

From the journals. . . .

AI Magazine

Vol. 21 No. 1

Articles

Fellows nominations

M. DesJardins

Fellows nominations – Response

D. L. Waltz

Untitled

D. Leake

Overview of RoboCup-98

M. Asada, M. M. Veloso, M. Tambe, I. Noda, H. Kitano and G. K. Kraetzschmar

CMUNITED-98 – Simulator team

P. Stone, M. Veloso and P. Riley

CMUNITED-98 – RoboCup-98 small-robot world champion team

M. Veloso, M. Bowling, S. Achim, K. Han and P. Stone

The CS Freiburg team – Playing robotic soccer based on an explicit world model

J. S. Gutmann, W. Hatzack, I. Herrmann, B. Nebel,

F. Rittinger, A. Topor and T. Weigel

Vision, strategy, and localization using the Sony legged robots at RoboCup-98

M. Fujita, M. Veloso, W. Uther, M. Asada, H. Kitano, V. Hugel, P. Bonnin, J. Bouramoue and P. Blazevic

Three RoboCup simulation league commentator systems

E. Andre, K. Binsted, K. TanakaIshii, S. Luke, G. Herzog and T. Rist

AAAI-98 robot exhibition

K. Z. Haigh and T. Balch

Using robot competitions to promote intellectual development

R. R. Murphy

Workshop on Intelligent Information Integration (III'99)

D. Fensel, C. Knoblock, N. Kushmerick and M. C.

Rousset

Reports on the AAAI 1999 Workshop Program – 18–19

July 1999 – Abstract

A message to readers

B. Chandrasekaran

Vol. 21 No. 2

Articles

The AIPS-98 planning competition

D. Long

The 1998 AI Planning Systems Competition

D. McDermott

Model-based diagnosis under real-world constraints

A. Darwiche

Applied Artificial Intelligence

Vol. 14 No. 3

Articles

Reuse machining knowledge for generating process plans of axisymmetric parts based on case-based reasoning

H. C. Chang, W. F. Lu and X. Q. F. Liu

A methodology for model-based diagnosis of analogue circuits

A. Biasizzo and F. Novak

An integrated symbolic/connectionist architecture for parsing Italian sentences containing PP-attachment ambiguities

B. Apolloni, G. Zamponi and A. M. Zanaboni

Vol. 14 No. 4

Articles

Guest editorial

C. Holzbaur and T. Fruhwirth

University course timetabling using constraint handling rules

S. Abdennadher and M. Marte

A constraint-based framework for diagrammatic reasoning

B. Meyer

Symbolic constraints for meta-logic programming

H. Christiansen and D. Martinenghi

A Prolog constraint handling rules compiler and runtime system

C. Holzbaur and T. Fruhwirth

On the incremental adaptation of CHR derivations

A. Wolf, T. Gruenhagen and U. Geske

Vol. 14 No. 5

Articles

Implementing a business process management system using ADEPT: A real-world case study

N. R. Jennings, P. Faratin, T. J. Norman, P. O'Brien,

B. Odgers and J. L. Alty

Cooperative learning strategies for intelligent tutoring systems

E. Aimeur, C. Frasson and H. Dufort

Compositional design and reuse of a generic agent model

F. M. T. Brazier, C. M. Jonker and J. Treur

Applied Intelligence

Vol. 12 No. 3

Articles

A genetic algorithm for multiobjective robust design

B. Forouraghi

Influence of the migration policy in parallel distributed GAs with structured and panmictic populations

E. Alba and J. M. Troya

Predicting aflatoxin contamination in peanuts: A genetic algorithm/neural network approach

C. E. Henderson, W. D. Potter, R. W. McClendon and G. Hoogenboom

Variable hidden layer sizing in Elman recurrent neuro-evolution

K. Kaikhah and R. Garlick

Fuzzy neural network models for classification
A. D. Kulkarni and C. D. Cavanaugh
 Diagnosis of active systems by automata-based reasoning techniques
G. Lamperti, M. Zanella and P. Pogliano
 Using character motives to drive plot resolution in interactive stories
N. M. Sgouros
 Incremental iterative retrieval and browsing for efficient conversational CBR systems
I. Jurisica, J. Glasgow and J. Mylopoulos
Vol. 13 No. 1
Articles
 Artificial intelligence and environmental applications
U. Cortes, M. SanchezMarre and M. Poch

Predicting chemical parameters of river water quality from bioindicator data
S. Dzeroski, D. Demsar and J. Grbovic
 Application of Bayesian Network learning methods to Waste Water Treatment Plants
R. Sanguesa and P. Burrell
 Interactive case-based planning for forest fire management
P. Avesani, A. Perini and F. Ricci
 Integrated fault detection and isolation: Application to a winery's wastewater treatment plant
A. Genovesi, J. Harmand and J. P. Steyer
 Artificial intelligence and environmental decision support systems
U. Cortes, M. SanchezMarre, L. Ceccaroni, I. R. Roda and M. Poch

Artificial Intelligence

Vol. 117 No. 2
Articles
 Model-based reasoning about learner behaviour
K. deKoning, B. Bredeweg, J. Breuker, B. Wielinga
 Robust logics
L. G. Valiant
 On conjectures in orthocomplemented lattices
E. Trillas, S. Cubillo and E. Castineira
 On agent-based software engineering
N. R. Jennings
 On the complexity of inference about probabilistic relational models
M. Jaeger
Vol. 118 Nos. 1–2
Articles
 Intelligent Internet systems
A. Y. Levy and D. S. Weld
 Wrapper induction: Efficiency and expressiveness
N. Kushmerick
 Learning to construct knowledge bases from the World Wide Web
M. Craven, D. DiPasquo, D. Freitag, A. McCallum, T. Mitchell and K. Nigam, S. Slattery
 Flexible and scalable cost-based query planning in mediators: A transformational approach
J. L. Ambite and C. A. Knoblock
 WHIRL: A word-based information representation language
W. W. Cohen
 BIG: An agent for resource-bounded information gathering and decision making
V. Lesser, B. Horling, F. Klassner, A. Raja, C. Wagner and S. X. Q. Zhang
 Towards adaptive Web sites: Conceptual framework and case study
M. Perkowitz and O. Etzioni
 Viewing morphology as an inference process
R. T. Krovetz

Vol. 119 Nos. 1–2
Articles
 Semantical and computational aspects of Horn approximations
M. Cadoli and F. Scarcello
 Qualitative rigid-body mechanics
T. F. Stahovich, R. Davis and H. Shrobe
 Choosing social laws for multi-agent systems: Minimality and simplicity
D. Fitoussi and M. Tennenholtz
 Semi-quantitative system identification
H. Kay, B. Rinner and B. Kuipers
 The complexity of belief update
P. Liberatore
 The Spatial Semantic Hierarchy
B. Kuipers
 Linear constraints for the interpretation of line drawings of curved objects
M. C. Cooper
 Note about cardinality-based circumscription
Y. Moinard
 Nature's way of optimizing
S. Boettcher and A. Percus
Vol. 120 No. 1
Articles
 Abductive reasoning through filtering
C. Baral
 Optimal auctions revisited
D. Monderer and M. Tennenholtz
 Bounding the cost of learned rules
J. Kim and P. S. Rosenbloom
 Backtracking algorithms for disjunctions of temporal constraints
K. Stergiou and M. Koubarakis
 A computational model of belief
A. N. Kaplan and L. K. Schubert

Artificial Intelligence Review

Vol. 13 Nos. 5–6
Articles
 Introduction: Data mining on the internet
S. Vaithyanathan
 Websom for textual data mining
K. Lagus, T. Honkela, S. Kaski and T. Kohonen
 Document categorization and query generation on the World Wide Web using WebACE
D. Boley, M. Gini, R. Gross, E. H. Han, K. Hastings, G. Karypis, V. Kumar, B. Mobasher and J. Moore

A framework for collaborative, content-based and demographic filtering
M. J. Pazzani
 Topic distillation and spectral filtering
S. Chakrabarti, B. E. Dom, D. Gibson, R. Kumar, P. Raghavan, S. Rajagopalan and A. Tomkins
 Medical data mining on the Internet: Research on a cancer information system
A. L. Houston, H. C. Chen, S. M. Hubbard, B. R. Schatz, T. D. Ng, R. R. Sewell and K. M. Tolle

Computers and Artificial Intelligence

Vol. 19 No. 1

Articles

On the computational power of adaptive systems

C. Cotta, E. Alba and J. M. Troya

Karhunen-Loeve transform: An exercise in simple image-processing parallel pipelines

M. Fleury, A. C. Downton and A. F. Clark

Minimum 2-terminal routing in 2-jump circulant graphs

B. Robic and J. Zerovnik

Group know-how

R. Pazman

Theory of local register allocation for Prolog clauses II

M. Fico

Vol. 19 No. 2

Articles

Abstract parallel machines

J. O'Donnell and G. Runger

Multivalued dependencies as inference rules on a deductive process under a relational data model set-theory approach

M. Millan, M. C. FernandezBaizan, E. M. Ruiz and R. P. Baeza

Some essential side-effects of Prolog on a distributed implementation

L. Araujo

The irrelevant values problem in the ID3 tree

D. A. Chiang, W. Chen, Y. F. Wang and C. F. Hsu

Schema evolution in software engineering databases – A new approach in Adele environment

M. AhmedNacer and J. Estublier

Engineering Applications of Artificial Intelligence

Vol. 13 No. 3

Articles

Integrated real-time vision system for vehicle control in non-structured environments

J. Ferruz and A. Ollero

Stability analysis and development of a class of fuzzy control systems

R. E. Precup, S. Doboli and S. Preitl

Multi-sensor integration for on-line tool wear estimation through artificial neural networks and fuzzy neural network

R. J. Kuo

A modular approach to generating fuzzy rules with reduced attributes for the monitoring of complex systems

Q. Shen and A. Chouchoulas

Design of a human-error tolerant interface using fuzzy logic

M. B. B. Nguema, C. Kolski, N. Malvache and D. Waroux

Application of a system for the automatic generation of fuzzy neural networks

J. Liao, M. J. Er and J. Y. Lin

A fuzzy-based genetic approach to the diagnosis of manufacturing systems

L. P. Khoo, C. L. Ang and J. Zhang

Development of an intelligent technique for traffic network incident detection

D. Srinivasan, R. L. Cheu, Y. P. Poh and A. K. C. Ng

Multithresholding of mixed-type documents

C. Strouthopoulos and N. Papamarkos

Neural network based fault diagnosis using unmeasurable inputs

S. H. Yang, B. H. Chen and X. Z. Wang

Hydroelectric power plant management relying on neural networks and expert system integration

J. M. Molina, P. Isasi, A. Berlanga and A. Sanchis

Application of expert systems and neural networks for the design of hydro-carbon structures

M. R. Sohrabi, A. R. Mirzai and A. Massoumi

Global stability analysis of fuzzy path tracking using frequency response

J. Aracil, G. Heredia and A. Ollero

Vol. 13 No. 4

Articles

An implementation of genetic algorithms for rule based machine learning

S. Sette and L. Boullart

Combining a neural network with a genetic algorithm for process parameter optimization

D. F. Cook, C. T. Ragsdale and R. L. Major

Toward a heuristic optimum design of rolling schedules for tandem cold rolling mills

D. D. Wang, A. K. Tieu, F. G. deBoer, B. Ma and W. Y. D. Yuen

Automated fault detection in power distribution networks using a hybrid fuzzy-genetic algorithm approach

D. Srinivasan, R. L. Cheu, Y. P. Poh and A. K. C. Ng

PID plus fuzzy controller structures as a design base for industrial applications

L. Reznik, O. Ghanayem and A. Bourmistrov

Fuzzy intelligent system for the operation of fossil power plants

G. Arroyo Figueroa, L. E. Sucar and A. Villavicencio

Fault-diagnostic system using analytical fuzzy redundancy

F. J. Garcia, V. Izquierdo, L. J. deMiguel and J. R. Peran

A neuro-fuzzy tool for CT-PT contact detection in a pressurized heavy water reactor

A. Mukherjee, K. Shivaprasad, R. I. K. Moorthy and A. Kakodkar

A novel neuro-estimator and its application to parameter estimation in a remotely piloted vehicle

M. B. Menhaj and F. R. Salmasi

An integrated expert system/operations research approach for the optimization of natural gas pipeline operations

C. K. Sun, V. Uraikul, C. W. Chan and P. Tontiwachwuthikul

Fault diagnosis for gas turbines based on the control system

A. Guasch, J. Quevedo and R. Milne

An intelligent system for distributed control of an anaerobic wastewater treatment process

J. Flores, B. Arcay and J. Arias

Expert Systems With Applications

Vol. 18 No. 3

Articles

An incremental solution for developing knowledge-based software: its application to an expert system for isokinetics interpretation

F. Alonso, J. L. Fuertes, L. Martinez and C. Montes

The use of fuzzy clustering algorithm and self-organizing neural networks for identifying potentially failing banks: an experimental study

P. Alam, D. Booth, K. Lee and T. Thordarson

Identifying the impact of decision variables for nonlinear classification tasks

S. H. Kim and S. W. Shin

Bankruptcy support system: taking advantage of information retrieval and case-based reasoning

M. T. Elhadi

A Grobner bases-based shell for rule-based expert systems development

E. RoanesLozano, L. M. Laita, E. RoanesMacias, V. Maojo, S. Corredor, A. delaVega and A. Zamora

Automating the design of high-recirculation airlift reactors using a blackboard framework

D. A. Sanders, A. D. Hudson, G. E. Tewkesbury and S. Mason

Vol. 18 No. 4

Articles

Optimal signal multi-resolution by genetic algorithms to support artificial neural networks for exchange-rate forecasting

T. Shin and I. Han

Development of an expert system for optimizing natural gas pipeline operations

V. Uraikul, C. W. Chan and P. Tontiwachwuthikul

Next-generation agent-enabled comparison shopping

S. T. Yuan and A. Liu

Conceptual frame for development of optimized simulation-based scheduling systems

K. Y. Jeong

The improvement of response modeling: combining rule-induction and case-based reasoning

F. Coenen, G. Swinnen, K. Vanhoof and G. Wets

A cooperative tool for facilitating knowledge management

J. T. Fernandez Breis and R. Martinez Bejar

Vol. 19 No. 1

Articles

Sufficient search space for spatial expert systems

K. J. Lee

A coverage-based genetic knowledge-integration strategy

C. H. Wang, T. P. Hong, M. B. Chang and S. S. Tseng

A multi-expert system for material cutting plan generation

C. Y. Hung and R. T. Sumichrast

The role of knowledge-based technology in language applications development

P. M. Fernandez and A. M. GarciaSerrano

An expert system for reliability centered maintenance in the chemical industry

D. J. Fonseca and G. M. Knapp

A conjoint model for Internet shopping malls using customer's purchasing data

D. H. Lee, S. H. Kim and B. S. Ahn

IEEE Transactions on Knowledge and Data Engineering

Vol. 12 No. 1

Special section on the 14th International Conference on Data Engineering

High dimensional similarity joins: Algorithms and performance evaluation.

N. Koudas and K. C. Sevcik

Efficient cost models for spatial queries using R-trees

Y. Theodoridis, E. Stefanakis and T. Sellis

The effect of buffering on the performance of R-trees

S. T. Leutenegger and M. A. Lopez

Indexing the solution space: A new technique for nearest neighbor search in high-dimensional space

S. Berchtold, D. A. Keim, H. P. Kriegel and T. Seidl

Special section on the 1997 International Workshop on Multimedia Information Systems

Guest editorial – Introduction to the special section

E. Bertino, R. Muntz and T. Rakow

Syne classes: A framework for optimal scheduling of requests in multimedia storage servers

L. Golubchik, V. S. Subrahmanian, S. Marcus and J. Biskup

Dynamically negotiated resource management for data intensive application suites

G. J. Nutt, S. Brandt, A. J. Griff, S. Siewert, M. Humphrey and T. Berk

MPGS: An interactive tool for the specification and generation of multimedia presentations

E. Bertino, E. Ferrari and M. Stolf

Natural language grammatical inference with recurrent neural networks

S. Lawrence, C. L. Giles and S. Fong

Vol. 12 No. 2

Articles

The PSTR/SNS scheme for real-time fault tolerance via active object replication and network surveillance

K. H. Kim and C. Subbaraman

The cost of recovery in message logging protocols

S. Rao, L. Alvisi and H. M. Vin

Design and analysis of an integrated checkpointing and recovery scheme for distributed applications

B. Ramamurthy, S. Upadhyaya and B. Bhargava

An architecture for survivable coordination in large distributed systems

D. Malkhi and M. K. Reiter

Hierarchical error detection in a software implemented fault tolerance (SIFT) environment

S. Bagchi, B. Srinivasan, K. Whisnant, Z. Kalbarczyk and R. K. Iyer

An efficient evaluation of a fuzzy equi-join using fuzzy equality indicators.

W. N. Zhang and K. Wang

Optimization and evaluation of disjunctive queries

J. Claussen, A. Kemper, G. Moerkotte, K. Peithner and M. Steinbrunn

Consistent schema version removal: An optimization technique for object-oriented views

V. M. CrestanaJensen, A. J. Lee and E. A. Rundensteiner

Justification for inclusion dependency normal form

M. Levene and M. V. Vincent

An implementation of logical analysis of data

E. Boros, P. L. Hammer, T. Ibaraki, A. Kogan, E. Mayoraz and I. Muchnik

Efficient subgraph isomorphism detection: A decomposition approach

B. T. Messmer and H. Bunke

Optimal data placement on disks: A comprehensive solution for different technologies

P. Triantafyllou, S. Christodoulakis and C. Georgiadis

A generalized definition of rough approximations based on similarity

R. Slowinski and D. Vanderpooten

Vol. 12 No. 3

Articles

Scalable parallel data mining for association rules

E. H. Han, G. Karypis and V. Kumar

Discovering structural association of semistructured data

K. Wang and H. Q. Liu

Scalable algorithms for association mining

M. J. Zaki

Response time analysis of OPS5 production systems

A. M. K. Cheng and J. R. Chen

Load sharing in distributed multimedia-on-demand systems

Y. C. Tay and H. Pang

Real-time index concurrency control

J. R. Haritsa and S. Seshadri

A hybrid representation of vague collections for distributed object management systems

O. Haase and A. Henrich

Dynamic taxonomies: A model for large information bases

G. M. Sacco

IEEE Transactions on Neural Networks

Vol. 11 No. 2

Articles

Bayesian nonlinear model selection and neural networks: A conjugate prior approach

J. P. Vila, V. Wagner and P. Neveu

Quad-Q-learning

C. Clausen and H. Wechsler

The layer-wise method and the backpropagation hybrid approach to learning a feedforward neural network

N. S. Rubanov

Selecting radial basis function network centers with recursive orthogonal least squares training

J. B. Gomm

On the choice of parameters of the cost function in nested modular RNN's

D. P. Mandic and J. A. Chambers

On the optimality of neural-network approximation using incremental algorithms

R. Meir and V. E. Maiorov

Algorithms for accelerated convergence of adaptive PCA

C. Chatterjee, Z. J. Kang and V. P. Roychowdhury

The equivalence between fuzzy logic systems and feedforward neural networks

H. X. Li and C. L. P. Chen

Unsupervised feature evaluation: A neuro-fuzzy approach

S. K. Pal, R. K. De and J. Basak

Extracting rules from trained neural networks

H. Tsukimoto

Nonlinear adaptive control using networks of piecewise linear approximators.

J. Y. Choi and J. A. Farrell

Learning neural networks with noisy inputs using the errors-in-variables approach

J. VanGorp, J. Schoukens and R. Pintelon

Discrete probability estimation for classification using certainty-factor-based neural networks

M. F. Li

Neurocontroller alternatives for "fuzzy" ball-and-beam systems with nonuniform nonlinear friction

P. H. Eaton, D. V. Prokhorov and D. C. Wunsch

Constructive neural-network learning algorithms for pattern classification

R. Parekh, J. H. Yang and V. Honavar

Bayes-optimality motivated linear and multilayered perceptron-based dimensionality reduction

R. Lotlikar and R. Kothari

Combination of artificial neural-network forecasters for prediction of natural gas consumption

A. Khotanzad, H. Elragal and T. L. Lu

Constraint satisfaction adaptive neural network and heuristics combined approaches for generalized job-shop scheduling

S. X. Yang and D. W. Wang

A local linearized least squares algorithm for training feedforward neural networks

O. Stan and E. Kamen

Recursive training of neural networks for classification

M. Aladjem

K-nearest neighbors directed noise injection in multilayer perceptron training

M. Skurichina, S. Raudys and R. P. W. Duin

Extracting M-of-N rules from trained neural networks

R. Setiono

Centroid neural network for unsupervised competitive learning

D. C. Park

A class of learning algorithms for principal component analysis and minor component analysis

Q. F. Zhang and Y. W. Leung

On equilibria, stability, and instability of Hopfield neural networks

Z. H. Guan, G. R. Chen and Y. Qin

Vol. 11 No. 3

Articles

Introduction to the special issue on neural networks for data mining and knowledge discovery

Y. Bengio, J. M. Buhmann, M. Embrechts and J. M. Zurada

Taking on the curse of dimensionality in joint distributions using neural networks

S. Bengio and Y. Bengio

General statistical inference for discrete and mixed spaces by an approximate application of the maximum entropy principle

L. Yan and D. J. Miller

Self organization of a massive document collection

T. Kohonen, S. Kaski, K. Lagus, J. Salojärvi, J. Honkela,

V. Paatero and A. Saarela

Clustering of the self-organizing map

J. Vesanto and E. Alhoniemi

Dynamic self-organizing maps with controlled growth for knowledge discovery

D. Alahakoon, S. K. Halgamuge and B. Srinivasan

Interactive visualization and analysis of hierarchical neural projections for data mining

A. König

Probabilistic principal component subspaces: A hierarchical finite mixture model for data visualization

Y. Wang, L. Luo, M. T. Freedman and S. Y. Kung

A hybrid approach of neural network and memory-based learning to data mining

C. K. Shin, U. T. Yun, H. K. Kim and S. C. Park

The application of certainty factors to neural computing for rule discovery

L. M. Fu and E. H. Shortliffe

Granular neural networks for numerical-linguistic data fusion and knowledge discovery

Y. Q. Zhang, M. D. Fraser, R. A. Gagliano and

A. Kandel

Data strip mining for the virtual design of pharmaceuticals with neural networks

R. H. Kewley, M. J. Embrechts and C. Breneman

Tropical cyclone identification and tracking system using integrated neural oscillatory elastic graph matching and hybrid RBF network track mining techniques

R. S. T. Lee and J. N. K. Liu

Predicting subscriber dissatisfaction and improving retention in the wireless telecommunications industry

M. C. Mozer, R. Wolniewicz, D. B. Grimes, E. Johnson and H. Kaushansky

New results on recurrent network training: Unifying the algorithms and accelerating convergence

A. F. Atiya and A. G. Parlos

SEPARATE: A machine learning method based on semi-global partitions

J. L. Castro, M. Delgado and C. J. Mantas

Fast self-organizing feature map algorithm

M. C. Su and H. T. Chang

Pattern recognition via synchronization in phase-locked loop neural networks.

F. C. Hoppensteadt and E. M. Izhikevich

Logic operations based on single neuron rational model

C. N. Zhang, M. Zhao and M. Wang

Neuro-fuzzy rule generation: Survey in soft computing framework

S. Mitra and Y. Hayashi

General fuzzy min-max neural network for clustering and classification

B. Gabrys and A. Bargiela

Underwater target classification using wavelet packets and neural networks

M. R. AzimiSadjadi, D. Yao, Q. Huang and G. J. Dobeck

Modified cascade-correlation learning for classification

M. Lehtokangas

Classification ability of single hidden layer feedforward neural networks

G. B. Huang, Y. Q. Chen and H. A. Babri

On the convergence of validity interval analysis

F. Maire

Fuzzy auto-associative neural networks for principal component extraction of noisy data

T. N. Yang and S. D. Wang

A constructive algorithm to solve "convex recursive deletion" (CoRD) classification problems via two-layer perceptron networks

C. Cabrelli, U. Molter and R. Shonkwiler

Extension of dynamic link matching by introducing local linear maps

T. Aonishi and K. Kurata

IEEE Transactions on Pattern Analysis and Machine Intelligence

Vol. 22 No. 3

Articles

Jean-Claude Simon, 1924–2000 – Obituary

H. Freeman

Morphological reversible contour representation

Y. M. Y. Hasan and L. J. Karam

A framework for automatic landmark identification using a new method of nonrigid correspondence

A. Hill, C. J. Taylor and A. D. Brett

Consistent gradient operators

S. Ando

Geodesic active contours and level sets for the detection and tracking of moving objects

N. Paragios and R. Deriche

Learning and design of principal curves

B. Kegl, A. Krzyzak, T. Linder and K. Zeger

The 3L algorithm for fitting implicit polynomial curves and surfaces to data

M. M. Blane, Z. B. Lei, H. Civi and D. B. Cooper

A noise-adaptive discriminant function and its application to blurred machine-printed Kanji recognition

S. Omachi, F. Sun and H. Aso

Vol. 22 No. 4

Articles

Untitled

K. Bowyer

Fast, reliable head tracking under varying illumination:

An approach based on registration of texture-mapped 3D models

M. LaCascia, S. Sclaroff and V. Athitsos

Bayesian segmentation via asymptotic partition functions

A. D. Lanterman, U. Grenander and M. I. Miller

Trajectory triangulation: 3D reconstruction of moving points from a monocular image sequence

S. Avidan and A. Shashua

Contour matching using epipolar geometry

J. H. Han and J. S. Park

Training hidden Markov models with multiple observations – A combinatorial method

X. L. Li, M. Parizeau and R. Plamondon

Fusion of intelligent agents for the detection of aircraft in SAR images

A. Filippidis, L. C. Jain and N. Martin

Automatic caption localization in compressed video

Y. Zhong, H. J. Zhang and A. K. Jain

Least squares estimation of 3D shape and motion of rigid objects from their orthographic projections

Y. Xirouhakis and A. Delopoulos

OCR in a Hierarchical feature space

J. Park, V. Govindaraju and S. N. Srihari

Efficiency of characterizing ellipses and ellipsoids by discrete moments

J. Zunic and N. Sladoje

IEEE Transactions on Robotics and Automation

Vol. 16 No. 1

Articles

Kinematic analysis and design of surface wave distributed actuators with application to a powered bed for bedridden patients

J. S. Spano and H. H. Asada

The direct kinematics of parallel manipulators under joint-sensor redundancy

L. Baron and J. Angeles

Measuring and reducing the Euclidean-space effects of robotic joint failures

J. D. English and A. A. Maciejewski

Adaptive output regulation of robot manipulators under actuator constraints

A. Laib

A learning controller for robot manipulators using Fourier series

X. Q. Tang, L. L. Cai and W. Q. Huang

Rigid body analysis of the indeterminate grasp force in power grasps

T. Omata and K. Nagata

Probabilistic self-localization for mobile robots

C. F. Olson

Modeling and supervisory control of a disassembly automation workcell based on blocking topology

K. M. Lee and M. N. B. V. Kuren

Lagrangian relaxation neural networks for job shop scheduling

P. B. Luh, X. Zhao, Y. J. Wang and L. S. Thakur

Time-optimal controls of kinematically redundant manipulators with geometric constraints

M. Galicki

Dynamics analysis of the Gough-Stewart platform manipulator

M. J. Liu, C. X. Li and C. N. Li

The bounds and realization of spatial compliances achieved with simple serial elastic mechanisms

S. G. Huang and J. M. Schimmels

Vol. 16 No. 2

Articles

A brachiating robot controller

J. Nakanishi, T. Fukuda and D. E. Koditschek

Dynamics computation of structure-varying kinematic chains and its application to human figures

Y. Nakamura and K. Yamane

Programming and control of robots by means of differential algebraic inequalities

R. J. Spiteri, D. K. Pai and U. M. Ascher

The eigenscrew decomposition of spatial stiffness matrices

S. G. Huang and J. M. Schimmels

Part orientation with one or two stable equilibria using programmable force fields

K. F. Bohringer, B. R. Donald, L. E. Kavraki and F. Lamiraux

Design and implementation of an adaptive process planner for disassembly processes

E. Zussman and M. C. Zhou

Intelligent organization for flexible manufacturing

M. N. Varvatsoulakis, G. N. Saridis and P. N. Paraskevopoulos

Algebraic synthesis of efficient deadlock avoidance policies for sequential resource allocation systems

J. H. Park and S. A. Reveliotis

Hyperbolic normal forms for manipulator kinematics

K. Tchon

Vol. 16 No. 3

Special issue on manufacturing systems design

Applying a component-based software architecture to robotic workcell applications

J. E. Beck, J. M. Reagin, T. E. Sweeny, R. L. Anderson and T. Garner

A behavioral layer architecture for telecollaborative virtual manufacturing operations

A. Banerjee, P. Banerjee, T. DeFanti, A. Hudson, B. Dodds and J. R. Curtis

Design lessons for building agile manufacturing systems

W. S. Newman, A. Podgurski, R. D. Quinn, F. L. Merat,

M. S. Branicky, N. A. Barendt, G. C. Causey, E. L.

Haaser, Y. Kim, J. Swaminathan and V. B. Velasco

Compression of time in manufacturing systems

C. C. Hsieh and T. C. Woo

Manufacturing strategy analysis and system design – The complete cycle within a computer-aided design environment

B. Wu

Custom design of facility layouts for multiproduct facilities using layout modules

S. A. Irani and H. Huang

Designing mixed-product assembly lines

B. Rekiek, P. DeLit and A. Delchambre

Extended-range hybrid tracker and applications to motion and camera tracking in manufacturing systems

D. Zetu, P. Banerjee and A. Thompson

Hyperbolic trajectories for pick-and-place operations to elude obstacles

C. M. MullerKarger, A. Leonell, G. Mirena and J. T. S. Lopez

Failure modeling and process monitoring for flexible manufacturing systems using colored timed Petri nets

C. H. Kuo and H. P. Huang

Feedback control of production-distribution systems with unknown demand and delays

F. Blanchini, R. Pesenti, F. Rinaldi and W. Ukovich

Phase-type approximation of stochastic Petri nets for analysis of manufacturing systems

S. T. Yee and J. A. Ventura

International Journal of Computer Vision

Vol. 36 No. 2

Articles

Untitled

T. Kanade

Systems and experiment paper: Construction of panoramic image mosaics with global and local alignment

H. Y. Shum and R. Szeliski

Object detection and localization by dynamic template warping

A. L. Ratan, W. E. L. Grimson and W. M. Wells

Diffusion of general data on non-flat manifolds via harmonic maps theory: The direction diffusion case

B. Tang, G. Sapiro and V. Caselles

Vol. 36 No. 3

Articles

Design and use of linear models for image motion analysis

D. J. Fleet, M. J. Black, Y. Yacoob and A. D. Jepson

Point light source estimation from two images and its limits

J. Stauder

Texture analysis through a Markovian modelling and fuzzy classification: Application to urban area extraction from satellite images

A. Lorette, X. Descombes and J. Zerubia

International Journal of Intelligent Systems

Vol. 15 No. 4

Articles

Belief-function representation of statistical audit evidence

C. VandenAcker

A neural network approach to adaptive protective systems problem in the complex power generating units

A. Halinka, P. Sowa, M. Szewczyk and L. Sztandera

A fuzzy noise-smoothing filter

H. B. Mitchell and P. A. Schaefer

Multiple priorities in an induced ordered weighted averaging operator

H. B. Mitchell and P. A. Schaefer

Mountain and subtractive clustering method:

Improvements and generalizations

N. R. Pal and D. Chakraborty

A fuzzy information space approach to speech signal non-linear analysis

W. Rodriguez, H. N. Teodorescu, F. Grigoras, A. Kandel and H. Bunke

Vol. 15 No. 5**Articles**

Stabilizing and robustifying the learning mechanisms of artificial neural networks in control engineering applications

M. O. Efe and O. Kaynak

Fuzzy rough set techniques for uncertainty processing in a relational database

T. Beaubouef and F. E. Petry

On Chu spaces in uncertainty analysis

H. T. Nguyen and N. T. Nguyen

A comparison of stochastic optimization techniques for image segmentation

S. M. Bhandarkar and H. Zhang

Vol. 15 No. 6**Articles**

The concept of evidence

D. Faust

An interval-based temporal algebra based on binary encoding of point relations

V. J. Kovarik and A. J. Gonzalez

Symbolic picture retrieval by relative-metric spatial relations

P. W. Huang and P. L. Lin

Incorporating domain knowledge into attribute-oriented data mining

S. McClean, B. Scotney and M. Shapcott

CLAM: A new model of associative memory

A. B. Bailon, M. Delgado and W. Fajardo

Fuzzy systems are universal approximators for a smooth function and its derivatives

V. Kreinovich, H. T. Nguyen and Y. Yam

Vol. 15 No. 7**Articles**

Merging fuzzy logic, neural networks, and genetic computation in the design of a decision-support system

V. Loia, S. Sessa, A. Staiano and R. Tagliaferri

Extracting rules from a (fuzzy/crisp) recurrent neural network using a self-organizing map

A. Blanco, M. Delgado and M. C. Pegalajar

A note on the refinement of ontologies

G. Antoniou and A. Kehagias

Data mining for text categorization with semi-supervised agglomerative hierarchical clustering

A. G. Skarmeta, A. Bensaid and N. Tazi

When QM-operators are implication functions and conditional fuzzy relations

E. Trillas, C. delCampo and S. Cubillo

Design of mode-to-mode fuzzy controllers

F. Rufus and G. Vachtsevanos

Vol. 15 No. 8**Articles**

Mining fuzzy association rules and fuzzy frequency episodes for intrusion detection

J. X. Luo and S. M. Bridges

Semantic measure of fuzzy data in extended possibility-based fuzzy relational databases

Z. M. Ma, W. J. Zhang and W. Y. Ma

Future profiling of time series behavior

S. Singh

Knowledge discovery in distributed databases using evidence theory

D. Cai, M. F. McTear and S. I. McClean

Fuzzy stochastic dynamic programming for marketing decision support

K. Weber and Z. H. Sun

Improving a neuro-fuzzy classifier using exploratory factor analysis

J. Martens, G. Wets, J. Vanthienen and C. Mues

Computing with words in formal methods

T. D. Pham

International Journal of Software Engineering and Knowledge Engineering

Vol. 10 No. 1**Special issue: Best papers from SEKE98**

Formalizing the functional model within object-oriented design

E. Y. Wang and B. H. C. Cheng

Planning support to software process evolution

R. Conradi, M. N. Nguyen, A. I. Wang and C. N. Liu

Formal support for an informal business modelling method

Y. H. ChenBurger, D. Robertson and J. Stader

Specification of software architecture

M. J. Gerken

An approach to quantitative software architecture sensitivity analysis

C. H. Lung and K. Kalaichelvan

Using fuzzy reasoning to support automated program understanding

I. Burnstein and F. Saner

Vol. 10 No. 2**Articles**

Case-based software quality prediction

K. Ganesan, T. M. Khoshgoftaar and E. B. Allen

Creating tools in a software environment based on graph rewriting rules

A. DeLucia, G. Tortora and M. Tucci

Test scenario generation based on formal specification and usage profile

K. H. Chang, S. S. Liao, R. Chapman and C. Y. Chen

Constructing flow-based tools with generative and compositional techniques.

J. T. Yang, F. J. Wang, W. C. Chu and C. H. Hu

From software reuse to database reuse

C. J. Egyhazy

Verifying requirements through mathematical modelling and animation

E. Kazmierczak, P. Dart, L. Sterling and M. Winikoff

Journal of Intelligent & Robotic Systems

Vol. 27 No. 3**Articles**

Suction control of a robotic gripper: A neuro-fuzzy approach

N. C. Tsourveloudis, R. Kolluru, K. P. Valavanis and D. Gracanin

A technique to analytically formulate and to solve the 2-dimensional constrained trajectory planning problem for a mobile robot

P. Gallina and A. Gasparetto

Managing complexity in large learning robotic systems

K. Eng, A. P. Robertson and D. R. Blackman

Sensor selection by GMB-REM in real robot position estimation

T. Koshizen

Prediction-based Iterative Learning Control (PILC) for uncertain dynamic nonlinear systems using system identification technique

M. Arif, T. Ishihara and H. Inooka

Vol. 27 No. 4**Articles**

Obstacle avoidance using the human operator experience for a mobile robot

L. Acosta, G. N. Marichal, L. Moreno, J. A. Mendez and J. J. Rodrigo

Control approach for legged robots with fast gaits

N. K. MSirdi, N. Manamanni and D. ElGhanami

A robust controller design method for a flexible manipulator with a large time varying payload and parameter uncertainties

J. H. Ryu, D. S. Kwon and Y. Park

Design of a robust adaptive neural tracking controller

Q. Song and J. Xiao

RTCS: a reactive with tags classifier system

A. Sanchis, J. M. Molina, P. Isasi and J. Segovia

Vol. 28 Nos. 1–2**Articles**

Untitled

S. G. Tzafestas and N. M. Sgouros

Color image segmentation for multimedia applications

N. Ikonomakis, K. N. Plataniotis and A. N.

Venetsanopoulos

Image segmentation via iterative fuzzy clustering based on local space-frequency multi-feature coherence criteria

S. G. Tzafestas and S. N. Raptis

Lossy image compression using wavelets

N. D. Panagiotacopoulos, K. Friesen and S. Lertsuntivit

Image data compression using zonal sampling and piecewise-linear transforms

A. Dziech, F. Belgasse and H. J. Nern

Transformations between Pictures from 2D to 3D

M. Sigmund and P. Novotny

Real-time feature matching in image sequences for non-structured environments. Applications to vehicle guidance

J. Ferruz and A. Ollero

Invariant representation and matching of space curves

C. H. Lo and H. S. Don

Gesture recognition: The gesture segmentation problem

M. K. Viblis and K. J. Kyriakopoulos

Face recognition by using feature orientation and feature geometry matching

C. L. Su

An efficient algorithm for ray tracing

J. S. Pantazopoulos and S. G. Tzafestas

A color coordinate normalizer chip

I. Andreadis

Vol. 28 No. 3**Articles**

A genetic approach for simultaneous design of membership functions and fuzzy control rules

C. J. Wu and G. Y. Liu

Obstacle avoidance for redundant manipulators using directional-collidability/temporal-collidability measure

S. I. Choi and B. K. Kim

Torque optimizing control with singularity-robustness for kinematically redundant robots

C. Y. Chung, B. H. Lee, M. S. Kim and C. W. Lee

Integrating optical force sensing with visual servoing for microassembly

Y. Zhou, B. J. Nelson and B. Vikramaditya

Investigating dynamic interaction between the one DOF manipulator and vehicle of a mobile manipulator

A. Meghdari, M. Durali and D. Naderi

Vol. 28 No. 4**Articles**

A workcell for the development of robot-assisted surgical procedures...

C. Casadei, S. Martelli and P. Fiorini

A fully autonomous microrobotic endoscopy system

V. K. Asari, S. Kumar and I. M. Kassim

An attempt to raise the level of software abstraction in assembly robotics through an apposite choice of underlying mechatronics

G. E. Deacon

Journal of Intelligent Manufacturing**Vol. 11 No. 2****Special issue: Production systems design and control**

Object-oriented process development in the M*-OBJECT methodology

G. Berio, A. DiLeva, P. Giolito and F. Vernadat

Expert configurator for concurrent engineering: Cameleon software and model

M. Aldanondo, S. Rouge and M. Veron

Learning-based algorithms in scheduling

E. DudekDyduch

An expert system for the dyeing recipes determination

R. Convert, L. Schacher and P. Viallier

An evolutionary approach to select a pull system among Kanban, Conwip and Hybrid

E. G. A. Gaury, H. Pierreval and J. P. C. Kleijnen

Double speed single production line

A. Stagno, R. Glardon and M. Pouly

Fluctuations of the production output of transfer lines

P. Ciprut, M. O. Hongler and Y. Salama

A Petri net model for integrated process and job shop production planning

T. Kis, D. Kiritsis, P. Xirouchakis and K. P. Neuendorf

Dynamic positioning of idle automated guided vehicles

G. Bruno, G. Ghiani and G. Improta

The performance of workload rules for order acceptance in batch chemical manufacturing

W. H. M. Raaymakers, J. W. M. Bertrand and J. C. Fransoo

Vol. 11 No. 3**Special issue on distributed manufacturing systems**

MetaMorph II: an agent-based architecture for distributed intelligent design and manufacturing

W. M. Shen, F. Maturana and D. Norrie

Distributed planning and control systems for the virtual enterprise: organizational requirements and development life-cycle

A. L. Soares, A. L. Azevedo and J. P. deSousa

Automated contracting in distributed manufacturing among independent companies

T. W. Sandholm

Inheritance and polymorphism in real-time monitoring and control systems

A. K. C. Lee, W. H. Ip and K. L. Yung

Assembly line balancing using genetic algorithms

I. Sabuncuoglu, E. Erel and M. Tanyer

Intelligent setup planning in manufacturing by neural networks based approach

X. G. Ming and K. L. Mak

Journal of Logic Programming

Vol. 44 Nos. 1–3

Special issue: abductive logic programming

Abducting through negation as failure: stable models within the independent choice logic

D. Poole

Conditional reasoning in logic programming

D. Gabbay, L. Giordano, A. Martelli, N. Olivetti and

M. L. Sapino

Abductive logic programming and disjunctive logic programming: their relationship and transferability

C. Sakama and K. Inoue

An abductive approach to disjunctive logic programming

J. H. You, L. Y. Yuan and R. Goebel

ACLP: Abductive Constraint Logic Programming

A. Kakas, A. Michael and C. Mourlas

Computing abduction by using TMS with top-down expectation

N. Iwayama and K. Satoh

An abductive event calculus planner

M. Shanahan

Journal of Symbolic Computation

Vol. 28 Nos. 4–5

Articles

Galois theory of differential equations, algebraic groups and Lie algebras

M. vanderPut

Computing Galois groups of completely reducible differential equations

E. Compoint and M. F. Singer

Differential equations of order two with one singular point

R. Vidunas

Two generator subgroups of $SL(2, \mathbb{C})$ and the hypergeometric, Riemann, and Lamé equations

R. C. Churchill

On rational solutions of systems of linear differential equations

M. A. Barkatou

An algorithm computing the regular formal solutions of a system of linear differential equations

M. Barkatou and E. Pflugal

Liouvillian solutions of linear differential equations of order three and higher

M. vanHoeij

The Schmidt-Kolchin conjecture

G. M. Reinhart

The differential ideal $[P]: M^\infty$

S. Morrison

Essential components of an algebraic differential equation

E. Hubert

Computation of Hilbert polynomials in two variables

A. Levin

Multibasic and mixed hypergeometric Gosper-type algorithms

A. Bauer and M. Petkoysek

Vol. 29 No. 1

Articles

Untitled

B. Caviness

Untitled

H. Hong

Using rewriting systems to compute left Kan extensions and induced actions of categories

R. Brown and A. Heyworth

Fast constructive recognition of a black box group isomorphic to S_n or $A(n)$ using Goldbach's Conjecture

S. Bratus and I. Pak

An algorithmic approach to fundamental groups and covers of combinatorial cell complexes

S. Rees and L. H. Soicher

A formula for the general solution of a constant-coefficient difference equation

D. A. Wolfram

SFA, a package on symmetric functions considered as operators over the ring of polynomials for the computer algebra system MAPLE

V. Prosper

Symbolic computation and differential equations: Lie symmetries

J. Carminati and K. Vu

Vol. 29 No. 2

Articles

Special issue on advances in first-order theorem proving

Foreword of the guest editors

M. P. Bonacina and U. Furbach

Theorem proving techniques for view deletion in databases

C. Aravindan and P. Baumgartner

Cut-elimination and redundancy-elimination by resolution

M. Baaz and A. Leitsch

Combining enumeration and deductive techniques in order to increase the class of constructible infinite models

R. Caferra and N. Peltier

Speeding up algorithms on atomic representations of Herbrand models via new redundancy criteria

R. Pichler

Goals and benchmarks for automated map reasoning

A. Formisano, E. G. Omodeo and M. Temperini

Controlled use of clausal lemmas in connection tableau calculi

M. Fuchs

Tableau methods for a logic with term declarations

P. J. Martin, A. Gavilanes and J. Leach

Connection calculus theorem proving with multiple built-in theories

U. Petermann

Vol. 29 No. 3

Articles

An algorithm for computing a new normal form for dynamical systems

G. T. Chen and J. DellaDora

On the validity of implicitization by moving quadrics for rational surfaces with no base points

D. Cox, R. Goldman and M. Zhang

Efficient decomposition of associative algebras over finite fields

W. Eberly and M. Giesbrecht

On rational geometry of conic sections

G. Gentili and M. A. O'Connor

Solving systems of strict polynomial inequalities

A. Strzebonski

Vol. 29 Nos. 4–5

Special issue on symbolic computation in algebra, analysis, and geometry

Symmetries of polynomials

I. Berchenko and P. J. Olver

Generalized resultants over unirational algebraic varieties

L. Buse, M. Elkadi and B. Bourrain

Applications of some properties of the canonical module in computational projective algebraic geometry

M. Chardin

Non-general type surfaces in P^4 : Some remarks on bounds and constructions

W. Decker and F. O. Schreyer

Cohomology on toric varieties and local cohomology with monomial supports

D. Eisenbud, M. Mustata and M. Stillman

Multiplicative bases, Grobner bases, and right Grobner bases

E. L. Green

Primary decomposition of lattice basis ideals

S. Hosten and J. Shapiro

Factorization-free decomposition algorithms in differential algebra

E. Hubert

New structure theorem for subresultants

H. Lombardi, M. F. Roy and M. S. ElDin

Generic and cogenerated monomial ideals

E. Miller, B. Sturmfels and K. Yanagawa

Local cohomology at monomial ideals

M. Mustata

A localization algorithm for D-modules

T. Oaku, N. Takayama and U. Walther

Computing global extension modules

G. G. Smith

Weyl closure of a linear differential operator

H. Tsai

Toric Newton method for polynomial homotopies

J. Verschelde

Algorithmic computation of de Rham cohomology of complements of complex affine varieties

U. Walther

Vol. 29 No. 6

Articles

On solutions of linear ordinary difference equations in their coefficient field

M. Bronstein

Algorithms for exponentiation in finite fields

S. H. Gao, J. VonzurGathen, D. Panario and V. Shoup

Challenges of symbolic computation: My favorite open problems

E. Kaltofen

Invariants, patterns and weights for ordering terms

U. Martin and D. Shand

An algorithm to compute the kernel of a derivation up to a certain degree

S. Maubach

Quantifier elimination for trigonometric polynomials by cylindrical trigonometric decomposition

P. Pau and J. Schicho

Vol. 30 No. 1

Articles

Foreword to the special issue on schemas

P. Flener, K. K. Lau and W. Bibel

Program development schemata as derived rules

P. Anderson, D. Basin

Proofs as schemas and their heuristic use

M. Fuchs

A calculus for schemes in $\mathbb{Z}$

S. M. Brien and A. P. Martin

An abstract formalization of correct schemas for program synthesis

P. Flener, K. K. Lau, M. Ornaghi and J. Richardson

Knowledge-Based Systems

Vol. 13 No. 1

Special issue on CyberDesign

Those "psychological tools" inside the design process

S. Grosjean, P. Fixmer and C. Brassac

A web-based information and decision support system for appropriateness in medicine

C. Vanoirbeek, Y. A. Rekik, N. Karacapilidis, O.

Aboukhaled, N. Ebel and J. P. Vader

Knowledge acquisition using VRML and the unified modelling language: the case of the RGB computer room

P. G. McIntosh

Design tools as agents of disclosure

M. Smyth

Remote decision support system: a distributed information management system

N. Baupin and K. Zreik

Vol. 13 Nos. 2-3

Special Issue ES '99

A personalised TV listings service for the digital TV age

B. Smyth and P. Cotter

AI planning: solutions for real world problems

R. S. Aylett, G. J. Petley, P. W. H. Chung, B. Chen and

D. W. Edwards

Creating knowledge maps by exploiting dependent relationships

J. L. Gordon

Improved modelling and control of oil and gas transport facility operations using artificial intelligence

M. Neuroth, P. MacConnell, F. Stronach and

P. Vamplew

Multiple algorithms for fraud detection

R. Wheeler and S. Aitken

Towards the application of case based reasoning to decision-making in concurrent product development (concurrent engineering)

B. U. Haque, R. A. Belecheanu, R. J. Barson and K. S.

Pawar

The KRAFT architecture for knowledge fusion and transformation

A. Preece, K. Hui, A. Gray, P. Marti, T. BenchCapon,

D. Jones and Z. Cui

Knowledge management through multi-perspective modelling: representing and distributing organizational memory

J. Kingston and A. Macintosh

Automating case selection in the construction of a case library

D. McSherry

Algorithms for computing association rules using a partial-support tree

G. Goulbourne, F. Coenen and P. Leng

CAFE: extending CLIPS for the internet

R. Inder

Structured cases in case-based reasoning – re-using and adapting cases for time-tabling problems

E. K. Burke, B. MacCarthy, S. Petrovic and R. Qu

Kybernetes

Vol. 29 Nos. 1–2

Articles

Contemporary systems and cybernetics

B. H. Rudall

Internet commentary

A. M. Andrew

Object detecting artificial retina

J. G. Wilson and R. J. Mitchell

The second stir and incompleteness of quantitative analysis

S. C. O. Yang, J. H. Miao, Y. Wu, Y. Lin, T. Y. Peng and T. Q. Xiao

Generation of alpha-dense curves and application to global optimization

A. Ziadi and Y. Cherruault

The forecasting performance of Cartesian ARIMA search and a vector-valued state space model

R. Ostermark

Automation seen as delegation

J. Bucki and Y. Pesqueux

Impossible measures, Consonian appearances –

Interpretation of the effect of high dilutions by building the Feynman measure in the real numbers of Levy and in the Solovay theory

H. Berliocchi

An EMI theory of consciousness

B. James

Digital setting for instruction

A. Nogro

Distinguished journal patrons

Contemporary systems and cybernetics

B. H. Rudall

Internet commentary

A. M. Andrew

Infrastructural analysis and restriction in the evolution of weather systems

S. OuYang, T. Y. Peng, T. G. Xiao, Lin Y. and J. H. Miao

Fuzzy dynamical systems in epidemic modelling

N. R. S. Ortega, P. C. Sallum and E. Massad

The existence of alpha-dense curves with minimal length in a metric space

A. Ziadi, Y. Cherruault and G. Mora

A triangle illusion with explanations

E. T. Lee and M. E. Lee

Sleep-wakefulness cycle of a guinea-pig as a model of a biosensor

I. D. Gvilia, M. Z. Kochladze, N. D. Darchia and T. N. Oniani

Creatures – Artificial life, autonomous agents and gaming environment

A. Adamatzky

“Militans cybernetics” on the horizon of the third millennium–millennium message

M. Manescu

Gene chip: the possible impact of the gene chip on future medical practice

B. James

Vol. 29 Nos. 3–4

Articles

Contemporary systems and cybernetics

B. H. Rudall

Internet commentary

A. M. Andrew

Ontological and Kantian modes of perceiving experience – Hemispheric basis for physical cognition

U. Fidelman

New results for the Adomian method

S. Khelifa and Y. Cherruault

Multiple input transfer function noise modelling in the time domain – Empirical evidence on Scandinavian stock data

R. Ostermark

On integrated circuit chip reduction

E. T. Lee and E. T. Lee

Cyberprofile – Dr Evelynne Andreewsky

Communications and forum – Maximising the functionality of cells

B. James

Cybernetics in the 2000th year

S. Madan

Machine Learning

Vol. 39 Nos. 2–3

Special issue of machine learning on information retrieval introduction

Text classification from labeled and unlabeled documents using EM

K. Nigam, A. K. McCallum, S. Thrun and T. Mitchell

BoosTexter: A boosting-based system for text categorization

R. E. Schapire and Y. Singer

Machine learning for information extraction in informal domains

D. Freitag

Adaptive retrieval agents: Internalizing local context and scaling up to the Web.

Menczer-F, Belew-R-K

Vol. 40 No. 1

Articles

Implementation issues in the Fourier transform algorithm

Y. Mansour and S. Sahar

Constructing X-of-N attributes for decision tree learning

Z. J. Zheng

Upper and lower bounds on the learning curve for Gaussian processes

C. K. I. Williams and F. Vivarelli

Vol. 40 No. 2

Articles

Stochastic grammatical inference of text database structure

M. YoungLai and F. W. Tompa

An experimental comparison of three methods for constructing ensembles of decision trees: Bagging, boosting, and randomization

T. G. Dietterich

MultiBoosting: A technique for combining boosting and wagging

G. I. Webb

New Generation Computing

Vol. 18 No. 3

Articles

Perspectives on systems biology

H. Kitano

Polynomial-time learning of elementary formal systems

S. Miyano, A. Shinohara and T. Shinohara

Abductive concept learning

A. C. Kakas and F. Riguzzi