## Proceedings of the Posters and Demo Track of the 15th International Conference on Semantic Systems. 9th – 12th of September 2019, Karlsruhe, Germany

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## **Preface**

This volume contains the proceedings of the Poster and Demo Track of the 15th International Conference on Semantic Systems, SEMANTICS 2019. SEMANTICS is the annual meeting place for professionals who make semantic computing work, who understand its benefits and encounter its limitations. Every year, SEMANTICS attracts information managers, IT architects, software engineers and researchers from organisations ranging from research facilities, NPOs, through public administrations to the largest and/or most innovative companies in the world.

SEMANTiCS 2019 took place from September 9 - 12, 2019 in Karlsruhe, Germany. SEMANTiCS offers a forum for the exchange of latest scientific results in semantic systems and complements these topics with new research challenges in areas like data science, machine learning, logic programming, content engineering, social computing, Semantic Web and many more. The conference is in its 15<sup>th</sup> year and has developed into an internationally visible and professional academic event with a strong focus on transfer and outreach.

Conference participants learn from top researchers and industry experts about emerging trends and topics in the wide area of semantic computing. The SEMANTICS community is highly diverse; attendees have responsibilities in interlinking areas such as artificial intelligence, knowledge discovery and management, big data analytics, e-commerce, enterprise search, technical documentation, document management, business intelligence, and enterprise vocabulary management.

This year the SEMANTiCS conference's subtitle was "The Power of AI and Knowledge Graphs", and especially welcomed submissions to the following "hot" topics:

- Web Semantics & Linked (Open) Data
- Enterprise Knowledge Graphs, Graph Data Management, and Deep Semantics
- Machine Learning & Deep Learning Techniques
- Semantic Information Management & Knowledge Integration
- Terminology, Thesaurus & Ontology Management
- Data Mining and Knowledge Discovery
- Reasoning, Rules, and Policies
- Natural Language Processing
- Data Quality Management and Assurance
- Explainable Artificial Intelligence
- Semantics in Data Science
- Semantics in Blockchain and Distributed Ledger Technologies
- Trust, Data Privacy, and Security with Semantic Technologies
- Economics of Data, Data Services, and Data Ecosystems

We additionally issued calls for two special tracks:

- Digital Humanities and Cultural Heritage
- LegalTech

The Posters & Demos Track provided an opportunity to present innovative work in progress, late-breaking research and innovation results, and smaller contributions in all fields related to the broadly understood Semantic Web. These include submissions on innovative applications with impact on end-users such as demos of solutions that users may test or that are yet in the conceptual phase but are worth discussing, and also applications, use cases or pieces of code that may attract developers and potential research or business partners. This also concerns new data sets made publicly available.

29 original submissions and 2 re-submissions from the research track were accepted to this track, selected with a peer-reviewing process from a total of 48 poster and demo submissions. The reviewing committee included 88 members, who provided at least three reviews per submission. The accepted papers cover a wide range of topics among them are machine learning, legislation, regulatory compliance, ontologies and reasoning, open data, metadata catalogs, semantic search and querying, digital humanities, NLP and text mining. The accepted works have been published within CEUR Workshop Proceedings series. Each paper (except for the invited ones) was reviewed by at least three program committee members. Papers were selected based on the review scores, potential comments, and discussions among track chairs, as well as based on their topics to (try to) ensure a balanced and representative distribution of themes across the SEMANTiCS2019 Poster/Demo Track. This volume includes these papers in traditional PDF format.

Many thanks go to all authors who submitted papers and of course to the program committee which provided careful reviews in a quick turnaround time. We also would like to thank Thomas Thurner and Martin Kaltenböck from the Semantic Web Company for providing the organizational infrastructure and taking care of all the operational tasks. Additionally, we would also like to thank our local organisation team Stefan Summesberger, Vivien Vetter, Julia Holze, as well as all those helping hands that are too many to name for supporting this year's conference and turn it into a success.

We would also like to thank our sponsors (i.a.o.):

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Special thanks also go to the partners of the conference which are:

University of Basel, BID - Bibliothek & Information International, Cefriel, Connected Data London, Consiglo Nazionale delle Ricerche, Cyberforum, DBpedia, eccenca, FIZ Karlsruhe, GFWM, IBM, KIT - Karlsruhe Institute of Technology, TIB, University of Paderborn, University of Fribourg, Springer LNCS, Wolters Kluwer WU Vienna.

We hope that Posters and Demo Track in SEMANTiCS 2019 will provide you with new inspirations for your research and with opportunities for partnerships with other research groups, academic and industrial participants.

Sincerely yours, The Editors

Karlsruhe, September 2019