



Collected Papers of the 1996 International Description Logics Workshop

Royal Sonesta Hotel
Cambridge, Massachusetts, U. S. A.
2-4 November 1996

The Description Logics Workshops are designed to provide a means for researchers in description logics to gather together in a less-formal setting than a conference. Attendance at the workshop was by invitation only. Most attendees were selected on the basis of their papers submitted to the workshop. The workshop was sponsored by Principles of Knowledge Representation and Reasoning, Incorporated.

The main draw of the Description Logics Workshops is detailed discussion between researchers, rather than the presentation of results. The organizers of the 1996 Description Logics Workshop have attempted to continue this tradition by structuring the workshop as a series of discussion topics, led by a panel, but involving also discussion where any researcher can speak—not just those who have submitted a paper on the topic.

The proposed discussion topics for the workshop are:

1. Different approaches to reasoning in Description Logics, e.g., structural subsumption, tableaux methods, model-based methods:
 - strengths of differing approaches;
 - reasons for choosing one approach above the other.
2. Extensions to Description Logics:
 - motivations for an extension;
 - what needs to be done in adding an extension;
 - what is gained from an extension;
 - semantics for extensions;
 - how to reason in an extension.
3. The part-whole relationship and composite objects in Description Logics
4. Domain modeling and methodologies:
 - details on modeling different applications;
 - methodology for modeling;
 - modeling issues;

- how well current approaches to Description Logics fit within larger applications and frameworks.
5. The value of applications:
 - what kind of applications are currently needed to further Description Logic research;
 - key properties of useful applications;
 - what makes good Description Logics application research.
 6. Interfacing and hybridity
 - architectures combined;
 - issues in creating interfaced or hybrid representations;
 - software-engineering aspects (e.g. reusability, real-time aspects, memory management, concurrency).
 7. Description Logics and Databases
 - relationships between Description Logics and Databases,
 - similarities and differences between Description Logics and Databases.

This collection of papers was put together to allow participants to see the work of other participants before the workshop, as well as to give participants and non-participants alike a chance to easily obtain a relatively large collection of papers on description logics. The papers in this collection include six description logic-related papers that were presented at the Fifth International Conference on Principles of Knowledge Representation and Reasoning. The remainder of the papers were submitted directly to the workshop.

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