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Web Reasoning and Rule Systems

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Proceedings

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Preface

Reasoning at Web scale continues to be one of the main challenges in bringing the Semantic Web to its full potential by providing support for ontology-based querying as well as logic-based extraction, exchange, and integration of Web data. Thereby, the distributed, heterogeneous and rapidly changing Web imposes various –and often even mutually conflicting– requirements on knowledge representation formalisms and inferencing techniques: modeling power, scalability, context-awareness, and the capability of coping with noisy and contradictory information as well as handling streaming data.

Of particular interest in this scenario is the use of rules to represent and model the particular inferences involved. The interplay between this classic reasoning approach with well-established Web languages such as RDF and OWL as well as other W3C standards has turned out to be one of the most fruitful research topics in this field. In the course of the four previous conferences, held in Innsbruck, Austria (2007), Karlsruhe, Germany (2008), Chantilly, Virginia, USA (2009), and Bressanone/Brixen, Italy (2010), the International Conference on Web Reasoning and Rule Systems has developed into a major forum for discussion and dissemination of new results on all topics of this area. The conference is devoted to both theoretical and practical aspects of this wide subject and continues to attract the world’s leading experts in the field.

This volume contains the papers presented at RR 2011: The 5th International Conference on Web Reasoning and Rule Systems, held during August 29-30, 2011, in Galway, Ireland, and which continued the excellence of the RR series. It contains 13 full papers and 12 short papers, which were selected out of 36 submissions following a rigorous reviewing process, where each submission was reviewed by at least three program committee members. The volume also contains one abstract and one paper each accompanying an invited talk.

We would like to thank our General Chair Heiner Stuckenschmidt, Krzysztof Janowicz for acquiring sponsors, and of course all the members of the Program Committee as well as the additional reviewers for their timely and thorough reviews. Special thanks go to our invited speakers Marie-Laure Mugnier and Marcelo Arenas. Particular thanks to Axel Polleres and his team who did a wonderful job with the organization under the auspices of DERI that hosted and supported the event. We also thank our sponsors *Artificial Intelligence Journal* (AIJ), Office of Naval Research Global, Siemens AG Austria, StormTechnology, and Vulcan Inc. Last but not least, thanks to EasyChair for the convenient and ergonomic facilities that greatly facilitated carrying out the administrative tasks related to the conference’s technical program.

August 2011

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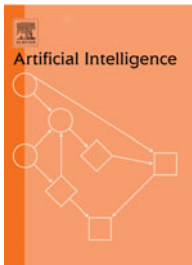
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