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# Metadata and Semantic Research

14th International Conference, MTSR 2020  
Madrid, Spain, December 2–4, 2020  
Revised Selected Papers

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Madrid, Spain

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# Preface

Metadata and semantics are integral to any information system and important to the sphere of Web data. Research and development addressing metadata and semantics is crucial to advancing how we effectively discover, use, archive, and repurpose information. In response to this need, researchers are actively examining methods for generating, reusing, and interchanging metadata. Integrated with these developments is research on the application of computational methods, linked data, and data analytics. A growing body of literature also targets conceptual and theoretical designs providing foundational frameworks for metadata and semantic applications. There is no doubt that metadata weaves its way through nearly every aspect of our information ecosystem, and there is great motivation for advancing the current state of understanding in the fields of metadata and semantics. To this end, it is vital that scholars and practitioners convene and share their work.

Since 2005, the International Metadata and Semantics Research Conference (MTSR) has served as a significant venue for dissemination and sharing of metadata and semantic-driven research and practices. 2020 marked the 14th MTSR, drawing scholars, researchers, and practitioners who are investigating and advancing our knowledge on a wide range of metadata and semantic-driven topics. The 14th International Conference on Metadata and Semantics Research (MTSR 2020) was organized by the Complutense University of Madrid, Spain, between 2 and 4 December, 2020. Due to the COVID-19 pandemic and taking into account all the available information and ongoing uncertainties and our concerns about the health and wellbeing of our community, the MTSR 2020 Organizing Committees decided to organize MTSR 2020 as an Online Conference. The MTSR 2020 Chairs, Organizing Committees, and Steering Committee worked together to change step by step the organizational structure of the conference.

MTSR conferences have grown in number of participants and paper submission rates over the past decade, marking it as a leading international research conference. Continuing the successful legacy of previous MTSR conferences (MTSR 2005, MTSR 2007, MTSR 2009, MTSR 2010, MTSR 2011, MTSR 2012, MTSR 2013, MTSR 2014, MTSR 2015, MTSR 2016, MTSR 2017, MTSR 2018, and MTSR 2019), MTSR 2020 brought together scholars and practitioners who share a common interest in the interdisciplinary field of metadata, linked data, and ontologies. 386 professionals registered for the MTSR 2020 online conference, from 43 countries.

The MTSR 2020 program and the proceedings show a rich diversity of research and practices from metadata and semantically focused tools and technologies, linked data, cross-language semantics, ontologies, metadata models, semantic systems, and metadata standards. The general session of the conference included 14 papers covering a broad spectrum of topics, proving the interdisciplinary view of metadata. Metadata as a research topic is maturing, and the conference supported the following eight tracks: Digital Libraries, Information Retrieval, Big, Linked, Social, and Open Data;

Agriculture, Food, and Environment; Open Repositories, Research Information Systems, and Data Infrastructures; Digital Humanities and Digital Curation; Cultural Collections and Applications; European and National Projects; Knowledge IT Artifacts in Professional Communities and Aggregations; and Metadata, Identifiers, and Semantics in Decentralized Applications, Blockchains, and P2P Systems.

Each of these tracks had a rich selection of short and full research papers, in total 23, giving broader diversity to MTSR, and enabling deeper exploration of significant topics. MTSR 2020 also co-hosted the DOABLE International inter-disciplinary conference, which brought together researchers, scholars, practitioners, educators, and information professionals coming from libraries, archives, museums, cultural heritage institutions, and organizations from the educational sector.

All the papers underwent a thorough and rigorous peer-review process by two to seven reviewers. The review and selection for this year was highly competitive and only papers containing significant research results, innovative methods, or novel and best practices were accepted for publication. From the general session, only seven submissions were accepted as full research papers, representing 24.1% of the total number of submissions, and seven as short papers. An additional 17 contributions from tracks covering noteworthy and important results were accepted as full research papers, representing 42.5% of the total number of submissions, and six as short papers, bringing the total of MTSR 2020 accepted contributions to 37. The acceptance rate of full research papers for both the general session and tracks was 34.7% of the total number of submissions.

The Complutense University of Madrid was founded by Cardinal Cisneros as a result of the “*Inter cetera*” Papal Bull granted by Pope Alexander VI on 13 April 1499. Nowadays the Complutense University of Madrid has three main objectives: to educate professionals who will be useful for society, to foster scientific research, and to disseminate knowledge and the intrinsic values of the University. A wide range of degrees are offered to meet the expectations of intellectual, economic, and scientific demands. The Department of Library and Information Science at the Faculty of Documentation Sciences, which was the School of Library and Information Science before 2006, has the following research lines: Society and library; Information policies, Information and Communication Technologies (ICT), and scientific communication; Management, assessment, and administration in information science units; and Photo documentation.

MTSR 2020 was pleased to host a remarkable keynote presentation by Ricardo Baeza-Yates, Professor in the Khoury College of Computer Sciences, Northeastern University at Silicon Valley, USA. In his presentation “Bias on the Web: A Content Accessibility Point of View”, Professor Baeza-Yates aimed to make people aware of the different biases that affect all of us on the Web. “The Web is the most powerful communication medium and the largest public data repository that humankind has created. Its content ranges from great reference sources such as Wikipedia to fake news. Indeed, social (digital) media is just an amplifying mirror of ourselves. Hence, the main challenge of search engines and other websites that rely on web data is to assess the quality of such data. However, as all people have their own biases, web content as well as our web interactions are tainted with many biases. Data bias includes redundancy and spam, while interaction bias includes activity and presentation bias. Awareness is the first step to be able to fight and reduce the vicious cycle of web bias.”

MTSR 2020 hosted a workshop on “Metadata enriching and filtering through FRBR and RDA” organized and presented by Dr. Getaneh Alemu, Cataloguing and Metadata Librarian, Solent University, UK.

We conclude this preface by thanking the many people who contributed their time and efforts to MTSR 2020 and made this year’s conference possible despite the unforeseen obstacles caused by COVID-19. We also thank all the organizations that supported this conference. We thank all the institutions and universities that co-organized MTSR 2020. We extend our sincere gratitude to the members of the Program Committees both main and special tracks, the Steering Committee, and the Organizing Committees (both general and local), to all the special track chairs, and to the conference reviewers who invested their time generously to ensure the timely review of the submitted manuscripts. A special thanks to keynote speaker Professor Ricardo Baeza-Yates, and to workshop organizer Dr. Getaneh Alemu. Also a special thank you to María-Antonia Ovalle-Perandones, Miguel-Angel Sicilia, Anxhela Dani, Ilias Nitsos, Vasiliki Georgiadi, Chrysanthi Chatzopoulou, Chrysanthi Theodoridou, and Iro Sotiriadou for supporting us throughout this event, and to Anxhela Dani and Chrysanthi Chatzopoulou who assisted us with the preparation of proceedings; and to Vasiliki, Nikoleta, and Stavroula for their endless support and patience. Our thanks go to our gold sponsor Elsevier, and our best paper and best student paper sponsor euroCRIS. Finally, our deepest thank you goes to all the authors and participants of MTSR 2020 for making the event a great success.

December 2020

Emmanouel Garoufallou  
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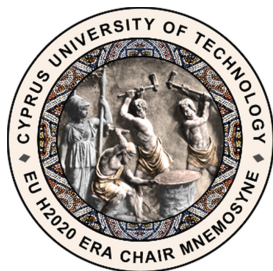
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