



The 32nd ACM SIGAPP Symposium On Applied Computing  
Marrakech, Morocco  
April 3 - 7, 2017

**Track on Knowledge Representation and Reasoning (KRR)**

<http://www.dmi.unipg.it/bista/organizing/KR@sac2017/>

**Overview:**

The topic of the track covers an important field of research in Artificial Intelligence: KRR is indeed a trending topic (for instance, its Argumentation-theory subfield). A similar dedicated conference is the International Conference on Principles of Knowledge Representation and Reasoning, but all the major conferences in AI (e.g., AAI, IJCAI, AAMAS, ECAI) have KRR among their topics of interest. KRR track will be a venue for all the researchers and practitioners working on the fundamentals (but also applications) of reasoning, and the cross-fertilization among different approaches (e.g., Argumentation and Belief Revision). ACM SAC is ranked CORE:B, MAS:A-, SHINE:A. The average acceptance rate per track is under 25%.

**Call for paper:**

Knowledge-representation is the field of artificial intelligence that focuses on designing computer representations that capture information about the world that can be used to solve complex problems. Its goal is to understand and build intelligent behavior from the top down, focusing on what an agent needs to know with the purpose to behave intelligently, how this knowledge can be represented symbolically, and how automated reasoning procedures can make this knowledge available as needed. In KRR a fundamental assumption is that an agent's knowledge is explicitly represented in a declarative form, suitable for processing by dedicated reasoning engines. Topics of interest include, but are not limited to:

- Argumentation
- Belief revision and update, belief merging, etc.
- Commonsense reasoning
- Constraint Programming and KRR
- Contextual reasoning
- Description logics
- Diagnosis, abduction, explanation
- Inconsistency- and exception tolerant reasoning, para-consistent logics
- KR and autonomous agents: intelligent agents, cognitive robotics, multi-agent systems
- KR and decision making, game theory, social choice
- KR and machine learning, inductive logic programming, knowledge discovery and acquisition
- Logic programming, answer set programming, constraint logic programming
- Non-monotonic logics, default logics, conditional logics
- Preferences: modeling and representation, preference-based reasoning
- Reasoning about knowledge and belief, dynamic epistemic logic, epistemic and doxastic logics
- Reasoning systems and solvers, knowledge compilation
- Spatial reasoning and temporal reasoning, qualitative reasoning
- Uncertainty, representations of vagueness, many-valued and fuzzy logics

### **Important Dates:**

- **September 15, 2016:** Papers and SRC research abstracts submission
- September 25, 2016: Tutorial proposals submission
- October 25, 2016: Tutorials notifications
- November 10, 2016: Paper and SRC notifications
- November 25, 2016: Paper and SRC camera-ready copies
- December 10, 2016: Author registration

### **Submissions:**

We would like to invite authors to submit papers on research on KRR area, with particular emphasis on assessing the current state of the art and identifying future directions.

Submissions fall into the following categories:

- Original and unpublished research work
- Reports of innovative computing applications in the arts, sciences, engineering, and business areas
- Reports of successful technology transfer to new problem domains
- Reports of industrial experience and demos of new innovative systems

### **Submissions Instructions:**

Original papers addressing any of the listed topics of interest (or related

topics) will be considered. Each submitted paper will be fully refereed and undergo a double-blind review process by at least three referees. Accepted papers will be included in the ACM SAC 2017 proceedings and published in the ACM digital library, being indexed by Thomson ISI Web of Knowledge and Scopus. **Submissions should be properly anonymized** to facilitate blind reviewing: The author(s) name(s) and address(es) must NOT appear in the body of the paper, and self-reference should be in the third person. **Paper size is strictly limited to 6 pages in the SAC style.** A maximum of 2 additional pages may be included for an additional fee only in the final version of the accepted paper.

**Please check the author kit latex style on the main SAC website: <http://www.acm.org/conferences/sac/sac2017/>** (the format is usually the format used in the ACM templates). Papers failing to comply with length limitations risk immediate rejection.

**Submissions will be in electronic format, via the website: <https://www.softconf.com/h/sac2017/> BE CAREFULL TO SELECT THE KRR TRACK BY CHECKING THE KRR TRACK RADIO BUTTON!!**

**After completing the submission, please send also an email to: [bista@dmi.unipg.it](mailto:bista@dmi.unipg.it).** The body of the email should include the title of the paper, the author(s) name(s) and affiliation(s), and the address (including e-mail, telephone, and fax) to which correspondence should be sent. The subject of the email should be "SAC2017 KRR track submission"

**Graduate students are suggested to submit both a regular paper to the KRR track and a 2 page abstract with the same title at the Student Research Competition (SRC) Program,** following the instructions published at SAC 2017 website. Authors of selected abstracts will have the opportunity to give poster presentations of their work and compete for three top-winning places. The winners will receive **cash awards and SIGAPP recognition certificates** during the conference banquet. The winners will also receive **SRC travel support (US\$500)** and are eligible to apply to the **SIGAPP Student Travel Award Program (STAP)** for additional travel support.

Papers that received high reviews (that is acceptable by reviewer standards) but were not accepted due to space limitation can be invited for the poster session.

### **Chairs:**

Stefano Bistarelli, University of Perugia, Italy

Martine Ceberio, University of Texas at El Paso, USA

Eric Monfroy, University of Nantes, France

Francesco Santini, University of Perugia, Italy

### **Program Committee:**

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**SAC No-Show Policy:**

An author or a proxy must attend SAC to present the work. This is a requirement for all accepted papers, posters, and invited SRC submissions to be included in the ACM digital library. No-show of scheduled papers, posters, and SRC submissions will result in excluding them from the ACM Digital Library.