*The Knowledge Engineering Review*, Vol. 15:4, 2000, 413–422

# From the journals . . .

## AI Magazine

**Vol. 21 No. 3**
**Articles**
Editorial
*D. Leake*
Congratulations to the 2000 AAAI award winners! Classic paper award – Judea Pearl
Congratulations to the 2000 AAAI award winners!
Expository writing award – James A. Hendler
Trying to understand RoboCup
*K. Tanaka Ishii, I. Frank and K. Arai*
LOGMONITOR – Analyzing good plays to train player agents
*T. Tomoichi*
Agent assistants for team analysis
*M. Tambe, T. Raines and S. Marsella*
The CMUnited-99 champion simulator team
*P. Stone, P. Riley and M. M. Veloso*
Cornell Big Red – Small-size-league winner
*R. D. Andrea and J. W. Lee*
ARVAND – A soccer player robot
*M. Jamzad, A. Foroughnassiraei, E. Chiniforooshan, R. Ghorbani, M. Kazemi, H. Chitsaz, F. Mobasser and S. Sadjad*
Using reactive and adaptive behaviors to play soccer
*V. Hugel, P. Bonnin and P. Blazevic*
Building intelligent learning database systems
*X. D. Wu*

## Applied Artificial Intelligence

**Vol. 14 No. 6**
**Articles**
Fuzzy neural networks for learning fuzzy IF-THEN rules
*R. J. Kuo, P. C. Wu and C. P. Wang*
Ontological foundations for experimental science knowledge bases
*N. F. Noy and C. D. Hafner*
**Vol. 14 No. 7**
**Articles**
Editorial
*P. Petta and J. Muller*
On the sources of complexity in agent design
*M. Wooldridge*
Vivid agents: Theory, architecture, and applications
*M. Schroeder and G. Wagner*
Information management at a bank using agents: Theory and practice
*F. Dignum*
Holonic transport scheduling with TELETRUCK
*H. J. Burckert, K. Fischer and G. Vierke*
ProPlanT: Multiagent system for production planning
*V. Marik, M. Pechoucek, O. Stepankova and J. Lazansky*
**Vol. 14 No. 8**
**Articles**
Editorial
*C. Castelfranchi, R. Falcone, B. S. Firozabadi and Y. H. Tan*
Boosting cooperation by evolving trust
*A. Birk*
Limiting deception in groups of social agents
*A. Biswas, S. Sen and S. Debnath*
Trust and control: A dialectic link
*C. Castelfranchi, R. Falcone*
Using trust for detecting deceitful agents in artificial societies
*M. Schillo, P. Funk and M. Rovatsos*
An outline of a trust model for electronic commerce
*Y. H. Tan and W. Thoen*
**Vol. 14 No. 9**
**Articles**
Editorial
*C. Castelfranchi, R. Falcone, B. S. Firozabadi and Y. H. Tan*
Using Bayesian networks to model agent relationships
*B. Banerjee, A. Biswas, M. Mundhe, S. Debnath and S. Sen*
Trust management through reputation mechanisms
*G. Zacharia and P. Maes*
An authorization-based trust model for multiagent systems
*W. Wen and F. Mizoguchi*
Adding security and trust to multiagent systems
*H. C. Wong and K. Sycara*

## Applied Intelligence

**Vol. 13 No. 2**
**Articles**
Introduction: Conceptual models for intelligent information systems
*W. W. Chu*
Explanation over inference hierarchies in active mediation applications
*M. Minock and W. Chu*
Data mining and machine oriented modeling: A granular computing approach
*T. Y. Lin*
Exception handling in workflow systems
*Z. W. Luo, A. Sheth, K. Kochut and J. Miller*
Conceptual models and architectures for advanced information systems
*L. Kerschberg and D. J. Weishar*
Context knowledge representation and reasoning in the Context Interchange system
*S. Bressan, C. Goh, N. Levina, S. Madnick, A. Shah and M. Siegel*

## Artificial Intelligence

**Vol. 120 No. 2**
**Articles**
Internal reinforcement in a connectionist genetic programming approach
*A. Teller and M. Veloso*
Credal networks
*F. G. Cozman*
Computer chess move-ordering schemes using move influence
*K. Greer*
Extending abstract argumentation systems theory
*P. Baroni, M. Giacomin and G. Guida*
**Vol. 121 Nos. 1–2**
**Articles**
Applying MDL to learn best model granularity
*Q. Gao, M. Li and P. Vitanyi*
A near-optimal polynomial time algorithm for learning in certain classes of stochastic games
*R. I. Brafman and M. Tennenholtz*
Stochastic dynamic programming with factored representations
*C. Boutilier, R. Dearden and M. Goldszmidt*
ConGolog, a concurrent programming language based on the situation calculus
*G. DeGiacomo, Y. Lesperance and H. J. Levesque*
A comprehensive methodology for building hybrid models of physical systems
*P. J. Mosterman and G. Biswas*
Constraint-directed techniques for scheduling alternative activities
*J. C. Beck and M. S. Fox*
A glimpse at the metaphysics of Bongard problems
*A. Linhares*

## Artificial Intelligence in Engineering

**Vol. 14 No. 2**
**Articles**
3D arm movement recognition using syntactic pattern recognition
*M. C. Su, Y. Y. Chen, K. H. Wang, C. Y. Tew and H. Huang*
Operational issues of sequencing with elastic nets
*C. H. Wei*
Fault diagnosis competitive neural network with prioritized modification rule of connection weights
*S. Khanmohammadi, I. Hassanzadeh and H. R. Z. Poor*
A GA-based search method for the tolerance allocation problem
*T. C. Chen and G. W. Fischer*
Rule-based system application for a technical problem in inventory issue
*R. Venkatraman and S. Venkatraman*
Stabilization fuzzy control of inverted pendulum systems
*J. Yi and N. Yubazaki*
Design of the speed controller for sensorless electric drives based on AI techniques: a comparative study
*D. Kukolj, F. Kulic and E. Levi*
A neural network approach for a robot task sequencing problem
*O. Maimon, D. Braha and V. Seth*
Development of expert systems for stream sampling in mineral processing plants
*C. Ketata, M. C. Rockwell and D. Riordan*
Editorial
*Y. Reich*

## Computers and Artificial Intelligence

**Vol. 19 No. 3**
**Articles**
Efficient total-exchange in wormhole-routed toroidal cubes
*F. Petrin*
A universal fixpoint semantics for ordered logic
*E. Laenens and D. Vermeir*
On discontinuous optical flow
*S. S. Beauchemin and J. L. Barron*
Real time speed of a conservative parallel simulation
*N. Kalantery*

## Engineering Applications of Artificial Intelligence

**Vol. 13 No. 5**
**Articles**
Preface
*S. R. LeClair*
Interplay of large materials databases, semi-empirical methods, neuro-computing and first principle calculations for ternary compound former/nonformer prediction
*P. Villars, K. Brandenburg, M. Berndt, S. LeClair, A. Jackson, Y. H. Pao, B. Igelnik, M. Oxley, B. Bakshi, P. Chen and S. Iwata*
Atomic environments in relation to compound prediction
*J. Daams and P. Villars*
Symmetric Veronese classifiers with application to materials design
*S. Martin, M. Kirby and R. Miranda*
Analysis and visualization of category membership distribution in multivariate data
*Y. H. Pao, B. F. Duan, Y. L. Zhao and S. R. LeClair*
Intelligent materials processing by hyperspace data mining
*N. Y. Chen, D. P. D. Zhu and W. H. Wang*
Databases and semantic networks for the inorganic materials computer design
*N. N. Kiselyova*
The third eye approach to innovative designs and applications into the 21st century: human recognition system by nonlinear oscillations
*S. Oka, Y. Takefuji and W. Huang*
Nondestructive imaging of grain boundaries in polycrystalline materials using evanescent microwave probes
*M. TabibAzar, R. Muller and S. R. LeClair*
Intelligent rate control for MPEG-4 coders
*G. H. Park, Y. J. Lee and S. R. LeClair*
Intelligent process control via gaze detection technology
*J. Kim, K. R. Park, J. J. Lee and S. R. LeClair*
Investigation of in situ Raman spectra for the control of PLD of YBCO thin film superconductors
*J. Busbee, R. Biggers, G. Kozlowski, I. Maartense, J. Jones and D. Dempsey*

https://doi.org/10.1017/S0269888900004057 Published online by Cambridge University Press

Image processing plume fluence for superconducting thin-film depositions
*J. G. Jones, R. R. Biggers, J. D. Busbee, D. V. Dempsey and G. Kozlowski*

Autoassociative-heteroassociative neural networks
*C. V. Kropas Hughes, M. E. Oxley, S. K. Rogers and M. Kabrisky*

## Expert Systems With Applications

**Vol. 19 No. 2**
**Articles**

Using a genetic algorithm-based system for the design of EDI controls: EDIGA
*S. Lee*

Learning a coverage set of maximally general fuzzy rules by rough sets
*T. P. Hong, T. T. Wang, S. L. Wang and B. C. Chien*

Using change-point detection to support artificial neural networks for interest rates forecasting
*K. J. Oh and I. Han*

The predictive accuracy of artificial neural networks and multiple regression in the case of skewed data: exploration of some issues
*P. N. Subba Narasimha, B. Arinze and M. Anandarajan*

Genetic algorithms approach to feature discretization in artificial neural networks for the prediction of stock price index
*K. J. Kim and I. Han*

EDTTDT: an expert design tool for temporal database transaction
*M. Qutaishat*

**Vol. 19 No. 3**
**Articles**

A categorical expert system "Jurassic"
*A. Wichert*

Fast and accurate power dispatch using a relaxed genetic algorithm and a local gradient technique
*F. Li and R. K. Aggarwal*

Representing, adapting and reasoning with uncertain, imprecise and vague information
*G. Vouros*

Integration of damage assessment paradigms of steel bridges on a blackboard architecture
*S. V. Barai and P. C. Pandey*

Coupling genetic algorithms and rule-based systems for complex decisions
*P. S. Deng and E. G. Tsacle*

Knowledge architecture and framework design for preventing human error in maintenance tasks
*K. W. Su, S. L. Hwang and T. H. Liu*

Detecting the error threshold for rule-based programs: a logit model
*T. T. Moores*

Adaptive fuzzy petri nets for dynamic knowledge representation and inference
*X. Li and F. Lara Rosano*

## IEEE Transactions on Knowledge and Data Engineering

**Vol. 12 No. 4**
**Articles**

Building probabilistic networks: "Where do the numbers come from?" – Guest editors' introduction
*M. J. Druzdzel and L. C. vanderGaag*

Network engineering for agile belief network models
*K. B. Laskey and S. M. Mahoney*

Dealing with the expert inconsistency in probability elicitation
*S. Monti and G. Carenini*

Constructing Bayesian networks for medical diagnosis from incomplete and partially correct statistics
*D. Nikovski*

A causal probabilistic network for optimal treatment of bacterial infections
*L. Leibovici, M. Fishman, H. C. Schonheyder, C. Riekehr, B. Kristensen, I. Shraga and S. Andreassen*

Logic-based query optimization for object databases
*J. Grant, J. Gryz, J. Minker and L. Raschid*

View operations on objects with roles for a statically typed database language
*A. Albano, G. Antognoni and G. Ghelli*

Efficiently supporting temporal granularities
*C. E. Dyreson, W. S. Evans, H. Lin and R. T. Snodgrass*

Trigger inheritance and overriding in an active object database system
*E. Bertino, G. Guerrini and I. Merlo*

An adaptive access method for broadcast data under an error-prone mobile environment
*S. C. Lo and A. L. P. Chen*

MDARTS: A multiprocessor database architecture for hard real-time systems
*V. B. Lortz, K. G. Shin and J. Kim*

Performance modeling of distributed and replicated databases
*M. Nicola and M. Jarke*

**Vol. 12 No. 5**
**Special section on the 15th International Conference on Data Engineering**

Guest editors' introduction
*M. Kitsuregawa, M. P. Papazoglou and C. Pu*

Querying time series data based on similarity
*D. Rafiei and A. O. Mendelzon*

Query rewriting for SWIFT (First) answers
*K. L. Tan, C. H. Goh and B. C. Ooi*

An approach to active spatial data mining based on statistical information
*W. Wang, J. Yang and R. Muntz*

A database approach for modeling and querying video data
*M. S. Hacid, C. Decleir and J. Kouloumdjian*

Analysis of range queries and self-spatial join queries on real region datasets stored using an R-tree
*G. Proietti and C. Faloutsos*

Analysis and comparison of declustering schemes for interactive navigation queries
*C. M. Chen and R. K. Sinha*

Supporting dynamic interactions among Web-based information sources
*A. Bouguettaya, B. Benatallah, L. Hendra, M. Ouzzani and J. Beard*

Mobile agents for World Wide Web distributed database access
*S. Papastavrou, G. Samaras and E. Pitoura*

E-DEVICE: An extensible active knowledge base system with multiple rule type support
*N. Bassiliades, I. Vlahavas and A. K. Elmagarmid*

Enhancing disjunctive datalog by constraints
*F. Buccafurri, N. Leone and P. Rullo*

Continual queries for Internet scale event-driven information delivery
*L. Liu, C. Pu and W. Tang*

https://doi.org/10.1017/S0269888900004057 Published online by Cambridge University Press

# IEEE Transactions on Neural Networks

**Vol. 11 No. 4**
**Articles**
Another K-winners-take-all analog neural network
*B. D. Calvert and C. A. Marinov*
Enumeration of linear threshold functions from the lattice of hyperplane intersections
*P. C. Ojha*
Analysis of input-output clustering for determining centers of RBFN
*Z. Uykan, C. Guzelis, M. E. Celebi and H. N. Koivo*
A feedforward bidirectional associative memory
*Y. Q. Wu and D. A. Pados*
A modified Hopfield auto-associative memory with improved capacity
*V. Gimenez Martinez*
The hysteretic Hopfield neural network
*S. Bharitkar and J. M. Mendel*
Generalized neurofuzzy network modeling algorithms using Bezier-Bernstein polynomial functions and additive decomposition
*X. Hong and C. J. Harris*
Temporal updating scheme for probabilistic neural network with application to satellite cloud classification
*B. Tian, M. R. Azimi Sadjadi, T. H. V. Haar and D. Reinke*
Identification of complex shapes using a self organizing neural system
*T. Sabisch, A. Ferguson and H. Bolouri*
Motion segmentation based on motion/brightness integration and oscillatory correlation
*E. Cesmeli and D. Wang*
Mixture of experts for classification of gender, ethnic origin, and pose of human faces
*S. Gutta, J. R. J. Huang, P. Jonathon and H. Wechsler*
Estimation of elliptical basis function parameters by the EM algorithm with application to speaker verification
*M. W. Mak and S. Y. Kung*
Local routing algorithms based on Potts neural networks
*J. Hakkinen, M. Lagerholm, C. Peterson and B. Soderberg*
Toward a digital neuromorphic pitch extraction system
*S. Jones, R. Meddis, S. C. Lim and A. R. Temple*
Optical neuron by use of a laser diode with injection seeding and external optical feedback
*E. C. Mos, J. J. L. Hoppenbrouwers, M. T. Hill, M. W. Blum, J. J. H. B. Schleipen and H. de Waardt*
A unified neural-network-based speaker localization technique
*G. Arslan and E. A. Sakarya*
The analysis of decomposition methods for support vector machines
*C. C. Chang, C. W. Hsu and C. J. Lin*
Probabilistic neural-network structure determination for pattern classification
*K. Z. Mao, K. C. Tan and W. Ser*
Global exponential stability of recurrent neural networks for solving optimization and related problems
*Y. S. Xia and J. Wang*
Memory annihilation of structured maps in bidirectional associative memories
*S. Kumar*
Visualization and self-organization of multidimensional data through equalized orthogonal mapping
*Z. Meng and Y. H. Pao*

**Vol. 11 No. 5**
**Articles**
Neural-network methods for boundary value problems with irregular boundaries
*I. E. Lagaris, A. C. Likas and D. G. Papageorgiou*
On overfitting, generalization, and randomly expanded training sets
*G. N. Karystinos and D. A. Pados*
An efficient learning algorithm for associative memories
*Y. Q. Wu and S. N. Batalama*
The annealing robust backpropagation (ARBP) learning algorithm
*C. C. Chuang, S. F. Su and C. C. Hsiao*
A neural network for linear matrix inequality problems
*C. L. Lin, C. C. Lai and T. H. Huang*
Soft learning vector quantization and clustering algorithms based on ordered weighted aggregation operators
*N. B. Karayiannis*
Weight adaptation and oscillatory correlation for image segmentation
*K. Chen, D. L. Wang and X. W. Liu*
A connectionist model for corner detection in binary and gray images
*J. Basak and D. Mahata*
Signal detection using the radial basis function coupled map lattice
*H. Leung, G. Hennessey and A. Drosopoulos*
Dynamical behavior of autoassociative memory performing novelty filtering for signal enhancement
*H. Ko and G. M. Jacyna*
The evidence framework applied to support vector machines
*J. T. Y. Kwok*
A fuzzy clustering neural networks (FCNs) system design methodology
*D. Zhang and S. K. Pal*
Robust backstepping control of induction motors using neural networks
*C. M. Kwan and F. L. Lewis*
Improvements to the SMO algorithm for SVM regression
*S. K. Shevade, S. S. Keerthi, C. Bhattacharyya and K. R. K. Murthy*
Equivalence between local exponential stability of the unique equilibrium point and global stability for Hopfield-type neural networks with two neurons
*X. B. Liang*

# IEEE Transactions on Pattern Analysis and Machine Intelligence

**Vol. 22 No. 5**
**Articles**
Orientation space filtering for multiple orientation line segmentation
*J. Chen, Y. Sato and S. Tamura*
MIR: An approach to robust clustering – Application to range image segmentation
*K. Koster and M. Spann*
Snake pedals: Compact and versatile geometric models with physics-based control
*B. C. Vemuri and Y. L. Guo*
A variational model for image classification and restoration
*C. Samson, L. Blanc Feraud, G. Aubert and J. Zerubia*
On the algorithmic implementation of stochastic discrimination
*E. M. Kleinberg*
The analysis and recognition of real-world textures in three dimensions
*P. H. Suen and G. Healey*
Supervised learning of large perceptual organization:

https://doi.org/10.1017/S0269888900004057 Published online by Cambridge University Press

https://doi.org/10.1017/S0269888900004057 Published online by Cambridge University Press

# IEEE Transactions on Robotics and Automation

**Vol. 16 No. 4**
**Articles**
Intelligent robot deburring using adaptive fuzzy hybrid position/force control
*F. Y. Hsu and L. C. Fu*
Manipulability of cooperating robots with unactuated joints and closed-chain mechanisms
*A. Bicchi and D. Prattichizzo*
Folding cartons with fixtures: A motion planning approach
*L. Lu and S. Akella*
Rate-hardness: A new performance metric for haptic interfaces
*D. A. Lawrence, L. Y. Pao, A. M. Dougherty, M. A. Salada and Y. Pavlou*
Design and control of flexure jointed hexapods
*J. E. McInroy and J. C. Hamann*
First-order hybrid Petri Nets: A model for optimization and control
*F. Balduzzi, A. Giua and G. Menga*
Behavior relations in synthesis process of Petri net models
*H. Q. Wang, C. J. Jiang and S. Y. Liao*
Scheduling flexible flow shops with sequence-dependent setup effects
*C. Y. Liu and S. C. Chang*
An effective method to reduce inventory in job shops
*P. B. Luh, X. H. Zhou and R. N. Tomastik*
Deadlock avoidance in flexible manufacturing systems using finite automata
*A. Yalcin and T. O. Boucher*
Optimal rate allocation in unreliable, assembly/disassembly production networks with blocking
*V. S. Kouikoglou*
Neural network-based target differentiation using sonar for robotics applications
*B. Barshan, B. Ayrulu and S. W. Utete*
Choosing good distance metrics and local planners for probabilistic roadmap methods
*N. M. Amato, O. B. Bayazit, L. K. Dale, C. Jones and D. Vallejo*
Comments on "Redesign of hybrid adaptive/robust motion control of rigid-link electrically-driven robot manipulators"
*M. S. de Queiroz, F. Zhang and W. Dixon*

# International Journal of Computer Vision

**Vol. 37 No. 1**
**Special issue on image-based serving**
*R. Horaud and F. Chaumette*
A direct interpretation of dynamic images with camera and object motions for vision guided robot control
*K. Deguchi*
Application of Lie algebras to visual servoing
*T. Drummond and R. Cipolla*
Observability of 3D motion
*C. Fermuller and Y. Aloimonos*
Robotic control with partial visual information
*K. Kinoshita and M. Lindenbaum*
2 1/2 D visual servoing with respect to unknown objects through a new estimation scheme of camera displacement
*E. Malis and F. Chaumette*
Model-based stereo-tracking of non-polyhedral objects for automatic disassembly experiments
*M. Tonko and H. H. Nagel*
**Vol. 37 No. 2**
**Articles**
Heteroscedastic regression in computer vision: Problems with bilinear constraint
*Y. Leedan and P. Meer*
Evaluation of interest point detectors
*C. Schmid, R. Mohr and C. Bauckhage*
A special section on visual surveillance – Introduction
*S. Maybank and T. Tan*
Integrated person tracking using stereo, color, and pattern detection
*T. Darrell, G. Gordon, M. Harville and J. Woodfill*
Visual surveillance for moving vehicles
*J. M. Ferryman, S. J. Maybank and A. D. Worrall*
Fast lighting independent background subtraction
*Y. Ivanov and A. Bobick*
Statistical models of object interaction
*R. J. Morris and D. C. Hogg*
**Vol. 37 No. 3**
**Articles**
Extracting structure from optical flow using the fast error search technique
*S. Srinivasan*
Structure from motion: Beyond the epipolar constraint
*T. Brodsky, C. Fermuller and Y. Aloimonos*
Spherical mosaics with quaternions and dense correlation
*S. Coorg and S. Teller*
A cumulant expansion technique for simultaneous Markov random Field image restoration and hyperparameter estimation
*M. Sigelle*
**Vol. 38 No. 1**
**Articles**
Introduction: Learning and vision at CBCL
*T. Poggio and A. Verri*
Statistical learning theory: A primer
*T. Evgeniou, M. Pontil and T. Poggio*
A trainable system for object detection
*C. Papageorgiou and T. Poggio*
Learning to recognize visual dynamic events from examples
*M. Pittore, M. Campani and A. Verri*
Visual speech synthesis by morphing visemes
*T. Ezzat and T. Poggio*
Morphable models for the analysis and synthesis of complex motion patterns
*M. A. Giese and T. Poggio*
Morphable Surface Models
*C. R. Shelton*
**Vol. 38 No. 2**
**Articles**
Optical flow constraints on deformable models with applications to face tracking
*D. DeCarlo and D. Metaxas*
Image registration using wavelet-based motion model
*Y. T. Wu, T. Kanade, C. C. Li and J. Cohn*
Regularized bundle-adjustment to model heads from image sequences without calibration data
*P. Fua*
Contour tracking in clutter: A subset approach
*D. Freedman and M. S. Brandstein*
**Vol. 38 No. 3**
**Articles**
Editorial
*T. Kanade and O. Faugeras*
A theory of shape by space carving
*K. N. Kutulakos and S. M. Seitz*
Euclidean reconstruction and reprojection up to subgroups
*Y. Ma, S. Soatto, J. Kosecka and S. Sastry*
Probabilistic detection and tracking of motion boundaries
*M. J. Black and D. J. Fleet*

https://doi.org/10.1017/S0269888900004057 Published online by Cambridge University Press

Equivalence of Julesz ensembles and FRAME models
*Y. N. Wu, S. C. Zhu and X. W. Liu*
**Vol. 39 No. 1**
**Articles**
Practical structure and motion from stereo when motion is unconstrained
*N. Molton and M. Brady*
Separation of transparent layers using focus
*Y. Y. Schechner, N. Kiryati and R. Basri*
Reliable estimation of dense optical flow fields with large displacements
*L. Alvarez, J. Weickert and J. Sanchez*
A probabilistic exclusion principle for tracking multiple objects
*J. MacCormick and A. Blake*
**Vol. 39 No. 2**
**Articles**
Introduction
*N. Kiryati*
Control of a camera for active vision: Foveal vision, smooth tracking and saccade
*E. Rivlin and H. Rotstein*
Shape reconstruction of 3D bilaterally symmetric surfaces
*I. Shimshoni, Y. Moses and M. Lindenbaum*
Images as embedded maps and minimal surfaces: Movies, color, texture, and volumetric medical images
*R. Kimmel, R. Malladi and N. Sochen*
New devices for 3D pose estimation: Mantis eyes, agam paintings, sundials, and other space fiducials
*A. M. Bruckstein, R. J. Holt, T. S. Huang and A. N. Netravali*
Depth from defocus vs. stereo: How different really are they?
*Y. Y. Schechner and N. Kiryati*

## International Journal of Intelligent Systems

**Vol. 15 No. 9**
**Articles**
Reasoning tractably about explicit belief: A model-theoretic approach
*K. M. Sim*
Multi-agent distributed intelligent system based on fuzzy decision making
*B. Fazlollahi, R. M. Vahidov and R. A. Aliev*
Conservative extension concepts for nonmonotonic knowledge bases
*G. Antoniou and C. K. MacNish*
Optimization issues in predictive control with fuzzy objective functions
*J. M. Sousa*
**Vol. 15 No. 10**
**Articles**
Genetic algorithms for scene interpretation from prototypical semantic description
*D. Prabhu, B. P. Buckles and F. E. Petry*
Rough sets in hybrid methods for pattern recognition
*K. Cyran and A. Mrozek*
Designing interval type-2 fuzzy logic systems using an SVD-QR method: Rule reduction
*Q. L. Liang and J. M. Mendel*
Why clustering in function approximation? Theoretical explanation
*V. Kreinovich and Y. Yam*
Relating decision under uncertainty and multicriteria decision making models
*D. Dubois, M. Grabisch, F. Modave and H. Prade*

## International Journal of Software Engineering and Knowledge Engineering

**Vol. 10 No. 3**
**Articles**
Integrated Software Engineering and Knowledge Engineering teaching experiences
*O. Dieste, N. Juristo, A. M. Moreno and M. Lopez*
Knowledge engineering of a monitoring and control decision support system
*C. W. Chan, W. Kritpiphat and P. Tontiwachwuthikul*
Supporting distributed individual tasks in cooperative specification development
*M. Saeki, S. Sureerat and A. Tanaka*
Distributed information and control in a concurrent hypermedia-oriented architecture
*A. Dattolo and V. Loia*

## Journal of Intelligent & Robotic Systems

**Vol. 29 No. 1**
**Articles**
A neural net predictive control for telerobots with time delay
*J. Q. Huang, F. L. Lewis and K. Liu*
A neural network approach to the frictionless grasping problem
*R. Abu Zitar and A. M. A. Nuseirat*
An integrated approach of learning, planning, and execution
*R. Garcia Martinez and D. Borrajo*
Improved sensor selection technique by integrating sensor fusion in robot position estimation
*T. Koshizen*
Experimental implementation of impedance based control schemes for assembly task
*S. P. Chan and H. C. Liaw*
**Vol. 29 No. 2**
**Articles**
A real-time kinematics on the translational crawl motion of a quadruped robot
*X. D. Chen, K. Watanabe, K. Kiguchi and K. Izumi*
A neural net-based assembly algorithm for flexible parts assembly
*J. Y. Kim and H. S. Cho*
Entropy-based Markov chains for multisensor fusion
*A. C. S. Chung and H. C. Shen*
3D local trajectory planner for UAV
*J. Z. Sasiadek and Duleba I*
**Vol. 29 No. 3**
**Articles**
A rotating sonar and a differential encoder data fusion for map-based dynamic positioning
*H. Yang, K. Park, J. G. Lee and H. Chung*

https://doi.org/10.1017/S0269888900004057 Published online by Cambridge University Press

Optimal motion planning of robotic manipulators removing mobile objects grasped in motion
*A. D. Jutard Malinge and G. Bessonnet*
Construction of an omnidirectional mobile robot platform based on active dual-wheel caster mechanisms and development of a control simulator
*F. H. Han, T. Yamada, K. Watanabe, K. Kiguchi and K. Izumi*
Robotic optimization and testing for the formula one tire-changing robot
*R. Mihali, M. Grigorian and T. Sobh*
Twin brush floor polishing robot
*D. H. Shin and H. J. Kim*

## Journal of Intelligent Manufacturing

**Vol. 11 No. 4**
**Articles**
Complexity reduction of a design problem in QFD using decomposition
*J. S. Shin and K. J. Kim*
Demand and cost forecast error sensitivity analyses in aggregate production planning by possibilistic linear programming models
*S. Hsieh and M. S. Wu*
Enhancing the performance of an agent-based manufacturing system through learning and forecasting
*W. M. Shen, F. Maturana and D. H. Norrie*
Towards the design and development of a knowledge-based universal modular jigs and fixtures system
*J. Kakish, P. L. Zhang and I. Zeid*
Reconfigurable manufacturing systems: Key to future manufacturing
*M. G. Mehrabi, A. G. Ulsoy and Y. Koren*
Metaheuristic methods for a class of the facility layout problem
*A. G. de Alvarenga, F. J. Negreiros Gomes and M. Mestria*

## Journal of Logic Programming

**Vol. 45 Nos. 1–3**
**Articles**
An abstract machine for efficiently computing queries to well-founded models
*K. Sagonas, T. Swift and D. S. Warren*
Dynamic updates of non-monotonic knowledge bases
*J. J. Alferes, J. A. Leite, L. M. Pereira, H. Przymusinska and T. C. Przymusinski*
Introduction to the constraint language NCL
*J. Y. Zhou*
Argumentation-based abduction in disjunctive logic programming
*K. W. Wang*
A simple polynomial groundness analysis for logic programs
*A. Heaton, M. Abo Zaed, M. Codish and A. King*
**Vol. 46 Nos. 1–2**
**Articles**
Meta-agent programs
*J. Dix, V. S. Subrahmanian and G. Pick*
More on tractable disjunctive Datalog
*R. BenEliyahu Zohary, L. Palopoli and V. Zemlyanker*
Decidability of logic program semantics and applications to testing
*S. Ruggieri*
Pair-sharing over rational trees
*A. King*

## Journal of Symbolic Computation

**Vol. 30 No. 2**
**Articles**
Finding normal integral bases of cyclic number fields of prime degree
*V. Acciaro and C. Fieker*
Minimally generating ideals of rational parametric curves in polynomial time
*G. Albano, Cioffi F, F. Orecchia and I. Ramella*
Generalized strong pseudoprime tests and applications
*P. Berrizbeitia and T. G. Berry*
Deciding Hopf bifurcations by quantifier elimination in a software-component architecture
*M. ElKahoui and A. Weber*
Solving index form equations in fields of degree 9 with cubic subfields
*I. Gaal*
Permanental ideals
*R. C. Laubenbacher and I. Swanson*
Linear problems in valued fields
*T. Sturm*
Computing triangular systems and regular systems
*D. M. Wang*
**Vol. 30 No. 3**
**Articles**
Computing local artin maps, and solvability of norm equations
*V. Acciaro and J. Kluners*
Computer algebra and algebraic. Geometry – Achievements and perspectives
*G. M. Greuel*
The projective Noether Maple package: Computing the dimension of a projective variety
*M. Giusti, K. Hagele, G. Lecerf, J. Marchand and B. Salvy*
Finding a basis of a linear system with pairwise distinct discrete valuations on an algebraic curve
*R. Matsumoto and S. Miura*
Bounds for the roots of lacunary polynomials
*M. Mignotte*
Complexity of the Havas, Majewski, Matthews LLL Hermite normal form algorithm
*W. Vander Kallen*
**Vol. 30 No. 4**
**Special issue on Applications of Grobner Bases**
Foreword of the guest editors
*Q. N. Tran, F. Winkler*
Computing ideals of points
*J. Abbott, A. Bigatti, M. Kreuzer and L. Robbiano*
Reduced Grobner bases, free difference-differential modules and difference-differential dimension polynomials
*A. Levin*
Cellular binomial ideals. Primary decomposition of binomial ideals
*I. O. M. De Castilla and R. P. Sanchez*

https://doi.org/10.1017/S0269888900004057 Published online by Cambridge University Press

Automated resolution of singularities for hypersurfaces
*G. Bodnar and J. Schicho*
Computing Grobner bases by FGLM techniques in a non-commutative setting
*M. A. Borges Trenard, M. BorgesQuintana and T. Mora*
A fast algorithm for Grobner basis conversion and its applications
*Q. N. Tran*
Grobner bases applied to finitely generated field extensions
*J. Muller Quade and R. Steinwandt*
Algorithms for exponentiation in finite fields
*S. Gao, J. vonzur Gathen, D. Panario and V. Shoup*

## Knowledge-Based Systems

**Vol. 13 No. 4**
**Articles**
Interference analysis in multiple rule firing systems
*T. S. Perraju, B. E. Prasad*
Slicing knowledge-based systems: techniques and applications
*W. W. Vasconcelos and M. A. T. Aragao*
Fisheye Matching: viewpoint-sensitive feature generation based on concept structure
*Y. Takama and M. Ishizuka*
Regression on feature projections
*H. A. Guvenir and I. Uysal*
Notation and nature of task in comprehending design rationale
*G. P. Heliades and E. A. Edmonds*
A rule-based expert system approach to process selection for cast components
*A. Er and R. Dias*

## Kybernetes

**Vol. 29 Nos. 5–6**
**Articles**
Cybernetics and systems in the new millennium – I
*B. H. Rudall*
Ten pints of beer – The rationale of Stafford Beer's cybernetic books (1959–94) – Discussion
*S. Beer*
About cybernetics, its roots and future
*R. Vallee*
The problem of technological barriers
*J. Rose*
Cybernetics and systems in the 1980s
*B. H. Rudall*
Simplifying complexity – The greatest present challenge to management and government
*C. Muses*
Self-organisation in artificial neural nets
*A. M. Andrew*
Pansystems thinking and investigations – Difference, identity, clustering
*X. M. Wu, J. H. Pan and P. A. Heng*
Sen's endowment-entitlement mapping in development economics – Cybernetic interpretation
*A. Ghosal*
The ternary analysis of work and working organisations
*D. J. Stewart*
Dynamic expert systems
*V. L. Stefanuk*
The viable system model and knowledge management
*A. Leonard*
Intelligent systems for optimisation and control
*K. J. Burnham, O. C. L. Haas and D. J. G. James*
Parallel controllers for decentralized robots: towards nano design
*A. Adamatzky and C. Melhuish*
Optimization by space-densifying curves as a natural generalization of the Alienor method
*G. Mora*
General structure of Acalugaritei networks
*G. Acalugaritei*
Observer or self-observer in second-order cybernetics?
*P. Julia*
A planar flexible robotic manipulator
*V. O. Gamarra Rosado*
Czech evolution scenarios in cybernetics for the next millennium
*C. Halbich and B. Lacko*
Neurocybernetics: contents and problems
*O. G. Chorayan*
**Vol. 29 Nos. 7–8**
**Articles**
Millennium volume: cybernetics and systems in the new millennium – II
*B. H. Rudall*
The Norbert Wiener Memorial Gold Medal address – Norbert Wiener and the idea of contingence
*I. Prigogine*
Abduction in language interpretation and law making
*E. Andreewsky and D. Bourcier*
Frank H. George Memorial Lecture – Stone soup: Identifying intelligence through construction
*T. R. Addis*
Frank H. George Research Award Winning Paper – Cybernetic approach to medical technology: application to cancer screening and other diagnostics
*D. D. Majumder and M. Bhattacharya*
Frank H. George Research Award winning paper – Cancer self-remission and tumour instability – a cybernetic analysis – Towards a fresh paradigm for cancer treatment
*D. D. Majumder and P. K. Roy*
Frank H. George Research Award – Highly commended paper – Eco-cybernetics: the ecology and cybernetics of missing emergences
*D. Bergandi*
Awards for Excellence 2000
Methods for identification and control of models
*Y. Cherruault*
Self-construction of desirable social systems
*R. Espejo*
Cybernetics Society's Essay Competition 1999 – Highly commended paper – Cybernetic explanation and development
*B. Scott*
The cybernetics of systems of belief
*B. Scott*
A blackboard software architecture for integrated intelligent control systems
*M. F. Abbod, D. A. Linkens, A. Browne and N. Cade*
Learning processes in a class of knowledge-based systems
*Z. Bubnicki*

https://doi.org/10.1017/S0269888900004057 Published online by Cambridge University Press

## Machine Learning



## New Generation Computing



https://doi.org/10.1017/S0269888900004057 Published online by Cambridge University Press