Electronic Transactions on Artificial Intelligence
Vol. 4 (2000), Section C: pp. *21-33*
http://www.ep.liu.se/ej/etai/2000/002/

Refereed Article

Uta Priss:

Faceted Knowledge Representation

Author's affiliation: Indiana University, Bloomington, IN, USA.

Abstract: *Faceted knowledge representation provides a formalism for implementing knowledge systems. The basic notions of faceted knowledge representation are "unit", "relation", "facet" and "interpretation". Units are atomic elements and can be abstract elements or refer to external objects in an application. Relations are sequences or matrices of 0's and 1's (binary matrices). Facets are relational structures that combine units and relations. Each facet represents an aspect or viewpoint of a knowledge system. Interpretations are mappings that can be used to translate between different representations. This paper introduces the basic notions of faceted knowledge representation. The formalism is applied here to an abstract modeling of a faceted thesaurus as used in information retrieval.*

Publication and review history

1. *Received* by the research area "Concept Based Knowledge Representation" of the Electronic Transactions on Artificial Intelligence, posted on its web site, and advertised in its Newsletter on 10.3.2000.
2. Available for *discussion* in the ETAI area of Concept Based Knowledge Representation until March–June, 2000. The discussion protocol is available and will be retained in the Article Interaction Page at
   http://www.etaij.org/ra/cbkr/004/
3. First version conditionally *accepted* after due refereeing and according to scientific journal standards by the Electronic Transactions on Artificial Intelligence (ETAI) on 22.9.2000.
4. Revised version *accepted* on 31.10.2000.
5. Revised version appears in Electronic Transactions on Artificial Intelligence, Volume 4 (2000), pages 21–33. The section and the annual volume are made permanently available at
   http://www.ep.liu.se/ej/etai/2000/
6. Paper editions of the ETAI issue and the ETAI volume containing this artice *republished* by the Royal Swedish Academy of Sciences.
7. First and final versions are also *published* as individual articles by Linköping University Electronic Press in December 2000 and January 2001, and are permanently available at
   http://www.ep.liu.se/ea/cis/2000/003/

The review policy and the quality requirements for acceptance are documented at http://www.etaij.org/info/

Article maintenance

The Electronic Transactions on Artificial Intelligence maintains an Article Interaction Page for this article at
http://www.etaij.org/ra/cbkr/004/
Besides the publication and review history, it contains links for contacting the author(s), as well as to amendments and other related information for the article. It is intended to keep these links up-to-date in the future.