

CALL FOR PAPERS

Special Issue of *Artificial Intelligence on Argumentation*

Background

Argumentation has evolved from its original study primarily by philosophers to emerge in the last ten years as an important sub-discipline of Artificial Intelligence. Among the significant contributions resulting have been approaches to modelling and analysis of defeasible reasoning, formal bases for negotiation and dialogue processes in multiagent systems, and the use of argumentation theory in A.I. applications whose nature is not best described through traditional logics, e.g. legal reasoning, evaluation of conflicting beliefs, etc. The process of interpreting and exploiting classical treatments of Argumentation Theory in effective computational terms has led to a rich interchange of ideas among researchers from diverse disciplines such as Philosophy, Linguistics, A.I. and Economics. Argumentation related workshops are now well-established events at the major Artificial Intelligence related Conferences, e.g. the workshop series on Computational Models of Natural Argument held in conjunction with IJCAI and ECAI, and the series of ArgMAS workshops held in conjunction with AAMAS. While work over the past five years has done much to consolidate diverse contributions to the field, many new concerns have been identified and form the basis of current research. Among such concerns are: approaches to coping with intractability issues; representation of argument structures in multiagent system settings; developing robust treatments of dynamically evolving argumentation frameworks; semantics for capturing concepts such as "persuasiveness", "credibility" and "impact" of arguments; computational bases for distinguishing classes of "acceptable" arguments, etc.

This special issue of *Artificial Intelligence Journal* on the theme of **Argumentation in A.I.**, is intended to present the current state-of-the-art in argumentation to a general audience, thus increasing awareness of the possibilities that argumentation offers among specialists in areas of A.I. which have not yet considered this as a way of addressing their problems. Equally it will present opportunities for those not currently involved with argumentation to consider new perspectives from which to tackle problems. In sum, the special issue aims both to spread the dissemination of argumentation ideas, and to widen the boundaries of the argumentation community.

Topics of Interest

Topics of interest include, but are not limited to:

- argumentation frameworks
- argument schemes
- argument in agent systems
- argument based negotiation
- computational properties of argumentation
- decision making based on argumentation
- dialogue based on argument
- e-democracy, legal and medical applications
- learning through argument
- reasoning about action with argument
- tools for argumentation

Submission Information

All manuscripts must be in English and submitted electronically to

aij@ida.liu.se

with the phrase "**Special Issue on Argumentation**" included in the e-mail subject line. Papers should **not** be submitted directly to the special issue editors.

If possible articles should be prepared using Elsevier's LaTeX style (elsart.cls). In addition to the postscript file, manuscripts should be accompanied by the following (as plain-text within the accompanying e-mail body)

- The paper title
- Names of all authors, their affiliations, and e-mail addresses.
- The corresponding author.
- An abstract.
- List of keywords (ideally, at least one should be from the **topics of interest**, however this is not required).

Articles are accepted for review on the understanding that these comply with the journal's policy on submissions. Longer versions of relevant papers that have appeared only in a preliminary form in conference proceedings are welcome, however, a brief accompanying text should indicate in what way the submission extends and differs from such previously published versions.

Timetable

- **Submission deadline:** 31st October 2006
- **Notification:** February 2007
- **Final revised version:** March 31st 2007

Special Issue Editors

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Enquiries relating to this special issue, e.g. concerning whether a particular article would be considered within its scope, may be directed to either of the editors.