

Contents

Linked Data Track

Detecting Similar Linked Datasets Using Topic Modelling	3
<i>Michael Röder, Axel-Cyrille Ngonga Ngomo, Ivan Ermilov, and Andreas Both</i>	
Heuristics for Connecting Heterogeneous Knowledge via FrameBase.	20
<i>Jacobo Rouces, Gerard de Melo, and Katja Hose</i>	
Dataset Recommendation for Data Linking: An Intensional Approach	36
<i>Mohamed Ben Ellef, Zohra Bellahsene, Stefan Dietze, and Konstantin Todorov</i>	
From Queriability to Informativity, Assessing “Quality in Use” of DBpedia and YAGO.	52
<i>Tong Ruan, Yang Li, Haofen Wang, and Liang Zhao</i>	
Normalized Semantic Web Distance	69
<i>Tom De Nies, Christian Beecks, Frédéric Godin, Wesley De Neve, Grzegorz Stepien, Dörthe Arndt, Laurens De Vocht, Ruben Verborgh, Thomas Seidl, Erik Mannens, and Rik Van de Walle</i>	
Gleaning Types for Literals in RDF Triples with Application to Entity Summarization	85
<i>Kalpa Gunaratna, Krishnaprasad Thirunarayan, Amit Sheth, and Gong Cheng</i>	
<i>TermPicker</i> : Enabling the Reuse of Vocabulary Terms by Exploiting Data from the Linked Open Data Cloud.	101
<i>Johann Schaible, Thomas Gottron, and Ansgar Scherp</i>	
Implicit Entity Linking in Tweets	118
<i>Sujan Perera, Pablo N. Mendes, Adarsh Alex, Amit P. Sheth, and Krishnaprasad Thirunarayan</i>	

Machine Learning Track

Fast Approximate A-Box Consistency Checking Using Machine Learning . . .	135
<i>Heiko Paulheim and Heiner Stuckenschmidt</i>	
Enriching Product Ads with Metadata from HTML Annotations	151
<i>Petar Ristoski and Peter Mika</i>	

Iterative Entity Navigation via Co-clustering Semantic Links and Entity Classes	168
<i>Liang Zheng, Jiang Xu, Jidong Jiang, Yuzhong Qu, and Gong Cheng</i>	
DoSeR - A Knowledge-Base-Agnostic Framework for Entity Disambiguation Using Semantic Embeddings	182
<i>Stefan Zwicklbauer, Christin Seifert, and Michael Granitzer</i>	
Embedding Mapping Approaches for Tensor Factorization and Knowledge Graph Modelling.	199
<i>Yinchong Yang, Cristóbal Esteban, and Volker Tresp</i>	
Comparing Vocabulary Term Recommendations Using Association Rules and Learning to Rank: A User Study.	214
<i>Johann Schaible, Pedro Szekely, and Ansgar Scherp</i>	
Mobile Web, Sensors and Semantic Streams Track	
Full-Text Support for Publish/Subscribe Ontology Systems	233
<i>Lefteris Zervakis, Christos Tryfonopoulos, Spiros Skiadopoulos, and Manolis Koubarakis</i>	
Heaven: A Framework for Systematic Comparative Research Approach for RSP Engines	250
<i>Riccardo Tommasini, Emanuele Della Valle, Marco Balduini, and Daniele Dell'Aglio</i>	
Natural Language Processing and Information Retrieval Track	
Bridging the Gap Between Formal Languages and Natural Languages with Zippers.	269
<i>Sébastien Ferré</i>	
Towards Monitoring of Novel Statements in the News.	285
<i>Michael Färber, Achim Rettinger, and Andreas Harth</i>	
AskNow: A Framework for Natural Language Query Formalization in SPARQL	300
<i>Mohnish Dubey, Sourish Dasgupta, Ankit Sharma, Konrad Höffner, and Jens Lehmann</i>	
Knowledge Extraction for Information Retrieval	317
<i>Francesco Corcoglioniti, Mauro Dragoni, Marco Rospocher, and Alessio Palmero Aprosio</i>	

Efficient Graph-Based Document Similarity	334
<i>Christian Paul, Achim Rettinger, Aditya Mogadala, Craig A. Knoblock, and Pedro Szekely</i>	
Semantic Topic Compass – Classification Based on Unsupervised Feature Ambiguity Gradation	350
<i>Amparo Elizabeth Cano, Hassan Saif, Harith Alani, and Enrico Motta</i>	
Reasoning Track	
Supporting Arbitrary Custom Datatypes in RDF and SPARQL	371
<i>Maxime Lefrançois and Antoine Zimmermann</i>	
Handling Inconsistencies Due to Class Disjointness in SPARQL Updates.	387
<i>Albin Ahmeti, Diego Calvanese, Axel Polleres, and Vadim Savenkov</i>	
A Contextualised Semantics for owl:sameAs	405
<i>Wouter Beek, Stefan Schlobach, and Frank van Harmelen</i>	
Semantic Data Management, Big Data, Scalability Track	
The Lazy Traveling Salesman – Memory Management for Large-Scale Link Discovery	423
<i>Axel-Cyrille Ngonga Ngomo and Mofeed M. Hassan</i>	
RDF Query Relaxation Strategies Based on Failure Causes	439
<i>Géraud Fokou, Stéphane Jean, Allel Hadjali, and Mickaël Baron</i>	
CyCLaDEs: A Decentralized Cache for Triple Pattern Fragments	455
<i>Pauline Folz, Hala Skaf-Molli, and Pascal Molli</i>	
LOTUS: Adaptive Text Search for Big Linked Data	470
<i>Filip Ilievski, Wouter Beek, Marieke van Erp, Laurens Rietveld, and Stefan Schlobach</i>	
Query Rewriting in RDF Stream Processing	486
<i>Jean-Paul Calbimonte, Jose Mora, and Oscar Corcho</i>	
Services, APIs, Processes and Cloud Computing Track	
Linking Data, Services and Human Know-How	505
<i>Paolo Pareti, Ewan Klein, and Adam Barker</i>	

Smart Cities, Urban and Geospatial Data Track

VOLT: A Provenance-Producing, Transparent SPARQL Proxy for the On-Demand Computation of Linked Data and its Application to Spatiotemporally Dependent Data 523
Blake Regalia, Krzysztof Janowicz, and Song Gao

Learning to Classify Spatiotextual Entities in Maps 539
Giorgos Giannopoulos, Nikos Karagiannakis, Dimitrios Skoutas, and Spiros Athanasiou

Supporting Geo-Ontology Engineering Through Spatial Data Analytics 556
Gloria Re Calegari, Emanuela Carlino, Irene Celino, and Diego Peroni

Trust and Privacy Track

Provenance Management for Evolving RDF Datasets. 575
Argyro Avgoustaki, Giorgos Flouris, Irimi Fundulaki, and Dimitris Plexousakis

Private Record Linkage: Comparison of Selected Techniques for Name Matching 593
Pawel Grzebala and Michelle Cheatham

Vocabularies, Schemas, Ontologies Track

An Ontology-Driven Approach for Semantic Annotation of Documents with Specific Concepts 609
Céline Alec, Chantal Reynaud-Delaître, and Brigitte Safar

Qanary – A Methodology for Vocabulary-Driven Open Question Answering Systems 625
Andreas Both, Dennis Diefenbach, Kuldeep Singh, Saedeeh Shekarpour, Didier Cherix, and Christoph Lange

Test-Driven Development of Ontologies. 642
C. Maria Keet and Agnieszka Ławrynowicz

In-Use & Industrial Track

Semantically Enhanced Quality Assurance in the JURION Business Use Case 661
Dimitris Kontokostas, Christian Mader, Christian Dirschl, Katja Eck, Michael Leuthold, Jens Lehmann, and Sebastian Hellmann

Adaptive Linked Data-Driven Web Components: Building Flexible and Reusable Semantic Web Interfaces	677
<i>Ali Khalili, Antonis Loizou, and Frank van Harmelen</i>	
Building the Seshat Ontology for a Global History Databank	693
<i>Rob Brennan, Kevin Feeney, Gavin Mendel-Gleason, Bojan Bozic, Peter Turchin, Harvey Whitehouse, Pieter Francois, Thomas E. Currie, and Stephanie Grohmann</i>	
RMLEditor: A Graph-Based Mapping Editor for Linked Data Mappings	709
<i>Pieter Heyvaert, Anastasia Dimou, Aron-Levi Herregodts, Ruben Verborgh, Dimitri Schuurman, Erik Mannens, and Rik Van de Walle</i>	
Enriching a Small Artwork Collection Through Semantic Linking.	724
<i>Mauro Dragoni, Elena Cabrio, Sara Tonelli, and Serena Villata</i>	
Ontology-Based Data Access for Maritime Security.	741
<i>Stefan Brüggemann, Konstantina Bereta, Guohui Xiao, and Manolis Koubarakis</i>	
WarSampo Data Service and Semantic Portal for Publishing Linked Open Data About the Second World War History	758
<i>Eero Hyvönen, Erkki Heino, Petri Leskinen, Esko Ikkala, Mikko Koho, Minna Tamper, Jouni Tuominen, and Eetu Mäkelä</i>	
Predicting Drug-Drug Interactions Through Large-Scale Similarity-Based Link Prediction.	774
<i>Achille Fokoue, Mohammad Sadoghi, Oktie Hassanzadeh, and Ping Zhang</i>	
PhD Symposium	
Semantics Driven Human-Machine Computation Framework for Linked Islamic Knowledge Engineering	793
<i>Amna Basharat</i>	
Towards Scalable Federated Context-Aware Stream Reasoning.	803
<i>Alexander Dejonghe</i>	
Machine-Crowd Annotation Workflow for Event Understanding Across Collections and Domains	813
<i>Oana Inel</i>	
Distributed Context-Aware Applications by Means of Web of Things and Semantic Web Technologies.	824
<i>Nicole Merkle</i>	

On Learnability of Constraints from RDF Data	834
<i>Emir Muñoz</i>	
A Knowledge-Based Framework for Events Representation and Reuse from Historical Archives	845
<i>Marco Rovera</i>	
Unsupervised Conceptualization and Semantic Text Indexing for Information Extraction	853
<i>Eugen Ruppert</i>	
Continuously Self-Updating Query Results over Dynamic Heterogeneous Linked Data	863
<i>Ruben Taelman</i>	
Exploiting Disagreement Through Open-Ended Tasks for Capturing Interpretation Spaces	873
<i>Benjamin Timmermans</i>	
A Semantic Approach for Process Annotation and Similarity Analysis	883
<i>Tobias Weller</i>	
Author Index	895