

Journal of Intelligent Information Systems

Integrating Artificial Intelligence and Database Technologies

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The mission of the *Journal of Intelligent Information Systems: Integrating Artificial Intelligence and Database Technologies* is to present research and development focused on the integration of Artificial Intelligence and Database Management technologies to provide models, architectures, tools and techniques for the next generation of systems -- Intelligent Information Systems. The *Journal of Intelligent Information Systems* is a technical journal that focuses on the creation of information systems that exhibit intelligent behavior and embody intelligence in their reasoning and management processes. Increasingly, knowledge-directed inference processes are being used to produce information from the data contained in large shared databases. The goal of the *Journal of Intelligent Information Systems* is to provide a forum for those interested in making information systems intelligent in which they can publish their original research and development results. For us, intelligence may be manifested in a user interface which has knowledge of user profiles and preferences and can use this knowledge to foster more productive human-computer interactions; intelligence may be embodied in the loosely or tightly-coupled architectures for integrating knowledge-based systems with database systems; and intelligence may reside in query optimization algorithms that incorporate semantic integrity constraints, heuristics as well as database statistics. *Journal of Intelligent Information Systems* is an archival, peer-reviewed, technical journal publishing the following types of high-quality, state-of-the-art papers: - research papers - invited papers - workshop and conference reports - survey and tutorial articles - book reviews. In addition to papers *Journal of Intelligent Information Systems* also presents: - meeting announcements - reviews - open problems and proposed solutions.

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Journal of Intelligent and Robotic Systems

Theory and Applications
(Incorporating *Mechatronic
Systems Engineering*)

Editor-in-Chief

Spyros G. Tzafestas

*Dept. of Electrical Engineering, National Technical University
of Athens, Greece*

The theory and practice of intelligent and robotic systems is currently one of the most intensely studied and promising areas in computer and systems science and engineering, and one that will certainly play a primary role in future life. The *Journal of Intelligent and Robotic Systems: Theory and Applications* provides a source linking all fields in which the system intelligence and/or intelligent control plays a dominant role, and stimulates interaction between workers performing both theoretical and applied research.

The papers published are all highly original, novel, of acute interest and, above all, clearly presented. A particular feature of the journal is the number of papers that suggest new avenues of research and new developments in the field.

Topics of particular relevance to the *Journal of Intelligent and Robotic Systems* are: computer integrated manufacturing systems; computer vision; diagnostic systems; expert systems; intelligent systems; learning theory; reasoning; robot language; robotic systems.

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development of monitoring systems which allow direct or indirect estimates

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User Modeling and User-Adapted Interaction

An International Journal

Editor

Alfred Kobsa

Dept. of Information Science, University of Konstanz, Germany

User Modeling and User-Adapted Interaction provides an interdisciplinary forum for the dissemination of new research results on all aspects of user modeling and user-adapted interaction. The journal publishes high quality original papers contributing to these fields, including the following areas:

- acquisition of user and student models
- conceptual models, mental models
- dialog planning and response tailoring
- levels of user expertise
- explanation strategies
- intelligent information retrieval
- plan recognition and generation
- presentation planning
- recognition and correction of misconceptions
- user stereotypes
- formal representation of user and student models
- shell systems for user modeling
- tutoring strategies

Relevant papers from the fields of psychology, linguistics and the instructional sciences are also considered if they bear implications for the design of computational systems.

The central audience of the journal is provided by researchers, students and industrial practitioners from the following areas: artificial intelligence (focus on knowledge-based systems), human-computer interaction (focus on cognitive engineering and intelligent interfaces), linguistics (focus on pragmatics and dialog models), and the instructional sciences (focus on computer-based tutoring systems).

User Modeling and User-Adapted Interaction is indexed/abstracted in *INSPEC Information Services; The Knowledge Engineering Review; Psychological Abstracts; Information Technology and the Law; Compuscience; Inspec Database; Zentralblatt für Mathematik; Psycinfo Database; PsycLIT; Computer Abstracts; Current Contents/Engineering, Computing & Technology; SciSearch; Research Alert; Computer Literature Index; Engineering Index; COMPENDEX PLUS; Ei Page One*

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Journal Highlight

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Journal of Automated Reasoning

Editor-in-Chief:
Deepak Kapur

University of New York at Albany, USA

The *Journal of Automated Reasoning* is an interdisciplinary journal that maintains a balance between theory, implementation and application. The spectrum of material published ranges from the presentation of a new inference rule with proofs of its logical properties to a detailed account of a computer program designed to solve some problem from industry. The main fields covered are automated theorem proving, logic programming, expert systems, program synthesis and validation, artificial intelligence, computational logic, robotics, and various industrial applications. The papers share the common feature of focusing on some aspects of automated reasoning, a field whose objective is the design and implementation of a computer program that serves as an assistant in solving problems and in answering questions that require reasoning. The *Journal of Automated Reasoning* provides a forum and a means for exchanging information for those interested purely in theory, those interested primarily in implementation, and those interested in specific research and industrial applications.

Journal of Automated Reasoning is indexed/abstracted in *The ACM Guide to Computing Literature*; *ACM Computing Reviews*; *INSPEC Information Services*; *Robotix Reporter*; *CAD/CAM Abstracts*; *The Turing Institute*; *Abstracts in Artificial Intelligence*; *Engineering Index*; *Compendex Plus*; *Ei Page One*; *Knowledge Engineering Review*; *Mathematical Reviews*; *Computer & Information Systems Abstracts*; *Computer Abstracts*; *Zentralblatt für Mathematik*; *SciSearch*; *Research Alert*; *CompuMath Citation Index*; *Research Trends in Advanced Manufacturing*; *Current Contents/Engineering, Technology & Applied Science*; *MathSci*; *Current Mathematical Publications*; *Inspec Database*

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The knowledge engineering review

Notes for Contributors

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, England; Dr Peter Jackson, North American Editor, Department of Electrical and Computer Engineering, Clarkson University, Potsdam, NY 13699-5720, USA; or may be submitted through a member of the Editorial Board (address inside front cover). Submission implies that the manuscript has not been published previously nor currently submitted for publication elsewhere.

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

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Contents

Editorial: Knowledge representation and reasoning: The view from cognitive psychology JOHN FOX and PAUL KRAUSE	1
Cognitive expertise research and knowledge engineering FERGUS BOLGER	3
Bias in human judgement under uncertainty? PETER AYTON and EVA PASCOE	21
A review of human linguistic probability processing: General principles and empirical evidence THOMAS S. WALLSTEN and DAVID V. BUDESCU	43
Grey Pages	
Models and Techniques for the Reuse of Designs: ECAI/94 Workshop, Amsterdam, August 8 1994 P. M. WOGNUM	63
Comparison of implemented ontologies NICOLAAS J. I. MARS	67
Validation of knowledge-based systems: Current trends and issues ALUN D. PREECE	69
Reasoning about structured objects: Knowledge representation meets databases FRANZ BAADER, MARTIN BUCHEIT, MANFRED A. JEUSFELD and WERNER NUTT	73
Integration of Machine Learning and Knowledge Acquisition CLAIRE NÉDELLEC	77
Information processing and the management of uncertainty SIMON PARSONS and ALESSANDRO SAFFIOTTI	83
The Legal Applications of Logic Programming Workshop at the ICLP 94 Conference DANIELA TISCORNIA	89
Report on the Workshop: Applications of Logic Programming in Software Engineering P. CIANCARINI and LEON STERLING	97
Book reviews	101

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