



Call for Papers

KR-2008: Eleventh International Conference on Principles of Knowledge Representation and Reasoning

Sydney, Australia, Sept. 16 - 19, 2008
Collocated with NMR-08, ICAPS-08, CP-08

Knowledge Representation and Reasoning (KR&R) is a vibrant and exciting field of human endeavour. KR&R techniques are key drivers of innovation in computer science, and they have led to significant advances in practical applications in a wide range of areas from Artificial Intelligence to Software Engineering.

Explicit representations of knowledge manipulated by reasoning engines are an integral and crucial component of intelligent systems. Semantic Web technologies, the design of software agents and Bio-Informatics technologies, in particular, provide significant challenges for KR&R.

We intend KR2008 to be a forum for the exchange of new ideas, issues, and results among the community of researchers in the principles and practices of KR&R systems. We encourage papers presenting substantial new results in the principles of KR&R systems that clearly contribute to the formal foundations or show the applicability of the results to implemented or implementable systems. We also encourage “reports from the field” of applications, experiments, developments, and tests. Such papers should be explicitly identified as reports from the field by the authors, to ensure appropriate reviewing, and must include a section on evaluation.

Topics of interest include:

- Exception tolerant and inconsistency-tolerant reasoning, Paraconsistent logics
- Nonmonotonic logics, Default logics, Conditional logics, Argumentation
- Temporal and spatial reasoning
- Causal reasoning, Abduction, Model-based diagnosis
- Reasoning about action and change, Action languages, Situation calculus, Dynamic logic
- Reasoning, planning, or decision making under uncertainty
- Representations of vagueness, Many-valued and fuzzy logics
- Graphical representations for belief and preference
- Reasoning about belief and knowledge, Epistemic and doxastic logics, Multiagent logics of belief and knowledge
- Logic programming, Constraint logic programming, Answer set programming
- Computational aspects of knowledge representation
- Concept formation, Similarity-based reasoning
- Belief revision and update, Belief merging, Information fusion
- Description logics, Ontologies
- Qualitative reasoning, Reasoning about physical systems
- Decision theory, Preference modelling and representation, Reasoning about preference
- KR & Autonomous Agents: Intelligent Agents, Cognitive Robotics
- KR & Multiagent Systems: Negotiation, Group decision making, Cooperation, Interaction, KR & game theory
- Natural language processing, Summarization, Categorization
- KR and machine learning, Inductive logic programming, Knowledge discovery and acquisition
- WWW querying languages, Information retrieval and web mining, Website selection and configuration
- Philosophical foundations and psychological evidence

Conference Chairs:

General Chair: Patrick Doherty
PC Chairs: Gerhard Brewka, Jérôme Lang
Local Chair: Maurice Pagnucco
Publicity Chair: Thomas Meyer
Doctoral Consortium Chair: Carsten Lutz

Important Dates:

Submission of title and abstract: April 3, 2008
Paper submission deadline: April 7, 2008
Notification of acceptance: May 25, 2008
Camera-ready papers due: June 16, 2008
KR-2008 Conference: September, 16-19, 2008