14th ESWC 2017

May 28th - June 1st 2017
Portorož, Slovenia

#ESWC2017

ESWC 2017 Opening Ceremony
Eva Blomqvist, General Chair
Welcome to ESWC 2017
ESWC Steering Committee

John Domingue,
President of STI International,
Director of The Knowledge Media Institute, Open University, UK

Conference Administration and Local Team

Local Chair
Marko Grobelnik,
Jožef Stefan Institute,
Slovenia

Website
Venislav Georgiev, STI,
Austria

Local organisation
Marija Kokelj,
JSI, Slovenia

Treasurer
Alexander Wahler,
STI, Austria

2017.eswc-conferences.org
Sponsors and Supporters

- IOS Press
- STI · INNSBRUCK
- Springer
- ELSEVIER
- Ontotext
- videolectures.net: exchange ideas & share knowledge
- Institut ”Jožef Stefan”, Ljubljana, Slovenija
Journals

- **AI Communications**
  - Est. 1987

- **Applied Ontology**
  - Est. 2005

- **Semantic Web**
  - Est. 2010

- **Data Science**
  - Est. 2017

- Astrid Engelen-Visser – a.engelen@iospress.nl
- Maarten Fröhlich – m.frohlich@iospress.nl
- @IOSPress_STM
- www.iospress.com
Books Series

Frontiers in Artificial Intelligence and Applications

Studies on the Semantic Web

Astrid Engelen-Visser – a.engelen@iospress.nl
Maarten Fröhlich – m.frohlich@iospress.nl
@IOSPress_STM
www.iospress.com
Organizing Committee
Participation & Publicity

Around 230 registered participants

Social media

- Facebook event "ESWC 2017" and @ESWCCONF
- Twitter @eswc_conf
- Use #ESWC2017

Ruben Verborgh, Ghent University, Belgium
ESWC Workshops 2017

• Number of submissions: 16
• Number of accepted workshops: 13 (1 cancelled)

• New topics: robotics, distributed ledgers, deep learning, scientometrics, decentralized scholarly communication, biomedical data analytics

• Established topics:
  – Linked Data/RDF management/evolution/preservation/querying/quality/stream processing
  – sentiment analysis, healthcare, humanities (history)

Agnieszka Ławrynowicz, Poznan University of Technology, Poland
Fabio Ciravegna, University of Sheffield, UK
Workshop topics

Title and abstracts

active applications applied approaches areas benefit community data datasets deep different discussion domains enable evolving field fostering including interest knowledge learning life linked machine model offer ontology opportunity problems processing propose provide quality querying rdf related representation requires research rSP sciences scientific scientometrics semantic share stream tasks technologies topics web analysis analytics biomedical community contracts cultural curation data decentralization deep digital discovery emotion heritage historical impact integration interlinking knowledge learning ledgers life linked machine mapping matching ontology open processing profiling publishing quality rdf reasoning recognition reconciliation representation research science scientific scientometrics semantic smart social sparql stream trend versioning vocabularies web
Tutorials

Full Day:
- Modular Ontology Modeling with Ontology Design Patterns
- Linked Open Data for Semantics-aware Recommender Systems

Half Day:
- How and Why Computers Read the Web
- Link Discovery - Algorithms, Approaches and Benchmarks
- Rule-based Processing of Dynamic Linked Data
- Getting Started With Knowledge Graphs

- Many submissions were encouraged by personal invitations
- Received 6 submissions, all of good quality, all accepted
- 4 tutorials came with hands-on sessions...

Anna Lisa Gentile, IBM Research Almaden, USA
Sebastian Rudolph, TU Dresden, Germany
PhD Symposium

- Submissions: 14; Accepted: 10.

- Papers and presentations were mentored by a PC member between acceptance and print/presentation.

- Full-day symposium on Monday. Attendance ca. 20.

- Program: Half-hour talks with discussion and a feedback wrap session.

- In addition: Mentoring lunch (5 students, 2 mentors per table) to answer all questions students had about academia, career, etc.
Main Scientific Program

• Three keynote speakers and a panel
• 12 tracks
  – 11 research tracks, including two special tracks:
    • Multilinguality
    • Semantic Web and Transparency
  – 1 in-use track

Diana Maynard,
University of Sheffield, UK

Aldo Gangemi,
Paris Nord University,
France and ISTC-CNR, Italy
Keynote Speakers

Kevin Crosbie,
Chief Product Officer, RavenPack
"Bringing Semantic Intelligence to Financial Markets"

John Sheridan,
Digital Director, The National Archives (UK)
"Semantic Web technologies for Digital Archives"

Lora Aroyo,
Professor, Vrije Universiteit Amsterdam, NL,
and Visiting Professor Columbia University, New York, US
"Disrupting the Semantic Comfort Zone"
Panel - Today 17:30

THE FUTURE OF PROCEEDINGS PUBLICATION: THE PERSPECTIVE OF THE SEMANTIC WEB COMMUNITY

• Rotating speakers: a few starters introduce the discussion (5 minutes max, then speakers from the audience get on stage)
• Starters: Aliaksandr Birukou, Sarven Capadisli, John Domingue, Aldo Gangemi, Pascal Hitzler, Ruben Verborgh
Track Chairs

- Helena Sofia Pinto, Silvio Peroni: Vocabularies, Schemas, Ontologies
- Uli Sattler, Umberto Straccia: Reasoning
- Jun Zhao, Axel Ngonga Ngomo: Linked Data
- Harith Alani, Wolfgang Nejdl: Social Web and Web Science
- Maria Esther Vidal, Juergen Umbrich: Semantic Data Management, Big data, Scalability
- Claire Gardent, Udo Kruschwitz: Natural Language Processing and Information Retrieval
- Claudia d’Amato, Michael Cochez: Machine Learning
- Emanuele della Valle, Manfred Hauswirth: Mobile Web, Sensors and Semantic Streams
- Peter Haase, Barry Norton: Services, APIs, Processes and Cloud Computing
- Philipp Cimiano, Roberto Navigli: Multilinguality
- Mathieu d’Aquín, Giorgia Lodi: Semantic Web and Transparency
- Paul Groth, Paolo Bouquet: In-Use and Industrial
## Submissions and Acceptances by Track

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# Reviewing figures

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reasoning
Linked Data
Social Web and Web Science
Semantic Data Management, Big data, Scalability
NLP & IR
Machine Learning
Mobile Web, Sensors and Semantic Streams
Services, APIs, Processes, Cloud Computing
Multilinguality
Transparency

Submissions per Track
- Vocabularies, Schemas, Ontologies
- Reasoning
- Linked Data
- Social Web and Web Science
- Semantic Data Management, Big data, Scalability
- NLP & IR
- Machine Learning
- Mobile Web, Sensors and Semantic Streams
- Services, APIs, Processes, Cloud Computing
- Multilinguality
- Transparency
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Submitted vs Accepted: Top 10 Countries

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Accepted: Countries by organisation contribution

- France
- Germany
- United Kingdom
- Italy
- USA
- Austria
- Greece
- Ireland
- Belgium
- Netherlands

**Contribution**

**Papers**
Submitted Papers

Word Cloud
Accepted Papers

Word Cloud

access address adopted affinity algorithms alignment analysis annotated api application approach associations automated automatic available axioms capture case connectivity context data datasets dbpedia design detection discovery engineering entity evaluation events experiments exploration extension extraction features formal framework general gold graph implementation indicators information integration knowledge language learning linked logic mapping measures memory metadata methods model named nature network nodes object ontology open owl pattern performance processing propose public quality query rdf reasoning recommendation relations represent representation requirements results rules search semantic shows social sources sparql standards streams structure support system task technologies text tools transformations type updates users web wikipedia
Quality Checking

- Derek Doran quality checks for plagiarism and duplicate submissions
- Metadata comparison (pairs of papers with similar authors)
- Plagiarism check via Springer – similarity of paper content
  - 2 cases >90% similarity -> rejected (both out of scope anyway)
  - 3 cases >40% similarity – manually checked and alerted track chairs
- Documented strategy and developed guidelines on how to deal with such cases in future

Derek Doran,
Wright State University, US
Proceedings

• Two volumes
  – Research and In-use papers
  – Keynote abstracts
  – PhD Symposium papers
• Free online access at SpringerLink (during the conference)
• Download

Olaf Hartig,
Linköping University, SE
Candidates
– Best Research Paper Award

Rafael Peñaloza, Carlos Mencía, Alexey Ignatiev and Joao Marques-Silva
Lean Kernels in Description Logics

Sara El Hassad, Francois Goasdoue and Helene Jallot
Learning Commonalities in RDF

Patrik Schneider, Thomas Eiter and Josiane Xavier Parreira
Spatial Ontology-Mediated Query Answering over Mobility Streams

Sarven Capadisli, Amy Guy, Christoph Lange, Sören Auer and Tim Berners-Lee
Linked Data Notifications

Today 11:00 and 11:30 (Reasoning1)

Today 16:30 (Mobile Web, ...)

Tomorrow 12:00 (Social Media)
Candidates
– Best Student Paper Award

Nam Khanh Tran, Tuan Tran and Claudia Niederée
Beyond Time: Dynamic Context-aware Recommendation

Sara El Hassad, Francois Goasdoue and Helene Jaudoin
Learning Commonalities in RDF

Chun Lu, Milan Stankovic, Filip Radulovic and Philippe Laublet
Crowdsourced Affinity: A Matter of Fact or Fiction

Sarven Capadisli, Amy Guy, Christoph Lange, Simon Legrand
Linked Data Notifications

Today 12:00 (NLP1)

Today 11:30 (Reasoning1)

Tomorrow 11:30 and 12:00 (Social Media)
Candidates
– Best In-Use Paper Award

Jeremy Lhez, Xiangnan Ren, Badre Belabbess and Olivier Curé

A Compressed, Inference-enabled Encoding Scheme for RDF Stream Processing

Amrapali Zaveri, Shima Dastgheib, Ruben Verborgh, Paul Avillach, Gabor Korodi, Raymond Terryn, Kathleen Jagodnik, Pedro Assis, Chunlei Wu and Michel Dumontier

smartAPI: Towards a more intelligent network of Web APIs
Candidates
– Best Paper 7 Year Award

**Incremental Reasoning on Streams and Rich Background Knowledge** (G:112, S:62)
Davide Francesco Barbieri, Daniele Braga, Stefano Ceri, Emanuele Della Valle, and Michael Grossniklaus

**Natural Language Interfaces to Ontologies: Combining Syntactic Analysis and Ontology-Based Lookup through the User Interaction** (G:139, S:60)
Danica Damljanovic, Milan Agatonovic, and Hamish Cunningham

**OWL Reasoning with WebPIE: Calculating the Closure of 100 Billion Triples** (G:178, S:77)
Jacopo Urbani, Spyros Kotoulas, Jason Maassen, Frank van Harmelen, and Henri Bal

**Facet Graphs: Complex Semantic Querying Made Easy** (G:90, S:49)
Philipp Heim, Thomas Ertl, Jürgen Ziegler

**Interactive Relationship Discovery via the Semantic Web** (G:98, S:63)
Philipp Heim, Steffen Lohmann, Timo Stegemann
Challenges

• 5 submissions - all accepted (one cancelled)
  – 7th Open Challenge on Question Answering over Linked Data (QALD-7)
  – ESWC-17 Challenge on Semantic Sentiment Analysis
  – The Mighty Storage Challenge
  – Open Knowledge Extraction Challenge 2017

• NOTE: change in schedule - session starts 11:30
Project Networking

• 17 submissions, 13 accepted submissions
• Keynote
  – The European Research Council: Funding opportunities for investigator-driven frontier research (Miklos Nagy)
• Short project presentation and networking

Maria Maleshkova,  
Karlsruhe Institute of Technology, Germany

Lyndon Nixon,  
Modul Universität Vienna, Austria
Posters and Demos

- **Posters:**
  20 submitted, 8 accepted

- **Demos:**
  33 submitted, 24 accepted (2 withdrawn)

- **Minute madness session - send your slides!**

Katja Hose,  
Aalborg University, Denmark

Heiko Paulheim,  
University of Mannheim, Germany
Posters and Demos (cont.)

- Poster session - Thursday morning 09:00
- Best poster and best demo
  - Please vote by using the conference app

Lionel Medini, University of Lyon, France

Luigi Asprino, University of Bologna, Italy
Social Events

Welcome reception

Gala dinner
Closing and Awards

All awards will be announced in the closing session on Thursday 17:30 (Emerald room)
Dobrodošli/Welcome to 14th ESWC in Portorož