

A Report on the Ninth International Web Rule Symposium

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■ *The annual International Web Rule Symposium (RuleML) is an international conference on research, applications, languages, and standards for rule technologies. RuleML is a leading conference to build bridges between academia and industry in the field of rules and its applications, especially as part of the semantic technology stack. It is devoted to rule-based programming and rule-based systems including production rules systems, logic programming rule engines, and business rule engines/business rule management systems; semantic web rule languages and rule standards; rule-based event-processing languages (EPLs) and technologies; and research on inference rules, transformation rules, decision rules, production rules, and ECA rules. The Ninth International Web Rule Symposium (RuleML 2015) was held in Berlin, Germany, August 2–5. This report summarizes the events of that conference.*

The Ninth International Web Rule Symposium (RuleML 2015) was held in Berlin, Germany, from August 2–5. The symposium was organized by Adrian Paschke (general chair), Fariba Sadri (program cochair), Nick Bassiliades (program cochair), and Georg Gottlob (program cochair). A total number of 94 papers were submitted from which 22 full papers, 1 short paper, 2 keynote papers, 3 track papers, 4 tutorial papers, 6 industry papers, 6 challenge papers, 3 competition papers, 5 Ph.D. papers and 3 poster papers were selected. The papers were presented in multiple tracks on complex event processing, existential rules and Datalog+/-, industry applications, legal rules and reasoning, and rule learning. Following the precedent set in earlier years, RuleML also hosted the Fifth RuleML Doctoral Consortium and the Ninth International Rule Challenge as well as the RuleML Competition, which this year was dedicated to rule-based recommender systems on the web of data. A highlight of this year's event was the industry track, which introduced six papers describing research work in innovative companies. New this year was also the joint RuleML / reasoning web tutorial day on the first day of the symposium, with four tutorials — TPTP World by Geoff Sutcliffe, PSOA RuleML by Harold Boley, Rulelog by Benjamin Grosz, and OASIS LegalRuleML by Tara Athan.

Join Us in New Orleans for AAAI-17!

The Thirty-First AAAI Conference on Artificial Intelligence (AAAI-17) and the Twenty-Ninth Conference on Innovative Applications of Artificial Intelligence (IAAI-17), will be held in New Orleans, Louisiana, USA, during the mid-January to mid-February timeframe. Final dates will be available by March 31, 2016. The technical conference will continue its 3.5-day scheduled, either preceded or followed by the workshop and tutorial programs. AAAI-17 will arrive in New Orleans just prior to Mardi Gras and festivities will already be underway. Enjoy legendary jazz music, the French Quarter filled with lively clubs and restaurants, world-class museums, and signature architecture. New Orleans' multicultural and diverse communities will make your choices and experience in the Big Easy unique. The 2017 Call for Papers will be available soon at www.aaai.org/Conferences/AAAI/aaai17.php.

Please join us in 2017 in NOLA for a memorable AAAI!

This year's symposium featured three invited keynote talks. Michael Genesereth of Stanford University, USA, presented the Herbrand Manifesto. Thom Fruehwirth of the University of Ulm, Germany, presented an overview of constraint-handling rules, while Avigdor Gal of the Technion – Israel Institute of Technology, presented a framework for mining the rules that guide event creation.

Very special this year was the great collocation of subevents and colocated events. A total number of 138 registered participants attended the main RuleML 2015 symposium and affiliated subevents, including the colocated Conference on Web Reasoning and Rule Systems (RR 2015), the Reasoning Web Summer School (RW 2015), and the Workshop on Formal Ontologies meet Industry (FOMI). Additionally, the Conference on Automated Deduction (CADE 2015) celebrated its 25th meeting with more than 200 participants. This "Berlin on Rules" collocation provided great opportunity for the rule-based community to meet with the automated deduction community at one of the several joint social events, including the joint reception at the Botanic Garden on Monday, August 3, the joint keynote by Michael Genesereth, the poster session on Tuesday, August 4, and the joint conference dinner at the Fischerhuetten restaurant at Lake Schlachtensee on Wednesday, August 5. The welcome address at the reception was given by Ute Finckh-Krämer (Berlin, SPD, member of

the German Parliament) followed by Wolfgang Bibel (University of Darmstadt) who was the invited speaker. The dinner speech at the Fischerhuetten was given by Jörg Siekmann (University of Saarbrücken).

The poster session, consisting of 18 posters and demos, was jointly organized as a get-together with the Berlin Semantic Web Meetup. At the session, wine, beer, and finger food were provided in the greenhouses of the Computer Science Department at the Freie Universität Berlin. The organizers also used this unique opportunity to hold a joint public RuleML and RR business meeting as well as an invited dinner with all chairs, and invited keynote speakers of RuleML, RR, RW, FOMI, and CADE. The additional rich social program, with a bus sightseeing tour to east, west, and downtown Berlin on Saturday, August 1, a boat sightseeing tour from lake Wannsee to the Reichstag on Sunday, August 2, the CADE exhibitions on Wednesday, and plenty visits to the various beer gardens, made it a memorable stay in the capital of Germany for the participants.

The RuleML 2015 Best Paper Award was given to Thomas Lukasiewicz, Maria Vanina Martinez, Livia Predoiu, and Gerardo I. Simari for their paper Existential Rules and Bayesian Networks for Probabilistic Ontological Data Exchange. The Ninth International Rule Challenge Award went to Jean-François Baget, Alain Gutierrez, Michel Leclère, Marie-Laure Mugnier, Swan Rocher, and Clément Sipieter, for their paper Datalog+, RuleML, and OWL 2: Formats and Translations for Existential Rules. The winners of the RuleML 2015 Competition Award were Marta Vodelova, Michal Kopecky, and Peter Vojtas, for their paper Transformation and Aggregation Preprocessing for Top-k Recommendation GAP Rules Induction.

As in previous years, RuleML 2015 was also a place for presentations and face-to-face meetings about rule technology standardizations, which this year covered OASIS LegalRuleML, RuleML 1.02 (Consumer+Deliberation+Reaction), OMG API4KB, OMG SBVR, ISO Common Logic, ISO PSL, and TPTP.

We would like to thank our sponsors, whose contributions allowed us to cover the costs of student participants and invited keynote speakers. We would also like to thank all the people who have contributed to the success of this year's special RuleML 2015 and colocated events, including the organization chairs, PC members, authors, speakers, and participants.

The next RuleML symposium will be held at Stony Brook University, in New York, USA, from July 5–8, 2016 (2016.ruleml.org).

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