

# The knowledge engineering review

## Notes for Contributors

### Editorial policy

The Knowledge Engineering Review has been established to provide a general source of information and analysis in all areas relevant to research and development in knowledge based systems and applied artificial intelligence. The editors wish to encourage careful preparation of original papers analysing developments in the field. In particular we wish to see tutorial and survey articles, and commentary, criticism and debate. Primary research papers on specialised technical topics are unlikely to be appropriate but research papers on broad topics such as development methodology or general evaluations of tools and techniques, are of interest. Descriptions of specific projects or particular computer systems will be considered if their presentation draws out general issues in the design, implementation or impact of knowledge based systems.

### Submission of manuscripts

Contributions for publication should be addressed to Professor John Fox, Editor, The Knowledge Engineering Review, Imperial Cancer Research Fund, PO Box 123, Lincoln's Inn Fields, London WC2A 3PX, UK; or Professor Adele E Howe, North American Editor, Computer Science Department, Colorado State University, Fort Collins, CO 80523, USA; or may be submitted through a member of the Editorial Board (addresses inside front cover). Submission implies that the manuscript has not been published previously, nor currently submitted for publication elsewhere. Upon acceptance of a manuscript, the author will be asked to transfer copyright to the publisher.

All contributions, whether articles, correspondence or reviews, must be sent in triplicate and typed on one side of the paper, with wide margins and double-line spacing throughout. Any minor corrections should be made neatly in the typescript, leaving the margins clear. Authors are encouraged to provide the final version of the contribution on disk (PC or Mac format, 'Word' or 'Wordperfect') in addition to the paper copies. Contributions should follow the general style of papers in recent issues of The Knowledge Engineering Review. The author is invited to nominate up to five possible referees, who will not necessarily be used.

Articles must be accompanied by a brief, informative rather than indicative, abstract. Headings should be set out clearly but not underlined. Primary headings should be in lower case, at margin, with arabic numeral; subheadings should be numbered 2.a., 2.b., etc., and tertiary headings, 2.a.1., 2.a.2. No cross-references should be given by page number, but 'above' and 'below' should be used with the section specified, e.g. Section 2.a.2. The SI system of units should be used. The author should mark in the margin of the manuscript where figures and tables may be inserted. References to points in larger works should, where possible, quote the page reference, e.g. Ager, 1981, p. 102.

Tables should be typed with double-line spacing on sheets separate from the running text. Each table must have a caption that will make the data in the table intelligible without reference to the text.

Illustrations should be drafted for reproduction as full page (148 mm) width. Originals should normally be drawn at twice final area and must be sent in a flat package; larger drawings may delay publication. Lettering should be of a size so that when reduced the smallest lower-case letters will not be less than about 1 mm. Avoid gross disparities in lettering size on a drawing. Duplicates of illustrations should be sent, and may be prints or, preferably, photocopies reduced to final size. Illustrations in the text, both line drawings and photographs for halftone reproductions, will be referred to as figures (Fig. 2, 2a, etc.). Folding plates will not be accepted. Figures composed of photographs should be glossy prints presented at publication scale. Figure captions must be typed with double-line spacing on sheets separate from the running text.

The preferred graphics package is Freehand 5 but files from many others can be accepted. Please indicate clearly the file format (e.g. TIFF, EPS, DCS, Freehand etc), computer operating system and graphics software used for originating the artwork files. The typefaces used in electronic artwork supplied should be restricted to the Monotype, Adobe and Bitstream font libraries. Illustrations should be supplied as EPS files and never as Postscript files, or as the native format files from the graphics package used. They should be accompanied by laser proofs with the name and version number of the graphics package used, and also the names of the fonts used.

References. The accuracy of references is the responsibility of authors. References must be double-spaced and spelt out in full, e.g.

Gale, W A, ed 1986. *Artificial Intelligence and statistics*, Reading, Massachusetts: Addison-Wesley.

Pearl, J 1984. *Heuristics. Intelligent search strategies for problem solving*, Reading, Massachusetts: Addison-Wesley.

Tie-Cheng Wang and Bledsoe, W W, 1987. "Hierarchical deduction" *Journal of Automated Reasoning* 3 (1) pp 1-34.

Pau, L F, 1986. "Survey of expert systems for fault detection, test generation and maintenance" *Expert Systems*, 3 (2) pp 100-111.

Unpublished work should normally be referred to in the text parentheses as, for example, 'private communication' or 'unpub. Ph.D. thesis, Univ. London, 1988', and not included in the reference list unless in the press.

### Proof Reading:

Typographical or factual errors only may be changed at proof stage. The publisher reserves the right to charge authors for correction of non-typographical errors. No page charge is made.

### Offprints:

Twenty-five offprints of each paper will be provided free of charge. Additional offprints may be purchased according to a set scale of charges if ordered when the proofs are returned.

© Cambridge University Press 1996

ISSN 0269-8889

CAMBRIDGE UNIVERSITY PRESS

Published by the Press Syndicate of the University of Cambridge  
The Pitt Building, Trumpington Street, Cambridge CB2 1RP  
40 West 20th Street, New York, NY 10011-4211, USA  
10 Stamford Road, Oakleigh, Melbourne 3166, Australia

Typeset by Paston Press Ltd, Loddon

Printed in Great Britain by Henry Ling Ltd, Dorchester

# The knowledge engineering review

VOLUME 11 NUMBER 2 JUNE 1996

## Contents

Ontologies: principles, methods and applications MIKE USCHOLD and MICHAEL GRUNINGER	93
Automated modelling: a discussion and review S. XIA and N. SMITH	137
Review of pattern matching approaches D. MANFAAT, A. H. B. DUFFY and B. S. LEE	161
Grey Pages	
DOOD'95 Post-Conference Workshop on Temporal Reasoning in Deductive and Object - Oriented Databases STEFAN CONRAD	191
Summary of the KEML - 96 workshop, Paris, January 15 - 16, 1996, CNRS, Gif sur Yvette (Paris)	193
Book reviews	197
From the journals. . . .	199

**CAMBRIDGE**  
UNIVERSITY PRESS



0269-8889(199606)11:2;1-F