Formalizing Context

AAAI-95 Fall Symposium
MIT, Cambridge, Massachusetts
November 10-12, 1995

Call for Papers

Description

The notion of context has played an important role in AI systems for many years. However, formal logical explication of contexts remains an area of research in which there are significant open issues. This symposium will provide a forum for discussing formalizations of contexts, approaches to resolving open issues, and application areas for context formalisms.

The most ambitious goal of formalizing contexts is to make automated reasoning systems which are never permanently stuck with the concepts they use at a given time because they can always *transcend* the context they are in. Such a capability would allow the designer of a reasoning system to include only such phenomena as are required for the system's immediate purpose, retaining the assurance that if a broader system is required later, "lifting rules" can be devised to restate the facts from the narrow context in the broader context with qualifications added as necessary. A formal theory of context in which sentences are always considered as asserted within a context could provide a basis for such transcendence.

Formal theories of context are also needed to provide a representation of the context associated with a particular circumstance, e.g. the context of a conversation in which terms have particular meanings that they wouldn't have in the language in general. Linguists and philosophers have already studied similar notions of context. An example is the situation theory that has been proposed in philosophy and applied to linguistics. However, these theories usually lie embedded in the analysis of specific linguistic constructions, so locating the exact match with AI concerns is itself a research challenge.

This symposium aims to bring together researchers who have studied or applied contexts in AI or related fields. Technical papers dealing with formalizations of context, the problem of generality, and use of context in common sense reasoning are especially welcome. However, survey papers which focus on contexts from other points of view, such as philosophy, linguistics, or natural language processing, or which apply contexts in other areas of AI, are also encouraged.

Submission Information

Persons wishing to make presentations at the workshop should submit papers (up to 12 pages, 12pt font). Persons wishing only to attend the workshop should submit a 1-2 page research summary including a list of relevant publications. A postscript file or 8 paper copies should be sent to the program chair. Limited funding will be available to support student travel.

Timetable

April 14, 1995 Submission deadline.

May 19, 1995 Submitters will be informed of decisions.

August 15, 1995 Final papers due.

September 20, 1995 AAAI will mail Working Notes to the participants.

November 10-12, 1995 Fall Symposium.

Program Committee

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Postscript and plain text versions of this announcement are available through the symposium WWW page at http://sail.stanford.edu/buvac/95-context-symposium and via anonymous ftp from sail.stanford.edu in the directory /buvac/95-context-symposium.