

The 10th International Web Rule Challenge, taking place at the 10th International Web Rule Symposium (RuleML 2016) at Stony Brook, New York, aims to award novel and innovative rule-oriented applications, both from academics and industry. This year featured a range of competitive submissions, including multiple translation approaches to translate DMN models to RuleML and first-order logic, and inversely translate modal-logic RuleML to TPTP. Other, highly practical rule-based applications focused on diverse domains: such as monitoring cutter suction dredging; supporting compliance assessment in the financial market; supporting What-If analysis for DMN models; and introducing animation when teaching mathematics.

As in the past five editions, the RuleML Symposium hosts the 6th Doctoral Consortium attracting Ph.D. researchers in the area of Web Rules from different backgrounds and encouraging an interdisciplinary research approach. In this year doctoral consortium there are three PhD papers introducing research into rule-based fragment allocation in distributed databases, rule-based situation detection, and rule-based compliance checking of business processes. The doctoral students benefit from the dynamic and friendly setting at RuleML, as well as from fruitful interactions with their dedicated academic mentors and the attending researchers and industrial experts in the field, who can evaluate their research projects from both theoretical and practical perspectives.

The 2nd Annual Industry Track: Business Cases and Technologies for Rules in Industry: State of practice, Challenges and Opportunities was hosted by the 10th International Web Rule Symposium (RuleML) 2016. The three accepted papers describe rule-based solutions to technological challenges faced by industry, including SPARQL and Graph Store protocol extensions to support real-time views and updates of dynamic RDF Graph Stores, the generation and execution of workflows in smart factories, and component-based mobile agents for a predictive maintenance scenario.

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