

Preface of the Proceedings of the Poster Demo Track of SEMANTiCS 2023

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1 Preface

This volume contains the proceedings of the Poster and Demo Track of the 19th International Conference on Semantic Systems, SEMANTiCS 2023, which took place from September 20–22, 2023, in Leipzig. SEMANTiCS is the annual meeting place for professionals who make semantic computing work, understand its benefits, and encounter its limitations. Every year, SEMANTiCS attracts information managers, IT architects, software engineers, and researchers from organizations ranging from research facilities and NPOs through public administrations to the largest and/or most innovative companies in the world.

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, bigdata analytics, e-commerce, enterprise search, technical documentation, document management, business intelligence, and enterprise vocabulary management.

The Posters & Demos Track provides a platform for researchers to showcase their latest findings, ongoing projects, and cutting-edge work in progress. These include submissions on innovative applications, the latest results, unpublished ideas, prototypes of semantic technologies and their use in various domains, as well as applications, use cases, or pieces of code that may attract developers and potential research or business partners. This also concerns new datasets made publicly available.

The Posters & Demos Track offers an informal setting that promotes engagement and dialogue between presenters and attendees. These discussions can provide valuable feedback for the presenters' future work while also allowing participants to gain insight into emerging research trends and network with other researchers.

This year, the SEMANTiCS conference especially welcomed submissions on the following cutting-edge topics:

- Web Semantics Linked (Open) Data
- Enterprise Knowledge Graphs, Graph Data Management

- Machine Learning Techniques for/using Knowledge Graphs (e.g. reinforcement learning, deep learning, data mining and knowledge discovery)
- Knowledge Management (e.g. acquisition, capture, extraction, authoring, integration, publication)
- Terminology, Thesaurus Ontology Management
- Reasoning, Rules, and Policies
- Natural Language Processing for/using Knowledge Graphs (e.g. entity linking and resolution using target knowledge such as Wikidata and DBpedia, foundation models)
- Crowdsourcing for/using Knowledge Graphs
- Data Quality Management and Assurance
- Mathematical Foundation of Knowledge-aware AI
- Multimodal Knowledge Graphs
- Semantics in Data Science
- Semantics in Blockchain environments
- Trust, Data Privacy, and Security with Semantic Technologies
- Economics of Data, Data Services, and Data Ecosystems
- IoT and Stream Processing
- Conversational AI and Dialogue Systems
- Provenance and Data Change Tracking
- Semantic Interoperability (via mapping, crosswalks, standards, etc.)

Special Sub-Topics included:

- Digital Humanities and Cultural Heritage
- LegalTech, AI Safety, Explainable and Interoperable AI
- Decentralized and/or Federated Knowledge Graphs

Application of Semantically Enriched and AI-Based Approaches included:

- Knowledge Graphs in Bioinformatics and Medical AI
- Clinical Use Case of AI-based Approaches
- AI for Environmental Challenges
- Semantics in Scholarly Communication and Open Research Knowledge Graphs
- AI and LOD within GLAM (galleries, libraries, archives, and museums) institutions

Nine original submissions were accepted for this track, selected through a peer-reviewing process from a total of 14 poster and demo submissions. The reviewing committee included 48 members, who contributed to receiving at least 3 reviews per submission. The accepted works have been published in the CEUR Workshop Proceedings series. 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 2023 Poster & Demo Track.

We would like to thank all authors who submitted papers and, of course, the program committee members who provided careful, thorough reviews in a quick turnaround time. We would also like to thank our local chairs, Julia Holze and

Michael Martic, as well as all those helping hands that are too many to name, for supporting this year's conference and turning it into a success.

We hope that these proceedings will provide you with new inspiration for your research and opportunities for partnerships with other research groups, academic and industrial participants.

2 Program Committee of the Poster & Demo Track of SEMANTiCS 2022

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