Proc. of Rule Challenge and Doctoral Consortium @ RuleML+RR 2023

Preface

RuleML+RR 2023 is the leading international joint conference in the field of rule-based reasoning. It focuses on theoretical advances, novel technologies, and innovative applications concerning knowledge representation, reasoning, and learning with rules. The conference is an annual event that builds bridges between academia and industry. These proceedings present the papers from the satellite events of RuleML+RR 2023, namely the 17th Rule Challenge and 7th Doctoral Consortium.

The Rule Challenge is one of the highlights of the conference and seeks to provide competition among innovative rule-oriented applications, aimed at both the research and industrial side. Submissions typically present demos related to the RuleML+RR topics, supply benchmarks and comparison results for rule engines and rule-based machine learning techniques, illustrate rule- and model-driven engineering, report on industrial experiences, present real case studies and practical experiences. The Rule Challenge is a competition, and a prize is awarded for the best Rule Challenge paper. This year's programme had 9 accepted papers across three sessions of the RuleML+RR conference.

The Doctoral Consortium is an initiative of the RuleML+RR community to attract and promote student research in the topics of the conference. It offers students close contact with leading experts in the field, as well as an opportunity to present and discuss their ideas in a dynamic and friendly setting. The topics range from theoretical aspects of rules and reasoning, such as knowledge elicitation within the knowledge graphs, ontology-enriched data management, data anonymization, and description logics, to relevant practical applications of machine learning. Students presented their work through brief oral presentations during a dedicated session of the RuleML+RR conference and had the chance to discuss their research in detail with experts in the field. This year's programme had 3 accepted papers from doctoral students.

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