

From the journals. . . .

AI applications

Vol. 11 No. 1

Articles

Airies

A. J. Thomson and J. E. Peak

A fuzzy-logic approach to detecting severe updrafts

V. Lakshmanan and A. Witt

Cloud classification using error-correcting output codes

D. W. Aha and R. L. Bankert

Integrating cases and models for prediction in biological systems

L. K. Branting, J. D. Hastings and J. A. Lockwood

Neural networks vs gaussian discriminant analysis

C. Marzban, H. Paik and G. J. Stumpf

Sigmar – a fuzzy expert-system for critiquing marine forecasts

B. Hansen

Artificial intelligence and environmental ethics

A. J. Thomson

Natural language generation in environmental applications

R. Kittredge

Artificial intelligence and weather forecasting – an update

D. Christopherson

Rain rate estimation using neural networks

S. W. Miller

Camet – cognitive analysis of meteorological tasks

R. Dyer, A. Rowe and R. Pliske

AIRIES 96 – workshop on artificial intelligence research in environmental science

J. E. Peak and D. W. Aha

Vol. 11 No. 2

Articles

Applying fuzzy-based inductive reasoning to analyze qualitatively the dynamic behavior of an ecological-system

A. M. Uhrmacher, F. E. Cellier and R. J. Frye

Nexsys – an expert system for estimating nonpoint source nutrient export rates

W. J. Young, F. M. Marston and J. R. Davis

Sirex – forest damage diagnosis as a constraint satisfaction problem

J. Perttunen, J. Vakeva and H. Saarenmaa

Implementation of cotton crop management expert systems – lessons from 10 years experience

R. E. Plant

Natural-resource management – opportunities and challenges in the application of decision-support systems

D. H. Walker and D. Lowes

Visualization of expert system rule bases

J. Kamler, G. J. Buhyoff and P. Miller

Vol. 11 No. 3

Articles

Adding learning to knowledge-based systems – taking the artificial out of AI

D. L. Schmoldt

The ecological epistemics research initiative

R. Muetzelfeldt and M. Haggith

Scene analysis for an orange harvesting robot

G. M. Grasso and M. Recce

Current artificial intelligence research in Australia and New Zealand

J. Weckert and R. Davis

Helping the user to understand – dynamic explanations

J. Scott and J. Weckert

Process models for neural-network applications in agriculture

F. Verdenius, A. J. M. Timmermans and R. E. Schouten

Modeling plant disease dynamics using neural networks

X. B. Yang and W. D. Batchelor

AI education

H. R. Gimblett

Augmenting resource-management education with AI technologies

H. R. Gimblett

Introducing knowledge-based systems to agricultural graduate students

T. W. Fermanian

An introduction to simulated neural networks

B. Itami and R. Wyatt

Fuel moisture prediction in homogeneous fuels using GIS and neural networks

B. J. Ball

Assessing and mapping conflicting recreation values in state park settings using neural networks

A. W. Guisse and H. R. Gimblett

Classification of Landsat thematic mapper image data, Chiricahua national monument, Arizona

S. M. Skirvin and G. Dryden

Application of neural networks to identifying vegetation types from satellite images

X. H. Zhang, C. Li and Y. L. Yuan

Applying neural networks to vegetation management plan development

P. J. Deadman and H. R. Gimblett

AI magazine

Vol. 18 No. 3

Articles

Does machine learning really work

T. M. Mitchell

Logic and databases – fast, present, and future

J. Minker

Artificial intelligence – realizing the ultimate promises of computing

D. L. Waltz

The state-of-the-art in ontology design – a survey and comparative review

N. F. Noy and C. D. Hafner

Intelligent adaptive agents – a highlight of the field and the AAAI-96 workshop

I. F. Imam and Y. Kodratoff

Vol. 18 No. 4

Articles

AAAI 97 highlights developments in the AI field

S. Hedberg

- Modern masters of an ancient game
C. M. Hamilton and S. Hedberg
- An overview of empirical natural language processing
E. Brill and R. J. Mooney
- Linguistic knowledge and empirical methods in speech recognition
A. Stolcke
- Statistical techniques for natural language parsing
E. Charniak
- Corpus-based approaches to semantic interpretation in natural language processing
H. T. Ng and J. Zelle
- Empirical methods in information extraction
C. Cardie
- Automating knowledge acquisition for machine translation
K. Knight
- Machine learning research – 4 current directions
T. G. Dietterich
- Emperor AI, where is your new mind?
W. K. Yeap
- ICMAS 96 – norms, obligations, and conventions
R. Conte and R. Falcone
- Is robot learning a new subfield? – The RoboLearn-96 workshop
H. Hexmoor, L. Meeden and R. R. Murphy
- Drawing the line
P. Hayes and K. Ford

Applied artificial intelligence

Vol. 11 No. 6

Articles

- Practical applications of intelligent agents and multiagent technology – introduction to the special issue
N. Jennings and B. Crabtree
- Intelligent pages – collecting shop and service information with software agents
K. Takahashi, Y. Nishibe, I. Morihara and F. Hattori
- MAGMA – an agent-based virtual market for electronic commerce
M. Tsvetovaty, M. Gini, B. Mobasher and Z. Wieckowski
- MACIV – a DAI based resource management system
E. Deoliveira, J. M. Fonseca and A. Steigergarcao
- Using mobile agents to support interorganizational workflow management
M. Merz, B. Liberman and W. Lamersdorf
- AMACIOA – a multiagent system for designing flexible assembly lines
F. Sprumont and J. P. Muller
- Vol. 11 Nos. 7–8**
- Articles.**
- Machine learning meets human-computer interaction
J. Herrmann and V. S. Moustakis
- Where do machine learning and human-computer interaction meet
V. S. Moustakis and J. Herrmann

- Help desk system with intelligent interface
B. H. Kang, K. Yoshida, H. Motoda and P. Compton
- Machine learning – a tool to support usability
J. Finlay
- CIMA – an interactive concept-learning system for end-user applications
D. Maulsby and I. H. Witten
- Machine learning for map interpretation – an intelligent tool for environmental-planning
F. Esposito, A. Lanza, D. Malerba and G. Semeraro
- Interactive knowledge-based construction and maintenance
G. Potamias, V. Moustakis and G. Charissis
- Human-robot communication and machine learning
V. Klingspor, J. Demiris and M. Kaiser
- Vol. 12 No. 1**
- Articles**
- Letter from the editor
R. Trappl
- Rule-based train traffic reactive simulation model
Y. Cheng
- Application of qualitative reasoning in engineering
L. M. Bozzo, A. Barbat and L. Torres
- Warrant selection for an intelligent argumentation tool
J. A. A. Sillince
- Formalizing partial matching and similarity in case-based reasoning with a description logic
P. Coupey, C. Fouquere and S. Salotti

Applied intelligence

Vol. 7 No. 4

Articles

- Incorporating prior knowledge in the form of production rules into neural networks using boolean-like neurons
S. H. Zhao and T. S. Dillon
- Experiments of fast learning with high-order Boltzmann machines
M. Grana, A. Danjou, F. X. Albizuri, M. Hernandez, F. J. Torrealdea, A. Delahera and A. I. Gonzalez
- Augmenting the discrimination power of HMM by NN for online cursive script recognition
S. H. Lee and J. H. Kim
- The application of connectionist structures to learning impedance control in robotic contact tasks
D. Katic and M. Vukobratovic
- Learning structure from data and its application to ozone prediction
L. E. Sucar, J. Perezbrito, J. C. Ruizsuarez and E. Morales
- Symbolical reasoning about numerical data – a hybrid approach
C. S. Herrmann

Artificial intelligence

Vol. 94 Nos. 1–2

- Economic principles of multiagent systems
C. Boutilier, Y. Shoham and M. P. Wellman
- The independent choice logic for modeling multiple agents under uncertainty
D. Poole
- Rationality and intelligence
S. J. Russell

- Negotiation and cooperation in multiagent environments
S. Kraus
- Coalitions among computationally bounded agents
T. W. Sandholm and V. R. Lesser
- On the emergence of social conventions – modeling, analysis, and simulations
Y. Shoham and M. Tennenholtz

Representations and solutions for game-theoretic problems

D. Koller and A. Pfeffer

Modeling agents as qualitative decision makers

R. I. Brafman and M. Tennenholtz

Vol. 95 No. 1

Articles

Engineering and compiling planning domain models to promote validity and efficiency

T. L. McCluskey and J. M. Porteous

Planning control rules for reactive agents

F. Kabanza, M. Barbeau and R. Stdenis

Autoepistemic logic of knowledge and beliefs

T. C. Przymusiński

Determination of social laws for multiagent mobilization

S. Onn and M. Tennenholtz

An event-driven integration reasoning scheme for handling dynamic threats in an unstructured environment

Y. Xia, S. S. Iyengar and N. E. Brener

Logical settings for concept learning

L. Deraedt

An automatic proof of Gödel's incompleteness theorem

K. Ammon

Vol. 95 No. 2

Articles

Qualitative and quantitative simulation – bridging the gap

D. Berleant and B. J. Kuipers

Modeling belief in dynamic systems. I: foundations

N. Friedman and J. Y. Halpern

Qualitative representation of positional information

E. Clementini, P. Difelice and D. Hernandez

The common order theoretic structure of version spaces and ATMSs

C. A. Gunter, T. H. Ngair and D. Subramanian

Representing action – indeterminacy and ramifications

E. Giunchiglia, G. N. Kartha and V. Lifschitz

Vol. 96 No. 2

Articles

Reasoning with minimal models – efficient algorithms and applications

R. Beneliyahuzohary and L. Palopoli

On the logic of causal explanation

V. Lifschitz

A note on the stable model semantics for logic programs

M. Kaminski

Vol. 97 Nos. 1–2

Articles

The relevance of relevance

D. Subramanian, R. Greiner and J. Pearl

Axioms of causal relevance

D. Galles and J. Pearl

A logical notion of conditional independence – properties and applications

A. Darwiche

Speeding up inferences using relevance reasoning – a formalism and algorithms

A. Y. Levy, R. E. Fikes and Y. Sagiv

Relevance from an epistemic perspective

G. Lakemeyer

Defaults and relevance in model-based reasoning

R. Khardon and D. Roth

A Bayesian approach to relevance in game playing

E. B. Baum and W. D. Smith

Selection of relevant features and examples in machine learning

A. L. Blum and P. Langley

Wrappers for feature subset-selection

R. Kohavi and G. H. John

The perceptron algorithm versus winnow – linear versus logarithmic mistake bounds when few input variables are relevant

J. Kivinen, M. K. Warmuth and P. Auer

Knowing what doesn't matter – exploiting the omission of irrelevant data

R. Greiner, A. J. Grove and A. Kogan

Dynamic relevance – vision-based focus of attention using artificial neural networks

S. Baluja and D. Pomerleau

An extension of QSIM with qualitative curvature

A. Hossain and K. S. Ray

Automated model selection for simulation-based on relevance reasoning

A. Y. Levy, Y. Iwasaki and R. D. Fikes

Tail uncertainty analysis in complex systems

E. Castillo, C. Solares and P. Gomez

Artificial intelligence in engineering

Vol. 12 Nos. 1–2

Articles

An intelligent database for engineering applications

Y. Dong and A. Goh

Cross breeding in genetic optimization and its application to fuzzy-logic controller-design

D. T. Pham and D. Karaboga

Probabilistic reasoning and multiple-expert methodology for correlated objective data

K. Cheekeong and D. F. Gillies

Fault detection and diagnosis using statistical control charts and artificial neural networks

R. P. Leger, W. J. Garland and W. F. S. Poehlman

Hybrid production control approach for JIT scheduling

D. Trentesaux, C. Tahon and P. Ladet

A new approach to fault-diagnosis in electrical distribution networks using a genetic algorithm

F. S. Wen and C. S. Chang

Selecting tools and techniques for model-based diagnosis

M. J. Chantler, G. M. Coghill, Q. Shen and R. R. Leitch

Recognizing patterns in information retrieval – a memory-based classifier for inferring relevancy

H. Aradhye and A. S. Heger

The role of explanations in an intelligent assistant system

J. Herrmann, M. Kloth and F. Feldkamp

Artificial-intelligence approaches to determination of CNC machining parameters in manufacturing – a review

K. S. Park and S. H. Kim

Dynamic weight estimation using an artificial neural-network

H. B. Bahar and D. H. Horrocks

Artificial intelligence review

Vol. 11 No. 6

Articles

Expressive applications of constraint logic programming

W. B. Day

Application of spreading activation techniques in information-retrieval

F. Crestani

Computers and artificial intelligence

Vol. 16 No. 3

Articles

A regular folding procedure

M. Gusev and D. J. Evans

Generalized semi-Markov process model of asynchronous automatic assembly system with simultaneous resource possession property, the statement of the perturbation analysis algorithm

M. Valent and Z. Lovasz

On planar affine transform determination

G. Podhajecky and J. Glasa

Fuzzy modeling with genetic algorithms

V. Wuwongse and S. Veluppillai

On the average number of solutions for SAT instances

H. Drias and A. Bensalma

Lifting of l-narrowing derivations

P. Bachmann

Vol. 16 No. 4

Articles

A semantic base for the fuzzy extension-principle

H. Becker

On the automatic synthesis of social laws for mobile robots – a study in artificial social-systems

O. Benyitzhak and M. Tennenholtz

A Prolog technique of implementing search of A/O graphs with constraints

M. Bielikova and P. Navrat

Blackboard-based and object-based systems via multi-head clauses

A. Ciampolini, E. Lamma, C. Stefanelli and P. Mello

Embedding rings into faulty twisted hypercubes

E. Abuelrub and S. Bettayeb

Vol. 16 No. 5

Articles

On the automatic synthesis of social laws for mobile robots – a study in artificial social-systems (2) analysis and discussion

O. Benyitzhak and M. Tennenholtz

A Z-specification approach to multimedia modeling

T. K. Shih

Theory of local register allocation for Prolog clauses

M. Fico

Vol. 16 No. 6

Articles

Broadcasting in the arrowhead torus

D. Deserale

Developing intelligent tutoring systems for mathematics

M. D. G. V. Nunes and R. Hasegawa

Vertex-disjoint paths in Cayley color graphs

P. Kulasinghe and S. Bettayeb

Monads-DPV – an object-oriented graphical support for developing concurrent software system

P. Kacsuk, S. Ferenczi, G. Doza, T. Fadgyas, G. Haring and G. Pigel

Engineering applications of artificial intelligence

Vol. 10 No. 4

Articles

Intelligent decision-support for waste minimization in electroplating plants

K. Q. Luo and Y. L. Huang

Using intelligent agent templates for dynamic structuring of distributed computer control systems

A. Stothert and I. M. MacLeod

A fuzzy approach to operation selection

F. T. S. Chan, A. Kazerooni and K. Abhary

An expert system architectural framework for engineering selection

C. Chan and P. Lau

Analyzing the schedulability of hard real-time artificial intelligence systems

A. Garciaforbes, A. Terrasa, V. Botti and A. Crespo

A framework for probabilistic combination of multiple classifiers at an abstract

H. J. Kang, K. W. Kim and J. H. Kim

Identification of text-only areas in mixed-type documents

C. Strouthopoulos, N. Papamarkos and

C. Chamzas

A binary-tree-based OCR technique for machine printed characters

B. Gatos, N. Papamarkos and C. Chamzas

Vol. 10 No. 5

Articles

Time-constrained qualitative model-based diagnosis

A. D. Steele and R. Leitch

Qualitative modeling and control of dynamic systems

Y. H. Wong, A. B. Rad and Y. K. Wong

Fuzzy controller and observer design for backing control of a trailer-truck

K. Tanaka, T. Taniguchi and H. O. Wang

Optimization of a fuzzy controller for fruit storage using neural networks and genetic algorithms

T. Morimoto, J. Suzuki and Y. Hashimoto

Fuzzy-logic-based decision-support system for scheduling tillage operations

S. Thangavadivelu and T. S. Colvin

Evolutionary neural trees for modeling and predicting complex systems

B. T. Zhang, P. Ohm and H. Muhlenbein

Comparison of shape-features for the classification of wear particles

K. Xu, A. R. Luxmoore and F. Deravi

Feature-selection in the recognition of handwritten chinese characters

C. H. Leung and L. Sze

A 2-level hierarchical approach for raw-material scheduling in steelworks

M. S. Suh, Y. J. Lee and Y. K. Ko

Expert systems with applications

Vol. 13 No. 1

Articles

Knowledge management – hope or hype

R. Dehoog and R. Vanderspek

Knowledge management – where did it come from and where will it go

K. M. Wiig

Supporting knowledge management – a selection of methods and techniques

K. M. Wiig, R. Dehoog and R. Vanderspek

Leveraging collective intellect by building organizational capabilities

B. Jumnarkar

Corporate memories as a tool for knowledge management

G. Vanheijst, R. Vanderspek and E. Kruizinga

Understanding and valuing knowledge assets – overview and method

J. Wilkins, B. Vanwegen and R. Dehoog

Methods and techniques for knowledge management – what has knowledge engineering to offer?

B. Wielinga, J. Sandberg and G. Schreiber

Vol. 13 No. 2

Articles

Predictability of interest-rates using data mining tools – a comparative-analysis of Korea and the US

S. H. Kim and H. J. Noh

Bankruptcy prediction using case-based reasoning, neural networks, and discriminant-analysis

H. K. Jo, I. G. Han and H. Y. Lee

Extending a tabular knowledge-based framework with feature selection

G. Wets, J. Vanthienen and S. Piramuthu

Smart bridge – expert bridge classification system

C. N. Vangroningen and R. A. Paddock

Communication-network design and analysis expert-systems based on higher-level representations

C. Kim

Knowledge-based nonmonotonic reasoning process in ship compartment design system

K. H. Lee and K. Y. Lee

Knowledge level analysis of group decision-support systems

H. Q. Wang

Improved accuracy in gradient-based optical-flow estimation

J. W. Brandt

Vol. 13 No. 3

Articles

Special issue – intelligent hybrid systems – preface

D. S. Yeung

Hybrid brainne – further developments in extracting symbolic disjunctive rules

W. F. Bloomer, T. S. Dillon and M. Witten

Modeling fuzzy production rules with fuzzy expert networks

E. C. C. Tsang and D. S. Yeung

An efficient hybrid direct vague fuzzy moves system using fuzzy-rules-based precise rules

Y. Q. Zhang and A. Kandel

Object recognition using genetic algorithms with a Hopfields Neural Model

J. S. Huang and H. C. Liu

Immunized neurocontrol

K. K. Kumar and J. Neidhoefer

Formal description and verification of hybrid rule/frame-based expert systems

S. C. K. Shiu, J. N. K. Liu and D. S. Yeung

The design of a hybrid authoring tool for modeling complex business applications

B. Wang and T. Holden

IEEE transactions on knowledge and data engineering

Vol. 9 No. 4

Articles

Cell suppression methodology – the importance of suppressing marginal totals

P. C. Chu

Information flow control in object-oriented systems

P. Samarati, E. Bertino, A. Ciampichetti and S. Jajodia

A deductive environment for dealing with objects and nonmonotonic reasoning

N. Leone, P. Rullo, A. Mecchia and G. Rossi

Implementation of tabled evaluation with delaying in Prolog

R. Ramesh and W. D. Chen

An empirical study of domain knowledge and its benefits to substructure discovery

S. Djoko, D. J. Cook and L. B. Holder

Programming with logical queries, bulk updates, and hypothetical reasoning

W. D. Chen

A transparent schema-evolution system based on object-oriented view technology

Y. G. Ra and E. A. Rundensteiner

Intelligent critic system for architectural design

H. W. Chun and E. M. K. Lai

Multiprocessor document allocation – a genetic algorithm approach

O. Frieder and H. T. Siegelmann

Feature selection via discretization

H. Liu and R. Setiono

Establishing the relevancy of the bookkeeping libraries to the functional testing of computer implementations

S. Vassiliadis, G. Triantafyllos and W. Kobrosly

The NUMA with clusters of processors for parallel join

S. Pramanik and W. R. Tout

On a pattern-oriented model for intrusion detection

S. P. Shieh and V. D. Gligor

Authorization and revocation in object-oriented databases

I. Majetic and E. L. Leiss

Vol. 9 No. 5

Articles

Guest editor's introduction – research surveys on building systems with knowledge and data engineering techniques

D. L. Spooner

Sequential decision-models for expert system optimization

V. S. Mookerjee and M. V. Mannino

Elicitation of knowledge from multiple experts using network inference

R. Rush and W. A. Wallace

Transaction processing in multilevel secure databases with kernelized architecture – challenges and solutions

V. Atluri, S. Jajodia and E. Bertino

R-mini – an iterative approach for generating minimal rules from examples

S. J. Hong

Use of contextual information for feature ranking and discretization

S. J. Hong

Shapes – a novel approach for learning search heuristics in under-constrained optimization problems

K. P. V. Doan and K. P. Wong

Modified fractal signature (MFS) – a new approach to document analysis for automatic knowledge acquisition

Y. Y. Tang, H. Ma, D. H. Xi, X. G. Mao and C. Y. Suen

- Integrating calendar dates and qualitative temporal constraints in the treatment of periodic events
P. Terenziani
- Transactions and updates in deductive databases
D. Montesi, E. Bertino and M. Martelli
- Independently updated views
U. R. Kulkarni and R. G. Ramirez
- Using a hash-based method with transaction trimming for mining association rules
J. S. Park, M. S. Chen and P. S. Yu
- Probabilistic model and optimal reorganization of b^+ -tree with physical clustering
J. S. Park and V. Sridhar
- QUEM—an achievement-test for knowledge-based systems
C. C. Hayes and M. I. Parzen
- Generalized production rules as a basis for integrating active and deductive databases
L. Palopoli and R. Torlone
- Boolean similarity measures for resource discovery
S. H. Li and P. B. Danzig
- High-order pattern discovery from discrete valued data
A. K. C. Wong and Y. Wang
- Implication and referential constraints – a new formal reasoning
X. B. Zhang and Z. M. Ozsoyoglu
- Case-based reasoning systems – from automation to decision aiding and stimulation
S. Dutta, B. Wierenga and A. Dalebout
- Strategic reasoning under trade-offs between action costs and advantages
S. Mussi
- Query optimization in multidatabase systems considering schema conflicts
C. Lee and C. J. Chen
- Schema evolution of an object-oriented real-time database system for manufacturing automation
L. Zhou, E. A. Rundensteiner and K. G. Shin
- Content-based indexing of multimedia databases
J. K. Wu
- A method of learning implication networks from empirical-data – algorithm and Monte-Carlo simulation-based validation
J. M. Liu and M. C. Desmarais
- Efficient scheduling of page access in index-based join processing
C. Y. Chan and B. C. Ooi

IEEE transactions on neural networks

Vol. 8 No. 5

Articles

- Glove-talkII – a neural-network interface which maps gestures to parallel formant speech synthesizer controls
S. S. Fels and G. E. Hinton
- Asymptotic statistical-theory of overtraining and cross-validation
S. Amari, N. Murata, K. R. Muller, M. Finke and H. H. Yang
- Adaptive critic designs
D. V. Prokhorov and D. C. Wunsch
- Vector-entropy optimization-based neural-network approach to image reconstruction from projections
Y. M. Wang and F. M. Wahl
- Neural network for estimating conditional distributions
H. Schioler and P. Kulczycki
- Diffusion approximation of frequency sensitive competitive learning
A. S. Galanopoulos, R. L. Moses and S. C. Ahalt
- CGHA for principal component extraction in the complex-domain
Y. W. Zhang and Y. L. Ma
- Data-storage channel equalization using neural networks
S. K. Nair and J. Moon
- VLSI circuit placement with rectilinear modules using 3-layer force-directed self-organizing maps
R. I. Chang and P. Y. Hsiao
- Time-delay neural networks – representation and induction of finite-state machines
D. S. Clouse, C. L. Giles, B. G. Horne and G. W. Cottrell
- On the use of artificial neural networks for the analysis of survival data
S. F. Brown, A. J. Branford and W. Moran
- Learning and adaptation in an airborne laser fire controller
P. D. Stroud
- An evaluation of the neocognitron
D. R. Lovell, T. Downs and A. C. Tsoi
- A theoretical-study of linear and nonlinear equalization in nonlinear magnetic storage channels
S. K. Nair and J. Moon
- Learning rules for neuro-controller via simultaneous perturbation
Y. Maeda and R. J. P. Defigueiredo
- Objective functions for training new hidden units in constructive neural networks
T. Y. Kwok and D. Y. Yeung
- A minor subspace analysis algorithm
F. L. Luo and R. Unbehauen
- Are artificial neural networks black-boxes?
J. M. Benitez, J. L. Castro and I. Requena
- Degree of population diversity – a perspective on premature convergence in genetic algorithms and its Markov chain analysis
Y. Leung, Y. Gao and Z. B. Xu
- Kernel orthonormalization in radial basis function neural networks
W. Kaminski and P. Strumillo
- An ART1 microchip and its use in multi-ART1 systems
T. Serranogotarredona and B. Linaresbarranco
- Morphological shared-weight networks with applications to automatic target recognition
Y. G. Won, P. D. Gader and P. C. Coffield
- Yet another algorithm which can generate topography maps
J. Sum, C. S. Leung, L. W. Chan and L. Xu
- Adaptive combination of PCA and VQ networks
A. Weingessel, H. Bischof, K. Hornik and F. Leisch
- On the convergence rate performance of the normalized least-mean-square adaptation
P. E. An, M. Brown and C. J. Harris
- On competitive learning
L. P. Wang
- Comments on a training rule which guarantees finite-region stability for a class of closed-loop neural-network control-systems
S. Park and C. H. Park
- Comments on a training rule which guarantees finite-region stability for a class of closed-loop neural-network control-systems – reply
S. Kuntanapreeda and R. R. Fullmer

Vol. 8 No. 6

Articles

- Old neural-network editors don't die, they just prune their hidden nodes
R. J. Marks
- Neural networks in financial engineering – a study in methodology
A. P. N. Refenes, A. N. Burgess and Y. Bentz

- Recurrent neural nets as dynamical boolean systems with application to associative memory
P. B. Watta, K. N. Wang and M. H. Hassoun
- Learning convergence of CMAC technique
C. S. Lin and C. T. Chiang
- Time-varying 2-phase optimization and its application to neural-network learning
H. Myung and J. H. Kim
- A neural-network learning-theory and a polynomial-time RBF algorithm
A. Roy, S. Govil and R. Miranda
- Fast training of multilayer perceptrons
B. Verma
- Nonlinear backpropagation – doing backpropagation without derivatives of the activation function
J. Hertz, A. Krogh, B. Lautrup and T. Lehmann
- Development and application of an integrated neural system for an HDCL
Y. Z. Lu and S. W. Markward
- Knowledge-based fuzzy MLP for classification and rule generation
S. Mitra, R. K. De and S. K. Pal
- Structure of the high-order Boltzmann machine from independence maps
F. X. Albizuri, A. Danjou, M. Grana and P. Larranaga
- A gradual neural-network approach for frequency assignment in satellite communication-systems
N. Funabiki and S. Nishikawa
- Stable online evolutionary learning of NN-MLP
Q. F. Zhao
- Responses to transients in living and simulated neurons
M. Stiber, R. Jeong and J. P. Segundo
- Reduction of breast biopsies with a modified self-organizing map
Y. Zheng, J. F. Greenleaf and J. J. Gisvold
- Complete memory structures for approximating nonlinear discrete time mappings
B. W. Stiles, I. W. Sandberg and J. Ghosh
- Neural-network-based robust fault diagnosis in robotic systems
A. T. Vemuri and M. M. Polycarpou
- Volterra models and 3-layer perceptrons
V. Z. Marmarelis and X. Zhao
- Structure optimization of neural networks with the A*-algorithm
A. Doering, M. Galicki and H. Witte
- Power prediction in mobile communication systems using an optimal neural-network structure
X. M. Gao, X. Z. Gao, J. M. A. Tanskanen and S. J. Ovaska
- Mine detection using scattering parameters and an artificial neural-network
G. L. Plett, T. Doi and D. Torrieri
- A new synthesis approach for feedback neural networks based on the perceptron training algorithm
D. R. Liu and Z. J. Lu
- On the problem of spurious patterns in neural associative memory models
G. Athithan and C. Dasgupta
- Growing radial basis neural networks – merging supervised and unsupervised learning with network growth techniques
N. B. Karayiannis and G. W. Q. Mi
- On the distribution of performance from multiple neural-network trials
S. Lawrence, A. D. Back, A. C. Tsoi and C. L. Giles
- Self-organizing algorithms for generalized eigen-decomposition
C. Chatterjee, V. P. Roychowdhury, J. Ramos and M. D. Zoltowski
- A knowledge-base generating hierarchical fuzzy-neural controller
R. M. Kandadai and J. M. Tien
- A partial order for the m-of-n rule-extraction algorithm
F. Maire
- Hardware implementation of CMAC neural-network with reduced storage requirement
J. S. Ker, Y. H. Kuo, R. C. Wen and B. D. Liu
- K-winners-take-all neural-net with theta(1) time-complexity
T. C. Hsu and S. D. Wang
- A self-organizing network for hyperellipsoidal clustering – comments
S. Wang and S. W. Xia
- A self-organizing network for hyperellipsoidal clustering – reply
J. C. Mao and A. Jain
- Adaptive critic designs
D. V. Prokhorov and D. C. Wunsch
- Vol. 9 No. 1**
- Articles**
- A CMOS binary pattern classifier based on Parzens method
R. Coultrip
- Fast training of recurrent networks based on the EM algorithm
S. Ma and C. Y. Ji
- A direct adaptive neural-network control for unknown nonlinear-systems and its application
J. R. Noriega and H. Wang
- Cross-validation with active pattern selection for neural-network classifiers
F. Leisch, L. C. Jain and K. Hornik
- Long-term attraction in higher-order neural networks
D. Burshtein
- A discrete dynamics model for synchronization of pulse-coupled oscillators
A. Schultz and H. Wechsler
- Global convergence of OJAS subspace algorithm for principal component extraction
T. P. Chen, Y. B. Hua and W. Y. Yan
- Incremental communication for multilayer neural networks – error analysis
A. A. Ghorbani and V. C. Bhavsar
- Compensatory neurofuzzy systems with fast learning algorithms
Y. Q. Zhang and A. Kandel
- Multiple descent cost competition – restorable self-organization and multimedia information-processing
Y. Matsuyama
- Adaptive unsupervised extraction of one-component of a linear mixture with a single neuron
Z. Malouche and O. MacChi
- MART – a multichannel ART-based neural-network
M. Fernandezdelgado and S. B. Ameneiro
- Learning in certainty-factor-based multilayer neural networks for classification
L. M. Fu
- A smart pixel-based feedforward neural-network
J. S. Kane
- Limitations of nonlinear PCA as performed with generic neural networks
E. C. Malthouse
- Quantizing for minimum average misclassification risk
C. Diamantini and A. Spalvieri
- Analysis and design of primal-dual assignment networks
J. Wang and Y. S. Xia
- Guaranteed 2-pass convergence for supervised and inferential learning
S. S. Fels and G. E. Hinton
- A bootstrap evaluation of the effect of data splitting on financial time-series
B. Lebaron and A. S. Weigend
- Stability analysis for neural dynamics with time-varying delays
C. H. Hou and J. X. Qian

Upper-bounds on the number of hidden neurons in feedforward networks with arbitrary bounded nonlinear activation functions

G. B. Huang and H. A. Babri

Doubly stochastic Poisson processes in artificial neural learning

H. C. Card

A note on convergence under dynamical thresholds with delays

K. Pakdaman and C. P. Malta

IEEE transactions on pattern analysis and machine intelligence

Vol. 19 No. 7

Articles

Face and gesture recognition – overview

J. Daugman

Visual interpretation of hand gestures for human-computer interaction – a review

V. I. Pavlovic, R. Sharma and T. S. Huang

Probabilistic visual learning for object representation

B. Moghaddam and A. Pentland

Eigenfaces vs fisherfaces – recognition using class-specific linear projection

P. N. Belhumeur, J. P. Hespanha and D. J. Kriegman

Face recognition – the problem of compensating for changes in illumination direction

Y. Adini, Y. Moses and S. Ullman

Linear object classes and image synthesis from a single example image

T. Vetter and T. Poggio

Automatic interpretation and coding of face images using flexible models

A. Lanitis, C. J. Taylor and T. F. Cootes

Coding, analysis, interpretation, and recognition of facial expressions

I. A. Essa and A. P. Pentland

An algorithm for the learning of weights in discrimination functions using a priori constraints

N. Kruger

Object recognition robust under translations, deformations, and changes in background

R. P. Wurtz

Face recognition by elastic bunch graph matching

L. Wiskott, J. M. Fellous, N. Kruger and

C. Vondermalsburg

PFINDER – real-time tracking of the human-body

C. R. Wren, A. Azarbayejani, T., Darrell and

A. P. Pentland

On the error-reject trade-off in biometric verification systems

M. Golfarelli, D. Maio and D. Maltoni

Vol. 19 No. 8

Articles

Optimal local weighted averaging methods in contour smoothing

R. Legault and C. Y. Suen

Bias in robust estimation caused by discontinuities and multiple structures

C. V. Stewart

Affine structure from line correspondences with uncalibrated affine cameras

L. Quan and T. Kanade

Wavelet-based affine invariant representation – a tool for recognizing planar objects in 3D space

Q. M. Tieng and W. W. Boles

A sequential factorization method for recovering shape and motion from image streams

T. Morita and T. Kanade

A system for recognizing a large class of engineering drawings

Y. H. Yu, A. Samal and S. C. Seth

Use of Fourier and Karhunen-Loeve decomposition for fast pattern-matching with a large set of templates

M. Uenohara and T. Kanade

On the sequential determination of model misfit

P. Whaite and F. P. Ferrie

Hough transform modified by line connectivity and line thickness

M. C. K. Yang and J. S. Lee

Recognition of 2D object contours using the wavelet transform zero-crossing representation

Q. M. Tieng and W. W. Boles

Approximating bayesian belief networks by arc removal

R. A. Vanengelen

Multiresolution analysis in extraction of reference lines from documents with gray-level background

Y. Y. Tang, H. Ma, J. M. Liu, B. F. Li and

D. H. Xi

Ligature modeling for online cursive script recognition

B. K. Sin and J. H. Kim

Vol. 19 No. 9

Articles

Partial surface and volume matching in 3 dimensions

G. Barequet and M. Sharir

Relaxation methods for supervised image segmentation

M. W. Hansen and W. E. Higgins

Linear pushbroom cameras

R. Gupta and R. I. Hartley

Off-line signature verification by local granulometric size distributions

R. Sabourin, G. Genest and F. J. Preteux

A simple algorithm for nearest-neighbor search in high dimensions

S. A. Nene and S. K. Nayar

Aided and automatic target recognition based upon sensory inputs from image forming systems

J. A. Ratches, C. P. Walters, R. G. Buser and

B. D. Guenther

Toward accurate recovery of shape from shading under diffuse lighting

A. J. Stewart and M. S. Langer

Robust egomotion estimation from the normal flow using search subspaces

C. Silva and J. Santosvictor

Deformable template recognition of multiple occluded objects

K. V. Mardia, W. Qian, D. Shah and K. M. A. Desouza

Detectability, uniqueness, and reliability of eigen windows for stable verification of partially occluded objects

K. Ohba and K. Ikeuchi

Multipurpose strategic-planning in the game of go

S. Hu and P. E. Lehner

Consistency of stochastic context-free grammars from probabilistic estimation based on growth transformations

J. A. Sanchez and J. M. Benedi

Vol. 19 No. 10

Articles

Pierre Devijver 1938–1996 – obituary

J. Kittler and A. Jain

Classification using adaptive wavelets for feature-extraction

Y. Mallet, D. Coomans, J. Kautsky and O. Devel

Large-scale simulation studies in image pattern-recognition

T. K. Ho and H. S. Baird

Space-variant fourier-analysis – the exponential chirp transform

G. Bonmassar and E. L. Schwartz

Matching sets of 3d line segments with application to polygonal arc matching

B. Kamgarparsa and B. Kamgarparsa

Brownian strings – segmenting images with stochastically deformable contours

R. P. Grzeszczuk and D. N. Levin

COSMOS – a representation scheme for 3d free-form objects

C. Dorai and A. K. Jain

Optimal registration of object views using range data

C. Dorai, J. Weng and A. K. Jain

Shape spectrum based view grouping and matching of 3d free-form objects

C. Dorai and A. K. Jain

The illumination-invariant matching of deterministic local-structure in color images

D. Slater and G. Healey

Correcting the geometry and color of digital images

M. Jackowski, A. Goshtasby, S. Bines,

D. Roseman and C. Yu

A variational approach to recovering depth from defocused images

A. N. Rajagopalan and S. Chaudhuri

Discrete Voronoi diagrams and the skiz operator – a dynamic algorithm

R. E. Sequeira and F. J. Preteux

A smoothly constrained Kalman filter

J. Degeeter, H. Vanbrussel, J. Deschutter and

M. Decreton

Recovering 3d motion of multiple objects using adaptive Hough transform

T. Y. Tian and M. Shah

Vol. 19 No. 11

Articles

Performance assessment through bootstrap

K. Cho, P. Meer and J. Cabrera

A discrete expression of Canny's criteria for step-edge detector performances evaluation

D. Demigny and T. Kamle

Geometric separation of partially overlapping nonrigid objects applied to automatic chromosome classification

G. Agam and I. Dinstein

3D part segmentation using simulated electrical charge-distributions

K. N. Wu and M. D. Levine

Prior learning and Gibbs reaction diffusion

S. C. Zhu and D. Mumford

An integrated model for evaluating the amount of data required for reliable recognition

M. Lindenbaum

Inference of surfaces, 3D curves, and junctions from sparse, noisy, 3D data

G. Guy and G. Medioni

Estimation and compensation of subpixel edge localization error

F. Pedersini, A. Sarti and S. Tubaro

Scene understanding by rule evaluation

W. F. Bischoff and T. Caelli

Superquadrics for segmenting and modeling range data

A. Leonardis, A. Jaklic and F. Solina

Computational Bayesian analysis of hidden Markov mesh models

A. P. Dunmur and D. M. Titterton

Joint induction of shape-features and tree classifiers

Y. Amit, D. Geman and K. Wilder

A framework for performance characterization of intermediate level grouping modules

S. Borra and S. Sarkar

IEEE transactions on robotics and automation

Vol. 13 No. 6

Articles

Deadlock analysis of petri nets using siphons and mathematical-programming

F. Chu and X. L. Xie

Stability analysis of assemblies considering friction

H. Mosemann, F. Rohrdanz and F. M. Wahl

Sensory-based motion planning with global proofs

I. Kamon and E. Rivlin

An integral manifold approach for tip-position tracking of flexible multilink manipulators

M. Moallem, K. Khorasani and R. V. Patel

Toward the implementation of hybrid position/force control in industrial robots

G. Ferretti, G. Magnani and P. Rocco

A new method of peak torque reduction with redundant manipulators

D. G. Li, A. A. Goldenberg and J. W. Zu

Nonlinear behavior and control of a nonholonomic free-joint manipulator

Y. Nakamura, T. Suzuki and M. Koinuma

Environment prediction for a mobile robot in a dynamic environment

C. C. Chang and K. T. Song

Incorporating body dynamics into sensor-based motion planning – the maximum turn

A. M. Shkel and V. J. Lumelsky

Robust and accurate time-optimal path-tracking control for robot manipulators

J. Kieffer, A. J. Cahill and M. R. James

Automatic selection of image features for visual servoing

F. Janabisharifi and W. J. Wilson

Eye-in-hand robotic tasks in uncalibrated environments

C. E. Smith, S. A. Brandt and N. P. Papanikolopoulos

A comparison of 2 fast algorithms for computing the distance between convex polyhedra

S. Cameron

International journal of computer vision

Vol. 23 No. 3

Articles

Singularities of illuminated surfaces

L. Donati and N. Stolfi

The generic bilinear calibration-estimation problem

J. J. Koenderink and A. J. Vandoorn

Sequential updating of projective and affine structure-from-motion

P. A. Beardsley, A. Zisserman and D. W. Murray

Detection and recognition of periodic, nonrigid motion

R. Polana and R. C. Nelson

3D pose estimation by directly matching polyhedral models to gray value gradients

H. Kollnig and H. M. Nagel

Vol. 24 No. 1

Articles

A new metric for gray-scale image comparison

D. L. Wilson, A. J. Baddeley and R. A. Owens

From multiple stereo views to multiple 3-D surfaces

P. Fua

Analyzing and synthesizing images by evolving curves with the Osher-Sethian method

R. Kimmel, N. Kiryati and A. M. Bruckstein

Global minimum for active contour models – a minimal path approach

L. D. Cohen and R. Kimmel

Dynamic vergence using log-polar images

C. Capurro, F. Panerai and G. Sandini

Vol. 24 No. 2

Articles

Shape from shading with interreflections under a proximal light-source – distortion-free copying of an unfolded book

T. Wada, H. Ukida and T. Matsuyama

Alignment by maximization of mutual information

P. Viola and W. M. Wells

Reconstruction from image sequences by means of relative depths

A. Heyden

Hypergeometric filters for optical-flow and affine matching

Y. L. Xiong and S. A. Shafer

Vol. 24 No. 3

Articles

Model-based detection and localization of circular landmarks in aerial images

C. Drewniok and K. Rohr

Multiscale blur estimation and edge type classification for scene analysis

W. Zhang and F. Bergholm

Efficiently locating objects using the Hausdorff distance

W. J. Rucklidge

The development and comparison of robust methods for estimating the fundamental matrix

P. H. S. Torr and D. W. Murray

A theory of specular surface geometry

M. Oren and S. K. Nayar

Vol. 25 No. 1

Articles

Improved accuracy in gradient-based optical-flow estimation

J. W. Brandt

Recognizing facial expressions in image sequences using local parameterized models of image motion

M. J. Black and Y. Yacoob

Multilevel shape representation using global deformations and locally adaptive finite-elements

D. Metaxas, E. Koh and N. I. Badler

Point signatures – a new representation for 3D object recognition

C. S. Chua and R. Jarvis

Vol. 25 No. 2

Articles

Affine morphological multiscale analysis of corners and multiple junctions

L. Alvarez and F. Morales

Learning recognition and segmentation using the cresceptron

J. Weng, N. Ahuja and T. S. Huang

Recognition using region correspondences

R. Basri and D. W. Jacobs

3-D scene data recovery using omnidirectional multibaseline stereo

S. B. Kang and R. Szeliski

International journal of intelligent systems

Vol. 12 No. 8

Articles

Mixing exact and importance sampling propagation algorithms in dependence graphs

L. D. Hernandez and S. Moral

Constructivist foundations of modeling – a Kantian perspective

M. C. Bettoni

Freddi – a fuzzy relational deductive database interface

J. M. Medina, O. Pons, J. C. Cubero and M. A. Vila

Vol. 12 No. 9

Articles

Prosum-prolog system for uncertainty management

I. Iancu

Removing partial inconsistency in valuation-based systems

L. M. Decampos and S. Moral

Intelligent algorithmic interpretation of pollutant discharges from multiunit industrial-complexes

H. M. Cartwright, B. Jesson and L. M. Sztandera

A self-learning and tuning fuzzy-logic controller based on genetic algorithms and reinforcements

H. Y. Chung and C. K. Chiang

Vol. 12 No. 11.1

Articles

Introduction – fuzzy information engineering

M. Grabisch and H. Prade

Fuzzy rules extraction and redundancy elimination – an application to remote-sensing image-analysis

L. Mascarilla

A fuzzy-logic based approach for semiological analysis of microcalcifications in mammographic images

S. Bothorel, B. B. Meunier and S. Muller

A possibilistic ATMS contribution to diagnose analog electronic circuits

C. Bosplachez

Tracks real-time classification based on fuzzy rules

A. Ayoun and M. Grabisch

Fuzzy multicriteria decision-making for long cane pruning – a system for standard and complex vine configurations

B. Tisseyre, N. J. B. McFarlane, C. Sinfort, R. D. Tillett, F. Sevilla and A. Carbonneau

Subjective evaluation of car seat comfort with fuzzy set techniques

E. Levrat, A. Voisin, S. Bombardier and J. Bremont

Nutri-expert, an educational software in nutrition

J. C. Buisson

Planning with graded nondeterministic actions – a possibilistic approach

C. D. Pereira, F. Garcia, J. Lang and R. Martinclouaire

Vol. 13 No. 1

Articles

Logics with approximate premises

L. Biacino and G. Gerla

On the design of neural-fuzzy control-system

D. Kaur and B. Lin

Data fusion modeling human-behavior

C. Dujet and N. Vincent

Extension from a linear associative memory to a linguistic linear associative memory

A. Blanco, M. Delgado and W. Fajardo

An analytic characterization of some aggregation operators

S. Ovchinnikov

An OWA operator with fuzzy ranks

H. B. Mitchell and D. D. Estrakh

Informational independence – models and normal forms

L. C. Van der Gaag and J. J. C. Meyer

Vol. 13 Nos. 2–3

Articles

Introduction – FLINS96

D. Ruan

Intelligent systems in nuclear applications

D. Ruan

Application of the transferable belief model to diagnostic problems

P. Smets

Identification of hidden failures in-process control-systems based on the HMG method

A. Jalashgar

Nondeterministic aggregation operators and systems

V. Cutello and J. Montero

Learning-based similarity measurement for fuzzy-sets

A. Tocatlidou

Speed-up of the Monte-Carlo method by using a physical model of the dempster-shafer theory

G. Resconi, A. J. Vanderwal and D. Ruan

Sugeno, Mamdani, and fuzzy Mamdani controllers put in a uniform interpolation framework

A. Nowe

Constructing fuzzy controllers with b-spline models – principles and applications

J. W. Zhang and A. Knoll

Discussion on soft computing at FLINS96

X. Li, D. Ruan and A. J. Van der Wal

International journal of software engineering and knowledge engineering

Vol. 7 No. 2

Articles

Understanding knowledge-based software processes – introduction

G. Visaggio

A new framework for improving software development process on small computer-systems

M. Sakai, K. I. Matsumoto and K. Torii

Enriching software process support by knowledge-based techniques

B. Dellen, F. Maurer, J. Munch and M. Verlage

Knowledge engineering based on optimization and pattern recognition – introduction

V. D. Mazurov

Method of cumulative sums and problems of optimal-control by technological processes

V. V. Mazalov

Knowledge aspects of resource allocation problems with saturation

A. P. Cherenkov

The stabilization problem for certain class of ecological systems

A. N. Kirillov

An experience with the use of systems engineer case tool

M. Bielikova and P. Navrat

Journal of intelligent & robotic systems

Vol. 19 No. 2

Articles

How to control robots interacting with dynamic environment

M. Vukobratovic

Geometry and thermal regulation of gma welding via conventional and neural adaptive-control

S. G. Tzafestas, G. G. Rigatos and E. J. Kyriannakis

Optimal collision-free path planning for nonsynchronized motions

S. Stifter

Nonlinear filtering of non-gaussian noise

K. N. Plataniotis, D. Androustos and

A. N. Venetsanopoulos

Vol. 19 No. 3

Special issue: Intelligent robotics

Grasping of static and moving-objects using a vision-based control approach

C. E. Smith and N. P. Papanikolopoulos

Sensor fusion and planning with perception-action network

S. Lee

On intelligent robot motion planning via learning

P. Chen

An spn-neural planning methodology for coordination of 2 robotic hands with constrained placement

N. Bourbakis and A. Tascillo

Neurofuzzy motion planners for intelligent robots

L. H. Tsoukalas, E. N. Houstis and G. V. Jones

Vol. 19 No. 4

Articles

Increased autonomy in industrial robotic systems – a framework

K. Brink, M. Olsson and G. Bolmsjo

Autonomous microrobots

U. Rembold and S. Fatikow

Position-based fuzzy force control for dual industrial robots

S. T. Lin and A. K. Huang

Forward assembly planning based on stability

C. Roberto and C. Enrico

Vol. 20 No. 1

Articles

Passive compliance from robot limbs and its usefulness in robotic automation

M. H. Ang, W. Wang, R. N. K. Loh and T. S. Low

Dynamics and control of elastic joint manipulators

C. D. Mladenova and P. C. Muller

Fast motion planning by parallel-processing – a review

D. Henrich

A fuzzy classifier for tactile sensing

L. Carotenuto, D. Famularo, P. Muraca and G. Raiconi

Vol. 20 Nos. 2–4

Articles

Robot adaptive and robust control

S. G. Tzafestas

Hybrid controller for adaptive link control of industrial robots

J. Karner and H. Janocha

Adaptive impedance control applied to a pneumatic legged robot

C. S. Tzafestas, N. K. Msirdi and N. Manamani

Stable sampled-data adaptive-control of robot arms using neural networks

F. C. Sun and Z. Q. Sun

Synthesis of neural networks and PID control for performance improvement of industrial robots

P. C. Chen and J. K. Mills

A stable neuro-adaptive controller for rigid robot manipulators

D. Y. Meddah and A. Benallegue

Position control of robots by nonlinearity estimation and compensation – theory and experiments

R. Hu and P. C. Muller

Adaptive control of a single link manipulator including motor and input unmodelled dynamics

Y. Eldeeb and W. H. Elmaraghy

Adaptive task space control of flexible-joint manipulators

R. Colbaugh and K. Glass

Cognitive architecture for robust adaptive control of robots in a team

A. Agah and G. A. Bekey

A nonlinear robust-control using a fuzzy reasoning and its application to a robot manipulator

K. Watanabe, K. Izumi and T. Otsubo

Robust practical point stabilization of a nonholonomic mobile robot using neural networks

R. Fierro and F. L. Lewis

Decentralized PD and robust nonlinear control for robot manipulators

M. Liu

On robust control of flexible joint robots using describing function and sector bounded nonlinearity descriptions

M. M. Moghaddam and A. A. Goldenberg

A new control scheme of single link flexible manipulators robust to payload changes

V. Feliu, J. A. Somolinos, C. Cerrada and J. A. Cerrada

Robust sliding-mode control of 9-link biped robot walking

S. G. Tzafestas, T. E. Krikochoritis and C. S. Tzafestas

Journal of intelligent manufacturing

Vol. 8 No. 4

Articles

An object-oriented system for tolerance charting

S. Konakalla and P. Gavankar

Active database support for step/express models

Y. Dong, C. F. Y. Chee, Y. He and A. Goh

Model of an integrated intelligent design and manufacturing system

J. Balic and B. Abersek

Online tool condition monitoring-system with wavelet fuzzy neural-network

X. L. Li, Y. X. Yao and Z. J. Yuan

A framework for virtual disassembly analysis

H. Srinivasan, N. Shyamsundar and R. Gadh

Using mixed-type reasoning in computer-aided process planning for feature interactions

J. S. Hwang and W. A. Miller

The application of neural networks in fixture planning by pattern-classification

Z. C. Lin and J. C. Huang

Manufacturing evaluation using resource-based, template-free features

C. Roberts, N. Hubele, M. Henderson, R. Stage and J. Perez

Vol. 8 No. 5

Articles

Manufacturing and logistics (1) towards global frameworks

J. M. Proth

A new-generation of decision-support systems for advanced manufacturing enterprises

S. J. Ren, X. D. Zhang and X. P. Zhang

Model-based process redesign

B. Janusz

Towards a synthesis method for distributed safety controllers based on net condition/event systems

H. M. Hanisch, J. Thieme and A. Luder

Setting thresholds for periodic order release

M. C. Fu, J. W. Herrmann and M. Narayanaswamy

Supply management for cost minimization in assembly systems with random component yield times

J. M. Proth, G. Mauroy, Y. Wardi, C. Chu and X. L. Xie

A stochastic method for discrete and continuous optimization in manufacturing systems

A. Dolgui and D. Ofitserov

Distributed bottleneck control for repetitive production systems

Z. Banaszak

On the receding horizon hierarchical optimal-control of manufacturing systems

F. L. Pereira and J. B. Desousa

Analytical results for the performance and the control of stochastic flow systems

M. O. Hongler

Evaluation of the role of waste in a truck manufacturing line using simulation

R. Desmet and L. Gelders

Management of a pool of self-service cars

F. Chauvet, N. Hafez, J. M. Proth and N. Sauer

Inspection and maintenance planning – an application of semi-Markov decision-processes

C. Berenguer, C. B. Chu and A. Grall

Vol. 8 No. 6

Articles

Planning the GMAW process by constraint propagation

N. V. Yetukuri and G. W. Fischer

Procedures for estimating desirable initial states of a production line – a comparative-study

S. Sengupta and R. P. Vantil

Modeling for flexible manufacturing systems and structural-properties of optimal work routing policy

X. B. Zhao, K. Ohno and K. Nakade

Shop-floor scheduling at shipbuilding yards using the multiple intelligent agent system

H. S. Choi and K. H. Park

A knowledge-based approach to safety evaluation for plant start-up

S. G. Lee and S. Park

Experimental-design with fuzzy levels

A. Lotfi and M. Howarth

Vol. 9 No. 1

Articles

Intelligent control for manipulators with moving bases

K. A. Tahboub

Integrated product and process design environment tool for manufacturing T/R modules

R. K. Karne, J. S. Baras, M. O. Ball, S. Bashyam,

A. Kebede, J. Williams, V. S. Trichur, M. Karir,

H. T. Lai and S. Dandekar

Automated process parameter resetting for injection-molding – a fuzzy-neuro approach

W. He, Y. F. Zhang, K. S. Lee, J. Y. H. Fuh and A. Y. C. Nee

Process sequence optimization-based on a new cost-tolerance model

S. H. Yeo, B. K. A. Ngoi and H. Chen

Fuzzy set-theory applications in production management research – a literature survey

A. L. Guiffreda and R. Nagi

A review of current research in manufacturing shop design integration

G. Ioannou and I. Minis

Assembly planning and plan decomposition in an automated microrobot-based microassembly desk-top station

S. Fatikow, R. Munassypov and U. Rembold

Journal of logic programming

Vol. 33 No. 1

Articles

Intuitionistic deductive databases and the polynomial-time hierarchy

A. J. Bonner

A parallel Prolog system for distributed-memory

L. Araujo and J. J. Ruz

Vol. 33 No. 2

Articles

A platform for restriction mapping

C. N. Yee and T. I. Dix

Logic and algebraic languages for interoperability in multidatabase systems

L. V. S. Lakshmanan, F. Sadri and I. N. Subramanian

The iff proof procedure for abductive logic programming

T. H. Fung and R. Kowalski

Expressiveness of stable model semantics for disjunctive logic programs with functions

T. Eiter and G. Gottlob

Vol. 34 No. 1

Articles

Transformational methodology for proving termination of logic programs

M. R. K. K. Rao, D. Kapur and R. K. Shyamasundar

A new term representation method for Prolog

X. N. Li

The horn basis of a set of clauses

J. J. Hebrard and P. Luquet

Vol. 34 No. 2

Articles

Tabulated resolution for the well-founded semantics

R. Bol and L. Degerstedt

SLDNFA – an abductive procedure for abductive logic programs

M. Denecker and D. Deschreye

Vol. 34 No. 3

Articles

Abstract metaprolog engine

I. Cicekli

Completeness and properness of refinement operators in inductive logic programming

P. R. J. Vanderlaag and S. H. Nienhuyscheng

SLR inference – an inference system for fixed-mode logic programs, based on SLR parsing

D. A. Rosenblueth and J. C. Peralta

Journal of symbolic computation

Vol. 24 No. 2

Special issue: Application of quantifier elimination

Computing the Newtonian graph

D. Kozen and K. Stefansson

Nonlinear control-system design by quantifier elimination

M. Jirstrand

Robust multiobjective feedback design by quantifier elimination

P. Dorato, W. Yang and C. Abdallah

Testing stability by quantifier elimination

H. Hong, R. Liska and S. Steinberg

Simulation and optimization by quantifier elimination

V. Weispfenning

Simplification of quantifier-free formulas over ordered fields

A. Dolzmann and T. Sturm

Vol. 24 Nos. 3–4

Special issue: Computational algebra and number-theory –

Proceedings of the first magma conference

The Magma algebra system (I) The user language

W. Bosma, J. Cannon and C. Playoust

Kant v4

M. Daberkow, C. Fieker, J. Kluners, M. Pohst,

K. Roegner, M. Schornig and K. Wildanger

Computing chief series, composition series and socles in large permutation-groups

J. J. Cannon and D. F. Holt

Computing Sylow subgroups in permutation-groups

J. J. Cannon, B. C. Cox and D. F. Holt

Computing EXT algebras for finite-groups

J. F. Carlson, E. L. Green and G. J. A. Schnieder

Computing isometries of lattices

W. Plesken and B. Souvignier

Analyzing finitely presented groups by constructing representations

W. Plesken and B. Souvignier

Lattices of compatibly embedded finite-fields

W. Bosma, J. Cannon and A. Steel

Computing with subfields

M. Daberkow

On computing subfields

J. Kluners and M. Pohst

Integer matrix diagonalization

G. Havas and B. S. Majewski

A new algorithm for the computation of canonical-forms of matrices over fields

A. Steel

Subexponential algorithms for class group and unit computations

H. Cohen, F. D. Y. Diaz and M. Olivier

Toric degenerations of polynomial ideals and geometric localization of fans

S. Collart and D. Mall

Converting bases with the Grobner walk

S. Collart, M. Kalkbrener and D. Mall

Constructing permutation representations for matrix groups

G. Cooperman, L. Finkelstein, M. Tselman and B. York

Constructing a representation of the group-(2,3,7-11)

D. F. Holt, W. Plesken and B. Souvignier

The 2-modular characters of Conway 3rd group co-3

I. A. I. Suleiman and R. A. Wilson

Vol. 24 No. 5

Articles

On testing a bivariate polynomial for analytic reducibility

S. McCallum

Factorization of differential operators with rational functions coefficients

M. Vanhoeij

Rectifying transformations for the integration of rational trigonometric functions

D. J. Jeffrey

Solving a multivariable congruence by change of term order

P. Fitzpatrick

Symbolic computation of conserved densities for systems of nonlinear evolution equations

U. Goktas and W. Hereman

Scientific computing – one part of the revolution

R. M. Corless and D. J. Jeffery

Vol. 24 No. 6

Articles

Special issue on validated numerical-methods and computer algebra – foreword of the guest editors

W. Krandick and S. Rump

How to recognize zero

D. Richardson

- Computing in the field of complex algebraic numbers
A. W. Strzebonski
- On validated computing in algebraic number-fields
M. E. Pohst
- Detection and validation of clusters of polynomial zeros
V. Hribernik and H. J. Stetter
- Estimations for the separation number of a polynomial system
J. P. Dedieu
- Floating-point versus symbolic computations in the QD-algorithm
A. Cuyt
- A new approach for analytical computation of Hamiltonian of a satellite perturbed motion
A. A. Vakhidov and N. N. Vasiliev

- Counting points on curves over finite-fields
M. D. Huang and D. Ierardi
- A generalization of grobner basis algorithms to polycyclic group-rings
K. Madlener and B. Reinert
- Finding intersections and normalizers in finitely generated nilpotent groups
E. H. Lo
- A polycyclic quotient algorithm
E. H. Lo
- The computation and application of the generalized inverse via Maple
J. Jones, N. P. Karampetakis and A. C. Pugh

Knowledge-based systems

Vol. 9 No. 8

Special issue: Knowledge acquisition representation and processing 1995

- Analogic – inference beyond logic.
K. K. Thornber
- Conceptual indexing and active retrieval of video for interactive learning environments.
R. Burke
- Heterogeneous knowledge representation – integrating connectionist and symbolic computation.
D. Montesi
- Design and application of a new knowledge engineering tool for solving real-world problems
Z. S. Hippe
- Automated object-oriented reusable component identification
L. H. Etzkorn and C. G. Davis
- A system for simulation, monitoring and diagnosis of controlled continuous-processes with slow dynamics
J. Prang, H. D. Huemmer and W. Geisselhardt
- A rule-based machine vision system for fire detection in aircraft dry bays and engine compartments
S. Y. Foo

Vol. 10 No. 1

Articles

- Computers and creativity support – knowledge, visualization and collaboration
L. Candy
- Abduction machine-1 as wooden furniture
A. Kubota
- Computational environments supporting creativity in the context of lifelong learning and design
G. Fischer and K. Nakakoji
- Concept space connected to knowledge processing for supporting creative design
K. Hori
- An idea generation support system for industrial designers (idea sketch processor)
H. Noguchi
- KJ editor – a card-handling tool for creative work support
H. Ohiwa, N. Takeda, K. Kawai and A. Shiomi
- Emergent media environment for idea creation support
K. Sugiyama, K. Misue, I. Watanabe, K. Nitta and Y. Takada

- Consensus-making support system for creative problem-solving
N. Kato and S. Kunifuji

Vol. 10 No. 2

Articles

- Logic-based representation and reasoning about knowledge of constrained resources
Y. U. Ryu
- An analysis on the inference guiding strategies – the benefits and costs
J. C. Wang
- Situation assessment and prediction in intelligence domains
L. A. Jesse and J. K. Kalita
- An integrated knowledge-based system for urban-planning decision-support
F. Shan and L. D. Xu
- A framework of constraint-based modeling for cooperative decision systems
H. Q. Wang and L. J. Liao
- Design knowledge representation and control for the structural design of ships
Y. S. Yeun and Y. S. Yang
- Heterogeneous knowledge representation integrating connectionist and symbolic computation
D. Montesi

Vol. 10 No. 3

Articles

- Knowledge processing and commonsense
R. Narasimhan
- Combining case-based reasoning and statistical method for proposing solution in RICAD
J. Daengdej, D. Lukose, E. Tsui, P. Beinai and B. L. Prophet
- Building software agents for training systems – a case-study on radiotherapy treatment planning
A. Farias and T. N. Arvanitis
- Pipes – a heuristic-search model for pipeline schedule generation
M. Sasikumar, P. R. Prakash, S. M. Patil and S. Ramani
- Layered fractal neural-net – computational performance as a classifier
B. Chakraborty, Y. Sawada and G. Chakraborty
- Automatic induction of rules for text simplification
R. Chandrasekar and B. Srinivas

Kybernetes

Vol. 26 Nos. 4–5

Articles

- Contemporary systems and cybernetics
B. H. Rudall
- Internet commentary
A. M. Andrew

- A successive approximation method for solving multiobjective fuzzy optimization problems
B. X. Zhang, B. T. F. Chung and E. T. Lee
- Intelligence differences – neural transmission errors or cerebral arousability
D. L. Robinson and J. Behbehani

Knowledge discovery and system-user adversary
Z. X. Chen
 Asymptotic approximations for the distributions of the (h, φ) -divergence goodness-of-fit statistics – application to renyi statistic
M. L. Menendez, J. A. Pardo, L. Pardo and M. C. Pardo
 Alienor and Twone – a comparative study
O. Bendiab and Y. Cherruault
 Global transdisciplinary research cooperation – 30 cyberneticians online
M. Schwaninger
 The new phrenology
B. James
 Contemporary systems and cybernetics
B. H. Rudall
 Internet commentary
A. M. Andrew
 Clip3 – cover learning using integer programming
K. J. Cios, D. K. Wedding and N. Liu
 Problems and difficulties related to information-science
J. A. Johannessen
 Knowledge-based/expert systems technology in life-support-systems
J. Liebowitz
 Classification of knee problems to provide evidential support
F. McErlean, D. A. Bell, A. Barr and G. Mulvenna
 On a reducing space-filling transformation – application to global optimization
Y. Cherruault
 Boundary of sets in pansystems information-systems
Y. L. Li, J. H. Zhang, C. Li and X. M. Wu
 What about trying to reach sustainable development intelligently
J. L. Elohim
Vol. 26 Nos. 6–7
Articles
 Sociocybernetics – complexity, dynamics and emergence in social science – preface
B. H. Rudall
 The promise of sociocybernetics – solving problems in social science
F. Geyer

Observing observations empirically – methodological innovations in applied sociocybernetics
H. W. Ahlemeyer
 Reconstructing the public sphere – AST and the observation of postmodernity
A. Arvidsson
 System entropy analysis
K. D. Bailey
 Towards a post-foundational understanding of community
P. Barbesino
 Assessing human values
B. Buchanan
 Crisis-driven evolutionary learning – conceptual foundations and systemic modeling – a summary abstract
M. P. Byron
 From cybernetics to the science of complexity
C. Vandijkum
 The creativity question in the perspective of autopoietic systems theory
G. P. Gornev
 Reflexivity and feed-before – from sociology to systemics
T. P. Deguzman
 Hypothesis testing for positive feedback models – some uses of a modified Poisson-distribution for loops involving the self-fulfilling prophecy
R. L. Henshel
 Conceptual modeling for technology-assessment of it systems – smart cards and health information systems
B. R. Hornung and F. T. Adilova
 Systems interpretation of the concept of alienation
V. Misheva
 The notion of system as a conceptual bridge between the sociology of organizations and organizational efficiency
F. Parraluna
 Inadvertent pathologies of communication in human systems
B. Scott
 Knowledge acquisition in changing realities
G. Dezeew
 The validation of sociocybernetic models
J. Vanderzouwen

Machine learning

Vol. 27 No. 3
Special issue: Multistrategy learning
 Integrating multiple learning-strategies in first-order logics
A. Giordana, F. Neri, L. Saitta and M. Botta
 Using background knowledge to build multistrategy learners
C. Sammut
 Tracking context changes through meta-learning
G. Widmer
 A multistrategy approach to relational knowledge discovery in databases
K. Morik and P. Brockhausen
 Learning and revising user profiles – the identification of interesting web sites
M. Pazzani and D. Billsus
Vol. 28 No. 1
Special issue: Inductive transfer
 A bayesian information-theoretic model of learning to learn via multiple task sampling
J. Baxter
 Multitask learning
R. Caruana
 Child – a first step towards continual learning
M. B. Ring

Shifting inductive bias with success-story algorithm, adaptive Levin search, and incremental self-improvement
J. Schmidhuber, J. Y. Zhao and M. Wiering
Vol. 29 No. 1
Articles
 Decision tree induction based on efficient tree restructuring
P. E. Utgoff, N. C. Berkman and J. A. Clouse
 Online learning versus offline learning
S. Bendavid, E. Kushilevitz and Y. Mansour
 Coping with uncertainty in map learning
K. Basye, T. Dean and J. S. Vitter
Vol. 29 Nos. 2–3
Articles
 Learning with probabilistic representations
P. Langley, G. M. Provan and P. Smyth
 On the optimality of the simple Bayesian classifier under zero-one loss
P. Domingos and M. Pazzani
 Bayesian network classifiers
N. Friedman, D. Geiger and M. Goldszmidt
 The sample complexity of learning fixed structure Bayesian networks
S. Dasgupta

Efficient approximations for the marginal likelihood of
Bayesian networks with hidden-variables

D. M. Chickering and D. Heckerman

Adaptive probabilistic networks with hidden variables

J. Binder, D. Koller, S. Russell and K. Kanazawa

Factorial hidden Markov-models

Z. Ghahramani and M. I. Jordan

Predicting protein secondary structure using stochastic
tree-grammars

N. Abe and H. Mamitsuka

New generation computing

Vol. 15 No. 4

Articles

Globally linear connection method

S. Bruning

Mapping 2 complete binary-trees into the star graph with
quick fault recovery

C. C. Hsu

Towards a logic programming methodology based on
higher-order predicates

A. Hamfelt and J. F. Nilsson

Static analysis of linear logic programming

J. M. Andreoli, R. Pareschi and T. Castagnetti

Vol. 16 No. 1

Articles

Towards communityware

T. Ishida

Automata for learning sequential tasks

C. H. Benchoi

A-Satchmore – Satchmore with availability checking

L. F. Je, Y. Y. Chao, Y. Shimajiri, H. Seki and H. Itoh

On the degeneration of program generators by program
composition

R. Gluck and A. Klimov