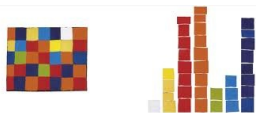


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OrdRing 2013

2nd International Workshop on Ordering and Reasoning

Workshop co-located with the 12th International Semantic Web Conference (ISWC 2013)

Sydney, Australia, October 22nd, 2013

Proceedings

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Preface

OrdRing 2013 was the 2nd International Workshop on Ordering and Reasoning and was collocated with 12th International Semantic Web Conference (ISWC 2013) in Sydney. The OrdRing workshop series aims to stimulate a paradigm shift in semantic technologies toward novel methods that integrate ordering with reasoning inspired by stream and rank-aware data management.

More and more applications require real-time processing of massive, dynamically generated, ordered data, where order is often an essential factor reflecting recency, proximity or relevance. Stream and rank-aware data management techniques are progressively providing reactive and reliable query answering over such massive datasets, allowing integration of highly dynamic sources. Key to their success is the use of streaming algorithms that harness the natural or enforceable orders in the data. The expressive power of semantic technologies is needed in those applications, yet existing semantic technologies are often unable to address these needs, since they do not consider ordering as an essential property. Ranking results is often seen as an *added task*, performed after inference, without affecting the inference process, which is order-agnostic.

The OrdRing workshops reflect a trend towards order-aware semantic technologies: both researchers and practitioners understand that order matters in reasoning over massive and highly dynamic data. The idea of Stream Reasoning is gaining considerable momentum. Some top-k query answering techniques for Linked Data appeared. Several works are considering SPARQL query answering on RDF annotated with partially ordered labels. The description logic community is investigating top-k ontological query answering.

This year's workshop received eight submissions out of which six were accepted. These submissions were equally distributed over two themes: extending the expressiveness of representation and query languages to better capture ordering information and reasoning over semantic data streams.

The increased interest in ordering and streaming information is also reflected by recent plans to start a W3C RDF Stream Processing Community Group. Given the close relation between the workshop topic and the discussion of the community group, the OrdRing workshop featured a keynote on this new group given by Oscar Corcho and was collocated with the open-door meeting of the group.

OrdRing 2013 featured excellent scientific papers, a high-profile keynote advocating the setting up of a community group for stream processing and a discussion of the future of the topic. We are happy and proud to present the proceedings of the workshop.

October 2013

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