

From the journals. . . .

AI MAGAZINE

Vol. 9 No. 1

Articles

Real-time knowledge-based systems

Thomas Laffey et al.

Approximate processing in real-time problem solving

Victor R. Lesser et al.

What AI practitioners should know about the law, part I

Steven J. Frank

New Mexico State University's computing research laboratory

Yorick Wilks and Rebecca Gomez

VT: An expert elevator designer that uses K-B backtracking

Sandra Marcus et al.

Concurrent logic programming, metaprogramming and open systems

Kenneth M. Kahn

Natural language understanding and logic programming

Patrick Saint-Dizier

Big problems for AI

Jon Doyle

AAAI news

Announcements

Books received

Book reviews

Career opportunities

Contributors

Letters

Vol. 9 No. 2

Articles

Navigation and mapping in large-scale space

Benjamin Kuipers and Tod Levitt

A framework for representing & reasoning about 3-D objects

Ellen Walker et al.

Sensor fusion in certainty grids for mobile robots

Hans Moravec

Evidence accumulation & flow of control

K. Andress and Avi Kak

Various views on spatial prepositions

Gudula Retz-Schmidt

What AI practitioners should know about the law, part 2

Steven J. Frank

DARPA workshop on planning

William Swartout

New hitech computer chess success

Hans Berliner

AAAI news

Announcements

Books received

Book reviews

Career opportunities

Contributors

Guest editorial

Letters

New products

Index to volume eight

ARTIFICIAL INTELLIGENCE IN ENGINEERING

Vol. 3 No., 3

Articles

Special issue: qualitative physics, part I

Editorial

Jeff Shrager

A logical framework for commonsense predictions of solid object behaviour

E. Davis

HELIX: a helicopter diagnostic system based on qualitative physics

T. P. Hamilton

Qualitative analysis by piecewise linear approximation

E. Sacks

Mathematical aspects of qualitative reasoning

P. Struss

The qualitative calculus is sound but incomplete: A reply to Peter Struss

B. Kuipers

Choices for comparative analysis: DQ analysis or exaggeration?

D. S. Weld

JOURNAL OF JAPANESE SOCIETY FOR AI

Vol. 3 No. 4

Articles

Recognition of partially occluded 2-D objects

Y. Nakamura and M. Nagao

Visibility and view for environment models of intelligent robots

H. Iba, H. Matsubara and H. Inoue

A modelling of human thought processes in categorical syllogisms

M. Ishikawa, K. Niki, H. Nakashima and M. Suwa

Understanding architectural drawings using knowledge

M. Nomura and Y. Tsukio

KBrows: a knowledge-based documentation browser

T. Ishida

FGCS

Vol. 3 No. 4

Articles

From visionary ideas to products

J. T. Pinkston

Parallel inference machines at ICOT

S. Uchida

Optical components for digital optical circuits

B. S. Wherrett, S. D. Smith, F. A. P. Tooley and A. C. Walker

The Dutch parallel reduction machine project

H. P. Barendrecht, M. C. J. D. Van Eekelan, M. J. Plasmeijer, P. H. Hartel, L. O. Hertzberger and W. G. Vree

Policy, program and perspectives of CWI, Amsterdam

P. C. Baayen

ECRC: a joint industrial research centre

H. Gallaire

Performance issues in dataflow machines

J. Gurd, W. Bohn and Y. M. Teo

DLM—a powerful AI computer for embedded expert systems

A. Pudner

Calendar

Author index

Vol. 4 No. 1

Articles

WAVE-1: a new ideology of parallel and distributed processing on graphs and networks

P. S. Sapaty

Implementation and performance of a complex vision system on a systolic array machine

E. Clune, J. D. Crisman, G. J. Klinker and J. A. Webb

Cellular array architecture for relational database implementation

M. R. Muraszewicz

Neurocomputing—neurons as microcomputers

G. Matsumoto

Data flow computing and parallel reduction machine

M. Amamiya

BRAVE—a parallel logic language for artificial intelligence

T. J. Reynolds, A. J. Beaumont, A. S. K. Cheng, S. A. Delgado-Rannauro and L. A. Spacek

Vol. 4 No. 2

Articles

Routing management in very large-scale networks

J. J. Garcia-Luna-Aceves

Self organising networks

M. Frankel, N. Shacham and J. E. Mathis

Logic programs directly processed in a network of content addressable memories

A. de Callatay

A parallel machine for multiset transformation and its programming style

J.-P. Banâtre, A. Coutant and D. Le Metayer

3-D VLSI technology in Japan and an example: a syndrome decoder for double error correction

T. Kurokawa and H. Asio

Calendar

INTERNATIONAL JOURNAL OF PATTERN RECOGNITION AND ARTIFICIAL INTELLIGENCE

Vol. 2 No. 2

Articles

Pattern recognition

On automatic feature selection

W. Siedlecki and J. Sklansky

The tree-to-tree editing problem

E. Tanaka and K. Tanaka

Computer vision and image analysis

The SIL-ICON compiler—an icon-oriented system generator

S.-K. Chang, M. J. Tauber, B. Yu and J.-S. Yu

The dynamic pyramid—a model for motion analysis with controlled continuity

J. Dengler and M. Schmidt

Location parameter estimation of a multispectral sample by a median operator

C. A. Pomalaza-Ráez and Y.-S. Fong

Feature extraction by rank-order filtering for image representation

P. Zamperoni

Speech understanding

A knowledge based speech understanding system

H. Niemann, A. Brietzmann, U. Ehrlich, S. Posch, P. Regel, G. Sagerer, R. Salzbrunn and G. Schukat-Talamazzini

Artificial intelligence

Fuzzy logic with equality

C. J. Liau and B. I.-P. Lin

Correspondences

INTERNATIONAL JOURNAL OF MAN- MACHINE STUDIES

Vol. 28 No. 1

Articles

Reading from screen versus paper: there is no difference

D. J. Osborne and D. Holton

Prompting, feedback and error correction in the design of a scenario machine

J. M. Carroll and D. S. Kay

Robust dictionary lookup using associative networks

Ö. Ekeberg

Conditional statements, looping constructs, and program comprehension: an experimental study

E. R. Iselin

Verifying identity via keystroke characteristics

J. Leggett and G. Williams

Analysis of competition-based spreading activation in connectionist models

P. Y. Wang, S. B. Seidman and J. A. Reggia

Editorial announcement

Vol. 28 Nos. 2 and 3

Articles

Editorial

Introduction

ISIS: the interactive spatial information system

C. A. McCann, M. M. Taylor and M. I. Tuori

Methods

Evaluating the intelligence in dialogue systems

J. L. Edwards and J. A. Mason

Layered protocols for computer-human dialogue.

I: principles

M. M. Taylor

Practice

Layered protocols for computer-human dialogue. II: some practical issues

M. M. Taylor

Surveying projects on intelligent dialogue

J. A. Mason and J. L. Edwards

Toward intelligent dialogue with ISIS

J. L. Edwards and J. A. Mason

Vol. 28 No. 4

Articles

Four different perspectives on human-computer interaction

J. Kammersgaard

Representing the structure of jobs in job analysis

G. L. Downes

Principles of intelligent learning systems design

G. G. Tchogovadze, G. G. Gogichaishvili and I. I. Abbasov

Adapting menu layout to tasks

J. E. McDonald, T. Dayton and D. R. McDonald

Extending Petri nets for specifying man-machine dialogues

W. R. Van Biljon

Vol. 28 No. 5

Articles

Undo support models

Y. Yang

Student models: the genetic graph approach

B. Brecht and M. Jones

The TTS language for music description

M. Balaban

Experience of programming beauty: some patterns of programming aesthetics

L. M. Leventhal

User-friendly syntax: design and presentation

J. Henno

Vol. 28 No. 6

Articles

Optimization of string length for spoken digit input with error correction

W. A. Ainsworth

Talking to computers: an empirical investigation

A. G. Hauptmann and A. I. Rudnický

Enhancing PIXIE's tutoring capabilities

J. L. Moore and D. Sleeman

Structural displays as learning aids

J. Patrick and L. Fitzgibbon

Changes in contrast sensitivity function produced by VDT use

H. H. Mikealian

DM²: an algorithm for diagnostic reasoning that combines analytical models and experiential knowledge
N. S. Lee

A hybrid approach to deductive uncertain inference
X. Liu and A. Gammerman

Effects of breadth, depth and number of responses on computer menu search performance
S. R. Parkinson, M. D. Hill, N. Sisson and C. Viera

KNOWLEDGE-BASED SYSTEMS

Vol. 1 No. 4

Special issue: Information systems—a knowledge-based perspective

Articles

Introduction

Modelling software processes in a knowledge base: the case of information systems

M. Jarke, M. Jausfeld and T. Rose

Declarative approach to information systems requirements

J. Hagelstein

Knowledge-based software assistant

K. M. Benner

Information systems development: a rule-based approach
F. Van Assche, P. Layzell, P. Loucopoulos and G. Speltinex

MDSE advisor: knowledge-based techniques applied to software design assessment

D. Budgen and M. Marashi

Co-operation and communication within an active IPSE
T. Rodden, P. Sawyer and I. Sommerville

Market forecast

R and D review

Products

Books

Literature

Calendar

EXPERT SYSTEMS

Vol. 5 No. 3

Articles

Statistical expert systems

Hans W. Gottinger

PAMS: A domain-specific knowledge-based parallel machine scheduling system

Jae Kya Lee and Min Soo Suh

The knowledge acquisition bottleneck: time for reassessment?

J. Cullen and A. Bryman

Constraint-based reasoning for generating naval flying programmes

D. H. Mott, J. Cunningham, G. Kelleher and J. A. Gadsden

Feature

Conference report

News

ARTIFICIAL INTELLIGENCE REVIEW

Vol. 2 No. 3

In this issue

Editorial

Response time

On being there: why simulated reality is better than the real thing

D. Connah, M. Shiels and P. Wavish

Being there (again): a reply to Connah, Shiels and Wavish
A. Clark

Formal semantics: is it relevant to artificial intelligence?

A. Galton

Intelligence and desire in animals, men and robots

G. Langford

Explanations in cognitive science

C. Beardon

Fodor and Pylyshyn on connectionism: an extended review and brief critique

A. Narayanan

Book reviews

DATA & KNOWLEDGE ENGINEERING

Vol. 3 No. 1

Articles

Timetabling through a deductive database: A case study

A. Monfroglio

Stored queries—a data organization for query optimization

W. Rzechowski and K. Subieta

Issues in relational database performance (Invited paper ISDBWS)

D. A. Bell

Calendar

Vol. 3 No. 2

Special issue: first international conference on data and knowledge systems for manufacturing and engineering

Articles

Guest editorial

P. C. Ting and F. Maryanski

Expert database systems: Efficient support for engineering environments

T. Sellis, N. Roussopoulos, L. Mark and C. Faloutsos

Processing and transaction concepts for cooperation of engineering workstations and a database server

T. Härder, Ch. Hübel, K. Meyer-Wegener and B. Mitschang

IMDAS—an integrated manufacturing data administration system

V. Krishnamurthy, S. Y. W. Su, H. Lam, M. Mitchell and E. Barkmeyer

Calendar

THE JOURNAL OF LOGIC

PROGRAMMING

Vol. 5 No. 3

Articles

An algebraic evaluation method for deduction in incomplete data bases

R. Demolombe and L. Fariñas Del Cerro

Automatic mode inference for logic programs

Saumya K. Debray and David S. Warren

A technique for translating clausal specifications of numerical methods into efficient programs

W. F. Clocksin

The occur-check problem revisited

Joachim Beer

Complete logic programs with domain-closure axiom

Paolo Mancarella, Simone Martini and Dino Pedreschi

ARTIFICIAL INTELLIGENCE

Vol. 36 No. 2

Articles

Generalized subsumption and its applications to induction and redundancy

W. Buntine

Quantifying inductive bias: AI learning algorithms and valiant's learning framework

D. Haussler

Autocircumscription (research note)

D. Perlis

Some fundamental properties of local constraint propagation (research note)

H.-W. Gusgen and J. Hertzberg

A practically efficient and almost linear unification algorithm (research note)

G. Escalada-Imaz and M. Ghallab

Addendum

Books received

Announcements

Forthcoming papers

Vol. 36 No. 3

Articles

Chronological ignorance: experiments in nonmonotonic temporal reasoning

Y. Shoham

Comparative analysis

D. S. Weld

Reasoning about partially ordered events

T. Dean and M. Boddy

Explanation-based generalisation = partial evaluation (research note)

F. van Harmelen and A. Bundy

Books received

Announcements

Forthcoming papers

Author index—Vol. 36 1988

Contents—Vol. 36 1988

JOURNAL OF INTELLIGENT AND ROBOTIC SYSTEMS

Vol. 1 No. 1

Editorial

Spyros Tzafestas

Knowledge acquisition under uncertainty—a rough set approach

Jerzy W. Grzymala-Busse

An axiomatic approach for combining evidence from a variety of sources

Yizong Cheng and R. L. Kashyap

Autonomous machine learning of effective control strategies with connectionist-net

Yoh-Han Pao

Approach to the dynamically reconfigurable robotic system

Toshio Fukuda and Seiya Nakagawa

Expert systems: an application in flexible manufacturing

Badie N. Farah

Book reviews

Calendar of events

Information for authors

Vol. 1 No. 2

Sensor data fusion

L. F. Pau

Multidimensional shape description and recognition using mathematical morphology

J. F. Bronskill and A. N. Venetsanopoulos

Fault detection and identification in an intelligent restructurable controller

K. M. Passino and P. J. Antsaklis

Robot model reference adaptive control through lower/upper part dynamic decoupling

S. Tzafestas, G. Stavrakakis and A. Zagorianos

Predictive computer vision for robotic assembly

J. C. Aylett, R. B. Fisher and A. P. Fothergill

Book reviews

Calendar of events