

# Preface of the Joint Proceedings of the Poster & Demo Track and Workshop Track of SEMANTiCS 2022

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## Preface

This volume contains the proceedings of the Poster and Demo Track and the Workshop Track of the 18th International Conference on Semantic Systems, SEMANTiCS 2022, which took place from September 13 - 15, 2022 in Vienna, Austria. SEMANTiCS is the annual meeting place for professionals both from academia and industry making semantic computing work, who 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, NPOs, through public administrations to the largest and/or most innovative companies in the world.

This year the SEMANTiCS conference's subtitle is "Towards A Knowledge-Aware AI", and especially welcomed submissions to the following cutting edge 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

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*SEMANTICS 2022 EU: 18th International Conference on Semantic Systems, September 13-15, 2022, Vienna, Austria*

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 CEUR Workshop Proceedings (CEUR-WS.org)

- Semantics in Blockchain and Distributed Ledger Technologies
- Trust, Data Privacy, and Security with Semantic Technologies
- Economics of Data, Data Services, and Data Ecosystems

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. 20 out of 27 submissions were accepted to this track, selected with a peer-reviewing process. The reviewing committee included 64 members, who provided mostly 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. 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 2022 Poster & Demo Track.

This volume further contains papers from the following workshops:

- 4th Workshop on Semantics for Transport 2022 (Sem4Tra22), organized by Pieter Colpaert, Ghent University, David Chaves, KU Leuven & Universidad Politécnic de Madrid, Marco Comerio & Mario Scrocca, Cefriel - Politecnico di Milano, and Mersedeh Sadeghi, University of Cologne.
- 1st Workshop on Ontologies for FAIR and FAIR Ontologies, organized by Luiz Olavo Bonino da Silva Santos, University of Twente and Leiden University Medical Center, Giancarlo Guizzardi, Free University of Bozen-Bolzano, Italy & University of Twente, Clément Jonquet, French National Research Institute for Agriculture, Food and Environment, and Cassia Trojahn UT2J and IRIT.
- 1st Workshop on Semantic AI, organized by Sebastian Neumaier, St. Pölten University of Applied Sciences, Martin Kaltenböck, Semantic Web Company, and Marta Sabou, Vienna University of Economics and Business

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

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