies for Semantic Web Data (11)
Semantic Information Retrieval (7)
Semantic Coordination, Integration, Matching and Interoperability (5)
Semantic Web services (5)
Ontology Design, Extraction, and Evolution (4)
Searching, Querying, Visualizing and Interpreting the Semantic Web (4)

by country provenance:

Italy (14)
Spain (3)
International collaboration (3)
UK (2)
Oman (1)
Japan (1)
India (1)

Reviewing Approach and Criteria

This year we have decided to experiment a double-open (or "glassbox") review procedure, with weighted criteria, ranging from traditional ones like *originality* and *relevance*, to unusual ones, like *gut feeling* i.e. the general feeling of "liking" a paper:

this is too often implicit in reviews. This means that, besides showing the name of the authors to reviewers, at the end of paper review text, the authors have found the name of the reviewer together with weighted scores. PC members (mostly outstanding junior researchers, also a choice of the chairs) effort had to deal with fairness, in an unconventional role. They were really professional and kind in accepting to sign their reviews.

The motivations for choosing the glassbox approach are the following. Recently, we have noticed that reviews in semantic web conferences are more and more superficial on average. This is probably due to the large number of conferences and the engagement of people in so many activities. Furthermore, it seems that every conference/workshop/journal etc. has its own evaluation criteria and methods, which are eventually taken into consideration in a rather subjective way by reviewers, meta-reviewers, and chairs.

We have considered the aspects of this choice. We know that putting a name under a review carries more responsibilities on the reviewer's side, and at a first glance it can appear reasonable to allow anonymous reviewing as a guarantee of objective evaluation. On the other hand, anonymity could lead to distortion: if a reviewer is a competitor in an area covered by a submitted paper, thanks to anonymity, one could be tempted to stress the problems of that paper, rather than appreciating the pros and cons of the approach presented.

While a glassbox reviewer could feel compelled to be "polite", it would also require some attention to details, in order to avoid gross misinterpretations. In addition, it would be more important for an author to submit well-thought work, before being publicly confronted with potential colleagues and friends. For some reason, it seems that this desirable psychological attitude is less activated by anonymity.

Now, SWAP is mostly attended by young researchers, and many of them are students. Often, the work presented is not completely mature (and this is in line with a workshop). As a workshop, it promotes and supports high quality scientific debate, but not really hard international competition. This helps in making this "experiment" less risky, politically speaking.

In order to better support and help our PC, we have defined a set of guidelines (published on the SWAP 2008 web site) that have helped reviewers getting a comparable approach to the evaluation. This means that the overall evaluation is given based on a common method, and every criterion has a fixed impact weight.

As a result, we can say now that we have achieved our goals i.e. having accurate and fair reviews, with a polite tone, and often rich of suggestions. As expected, the percentage of papers that had an average ≥ 0 synthetic score has been significantly higher than in other contexts (about 60%), so that we had to reject papers that had got substantially positive reviews. We think that this does not decrease the critical power of reviewers and does not impair the natural selection mechanism of science evolution. On the contrary, we believe that gathering more accurate and fair reviews, even if with a tendency to politeness, makes authors to take remarks and suggestions more positively, and to get encouraged in improving their work.

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Aldo Gangemi, STLab ISTC-CNR
Johannes Keizer, FAO-UN

Programme co-chairs

Valentina Presutti, STLab ISTC-CNR
Heiko Stoermer, University of Trento

Sponsoring chair

Giovanni Semeraro, University of Bari

Local Organization

Elena Di Paola, FAO-UN
Kris Jelinek, FAO-UN

Web master

Christian Morbidoni, Università Politecnica delle Marche

SWAP series steering committee

Paolo Bouquet, University of Trento
Oreste Signore, W3C Office in Italy/CNR
Giovanni Tummarello, Digital Enterprise Research Institute, Galway, Ireland

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Andreas Harth, DERI (IR)

Johannes Keizer, FAO (IT)
Agnieszka Lawrynowicz, Poznan University (PL)
Holger Lewen, AIFB University of Karlsruhe (DE)
Diana Maynard, University of Sheffield (UK)
Elena Montiel Ponsoda, Universidad Politécnica de Madrid (ES)
Christian Morbidoni, Università Politecnica delle Marche (IT)
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Heiko Stoermer, Università di Trento (IT)
Giovanni Tummarello, DERI (IR)
Denny Vrandecic, AIFB University of Karlsruhe (DE)

Additional Reviewers

Michele Catasta, DERI (IR) Tommaso Di Noia, Politecnico di Bari (IT) Soonho Kim, Francesca A. Lisi, Università degli Studi di Bari (IT) Alexandre Passant, Université Paris-Sorbonne (FR) Eufemia Tinelli, Politecnico di Bari (IT) Jürgen Umbrich, University of Karlsruhe (TH)