

From the journals . . .

Applied Artificial Intelligence

Vol. 16 No. 6

Articles

A neural network based approach for measurement dynamics compensation

P Georgieva and SF de Azevedo

“ABC” classification with uncertain data. A fuzzy model vs. a probabilistic model

J Puente, D de la Fuente, R Priore and R Pino

An adaptive real-coded genetic algorithm

LH Lee and YL Fan

Vol. 16 Nos. 7–8

Articles

Toward merging cognition and affect in HCI

F de Rosís

Toward recognizing and conveying an attitude of doubt via natural language

S Carberry, L Schroeder and L Lambert

Scripting affective communication with life-like characters in Web-based interaction systems

H Prendinger, S Descamps and M Ishizuka

Probabilistic assessment of user’s emotions in educational games

C Conati

Can a rational agent afford to be affectless? A formal approach

CL Lisetti and P Gmytrasiewicz

This time with feeling: Integrated model of trait and state effects on cognition and behavior

E Hudlicka

Panel discussion

S Carberry, C Conati, F de Rosís, P Gmytrasiewicz, E Hudlicka, M Ishizuka, C Lisetti, A Ortony, H Prendinger and W Revelle

Applied Intelligence

Vol. 17 No. 3

Articles

Introduction

HW Guesgen, FD Anger, G Ligozat and RV Rodriguez

Spatial reasoning about points in a multidimensional setting

P Balbiani and JF Condotta

Multi-dimensional modal logic as a framework for spatio-temporal reasoning

B Bennett, AG Cohn, F Wolter and M Zakharyashev

Qualitative geometry for shape recognition

V Dugat, P Gambarotto and Y Larvor

Reasoning about distance based on fuzzy sets

HW Guesgen

Ontology of spatial concepts in a natural language interface for a mobile robot

J Marciniak and Z Vetulani

Formalizing calendars with the category of ordinals

SR Schwer

Querying temporal constraint networks: A unifying approach

M Koubarakis

A path-consistent singleton modeling (CSM) algorithm for arc-constrained networks

D Mitra

Artificial Intelligence

Vol. 139 No. 1

Articles

Yet some more complexity results for default logic

R Ben-Eliyahu-Zohary

Local search with constraint propagation and conflict-based heuristics

N Jussien and O Lhomme

Clausal resolution in a logic of rational agency

C Dixon, M Fisher and A Bolotov

Summarization beyond sentence extraction: A probabilistic approach to sentence compression

K Knight and D Marcu

Accelerating filtering techniques for numeric CSPs

Y Lebbah and O Lhomme

Vol. 139 No. 2

Articles

Learning cost-sensitive active classifiers

R Greiner, AJ Grove and D Roth

Abstracting soft constraints: Framework, properties, examples

S Bistarelli, P Codognot and F Rossi

Narrative prose generation

CB Callaway and JC Lester

Lattice-theoretic models of conjectures, hypotheses and consequences

MS Ying and HQ Wang

Vol. 140 Nos. 1–2

Articles

Binary vs. non-binary constraints

F Bacchus, XG Chen, P van Beek and T Walsh

On point-duration networks for temporal reasoning

I Navarrete, A Sattar, R Wetprasit and R Marin

Nagging: A scalable fault-tolerant paradigm for distributed search

AM Segre, S Forman, G Resta and A Wildenberg

Solving multi-granularity temporal constraint networks

C Bettini, XS Wang and S Jajodia

Disjunctions, independence, refinements

M Broxvall, P Jonsson and J Renz

Abduction in logic programming: A new definition and an abductive procedure based on rewriting

FZ Lin and JH You

Context-specific sign-propagation in qualitative probabilistic networks

S Renooij, LC van der Gaag and S Parsons

Tractable combinatorial auctions and b-matching

M Tennenholtz

Drift analysis and average time complexity of evolutionary algorithms (vol 127, pg 57, 2001)

J He and X Yao

Vol. 141 Nos. 1–2

Articles

Explanations, belief revision and defeasible reasoning

MA Falappa, G Kern-Isberner and GR Simari

Using genetic programming to learn and improve control knowledge

R Aler, D Borrajo and P Isasi

On the computational complexity of assumption-based argumentation for default reasoning

Y Dimopoulos, B Nebel and F Toni

Conditional independence in propositional logic

M Lang, P Liberatore and P Marquis

Unifying metric approach to the triple parity

TYT Chan

The size distribution for Markov equivalence classes of acyclic digraph models

SB Gillispie and MD Perlman

The consensus operator for combining beliefs

A Josang

Emergence of social conventions in complex networks

J Delgado

Coherence in finite argument systems

PE Dunne and TJM Bench-Capon

On forward checking for non-binary constraint satisfaction

C Bessiere, P Meseguer, EC Freuder and J Larrosa

Artificial Intelligence Review

Vol. 18 No. 1

Articles

An evaluation of evolutionary generalisation in genetic programming

I Kushchu

EDU-EX: A tool for auto-regulated intelligent tutoring systems development based on models

P Domingo, A Garcia-Crespo, B Ruiz and A Iglesias

User modeling for personalized city tours

J Fink and A Kobsa

Vol. 18 No. 2

Articles

A perspective view and survey of meta-learning

R Vilalta and Y Drissi

Learning intelligent behavior in a non-stationary and partially observable environment

S Senkul and F Polat

User interfaces and help systems: From helplessness to intelligent assistance

S Delisle and B Moulin

Engineering Applications of Artificial Intelligence

Vol. 15 No. 1

Articles

Untitled

R Vingerhoeds and M Ruck

Fuzzy self-tuning PI control of pH in fermentation

R Babuska, J Oosterhoff, A Oudshoorn and PM Bruijn

Neuro-fuzzy ART-based document management system: application to mail distribution and digital libraries

GIS Palmero, YA Dimitriadis, RS Guadarrama and JMC Izquierdo

Fuzzy flow estimation for ultrasound-based liquid level measurement

M Jeffries, E Lai and JB Hull

Trajectory tracking in batch processes using neural controllers

J Sjöberg and M Agarwal

Enhancing trajectory tracking for a class of process control

problems using iterative learning

JX Xu, TH Lee and Y Tan

Learning-enhanced PI control of ram velocity in injection molding machines

KK Tan, JC Tang

Tool condition monitoring using artificial intelligence methods

M Balazinski, E Czogala, K Jemielniak and J Leski

Color image retrieval using a fractal signature extraction technique

N Nikolaou and N Papamarkos

Bispectral analysis for on-line monitoring of stamping operation

GC Zhang, M Ge, H Tong, Y Xu and R Du

A domain knowledge based search advisor for design problem solving environments

YS Ong and AJ Keane

Expert Systems With Applications

Vol. 23 No. 2

Articles

Document-based workflow modeling: a case-based reasoning approach

J Kim, W Suh and H Lee

A parallelized indexing method for large-scale case-based reasoning

WC Chen, SS Tseng, LP Chang, TP Hong and MF Jiang

Turning telecommunications call details to churn prediction: a data mining approach

CP Wei and IT Chiu

Knowledge model reuse: therapy decision through specialisation of a generic decision model

A Manjarres, S Pickin and J Mira

Diagnostic expert system using non-monotonic reasoning

ES El Azhary, A Edrees and A Rafea

The BIOGENES system for knowledge-based bioprocess control

P Hrnčirik, J Nahlik and J Vovsik

Stock market trading rule discovery using technical charting heuristics

W Leigh, N Modani, R Purvis and T Roberts

Vol. 23 No. 3

Articles

Knowledge management strategy and its link to knowledge creation process

B Choi and H Lee

Intelligent interpretation of validation data

E Mosqueira-Rey and V Moret-Bonillo

Domain-dependent information gathering agent

A Pivk and M Gams

I-Promise – intelligent protective material selection

M Duric and V Devedzic

An expert system for diagnosis of the heart valve diseases

I Turkoglu, A Arslan and E Ilkay

Hybrid of neural network and decision knowledge approach to generating influence diagrams

JK Kim, KC Lee and JK Lee

Credit scoring using the hybrid neural discriminant technique

TS Lee, CC Chiu, CJ Lu and IF Chen

A case-based reasoning with the feature weights derived by analytic hierarchy process for bankruptcy prediction

CS Park and I Han

A hybrid knowledge and model system for R&D project selection

QJ Tian, J Ma and O Liu

A rule induction-based knowledge system for retaining wall selection

JB Yang

Development of a case based intelligent customer-supplier relationship management system

KL Choy, WB Lee and V Lo

Pipe-routing algorithm development: case study of a ship engine room design

JH Park and RL Storch

Fish-Expert: a web-based expert system for fish disease diagnosis

DL Lia, ZT Fu and YQ Duan

A genetic algorithm application in bankruptcy prediction modeling

KS Shin and YJ Lee

A personalized recommender system based on web usage mining and decision tree induction

YH Cho, JK Kim and SH Kim

IEEE Transactions on Knowledge and Data Engineering

Vol. 14 No. 5

Articles

Editorial: Introducing the new AEs

PS Yu

The EVE approach: View synchronization in dynamic distributed environments

AJ Lee, A Nica and EA Rundensteiner

A graphical query language: VISUAL and its query processing

NH Balkir, G Ozsoyoglu and ZM Ozsoyoglu

ImageMap: An image indexing method based on spatial similarity

EGM Petrakis, C Faloutsos and KI Lin

SemQuery: Semantic clustering and querying on heterogeneous features for visual data

G Sheikholeslami, W Chang and AD Zhang

CLARANS: A method for clustering objects for spatial data mining

RT Ng and JW Han

Fast algorithms for online generation of profile association rules

CC Aggarwal, Z Sun and PS Yu

An efficient path computation model for hierarchically structured topographical road maps

S Jung and S Pramanik

HAL: A faster match algorithm

PY Lee and AMK Cheng

Presentation planning for distributed VoD systems

E Hwang, B Prabhakaran and VS Subrahmanian

Materialization and its metaclass implementation

M Dahchour, A Pirote and E Zimanyi

An evaluation of vertical class partitioning for query processing in object-oriented databases

CW Fung, K Karlapalem and Q Li

The event matching language for querying temporal data

TS Cheng and SK Gadia

Flexible robust programming in distributed object systems

M Ahamad and M Chelliah

Multiversion locking protocol with freezing for secure real-time database systems

C Park, S Park and SH Son

Scheduling transactions with temporal constraints:

Exploiting data semantics

M Xiong, K Ramamritham, JA Stankovic, D Towsley and

R Sivasankaran

Recovery from malicious transactions

P Ammann, S Jajodia and P Liu

An object-oriented fuzzy data model for similarity detection in image databases

AK Majumdar, I Bhattacharya and AK Saha

The presumed-either two-phase commit protocol

GK Attaluri and K Salem

Probability bounds for goal directed queries in Bayesian networks

MV Mannino and VS Mookerjee

IEEE Transactions on Neural Networks

Vol. 13 No. 4

Special issue on intelligent multimedia processing

Guest editorial

L Guan, T Adali, S Katagiri, J Larsen and J Principe

Extracting semantics from audiovisual content: The final frontier in multimedia retrieval

MR Naphade and TS Huang

Learning similarity measure for natural image retrieval with relevance feedback

GD Guo, AK Jain, WY Ma and HJ Zhang

Automatic machine interactions for content-based image retrieval using a self-organizing tree map architecture

P Muneesawang and L Guan

Shape indexing using self-organizing maps

PN Suganthan

PicSOM – Self-organizing image retrieval with MPEG-7 content descriptors

J Laaksonen, M Koskela and E Oja

Statistical multimodal integration for audio-visual speech processing

S Nakamura

Subband neural networks prediction for on-line audio signal recovery

G Cocchi and A Uncini

Unsupervised speaker recognition based on competition between self-organizing maps

I Lapidot, H Guterman and A Cohen

Estimation of speech embedded in a reverberant and noisy environment by independent component analysis and wavelets

AK Barros, T Rutkowski, F Itakura and N Ohnishi

Speaking mode variability in multimodal speech production

E Vatikiotis-Bateson and HC Yehia

An HMM-based speech-to-video synthesizer

JJ Williams and AK Katsaggelos

Real-time speech-driven face animation with expressions using neural networks

PY Hong, Z Wen and TS Huang

Modeling focus of attention for meeting indexing based on multiple cues

R Stiefelhagen, J Yang and A Waibel

Objective quality assessment of MPEG-2 video streams by using CBP neural networks

P Gastaldo, S Rovetta and R Zunino

Nonstationary color tracking for vision-based human-computer interaction

Y Wu and TS Huang

A spatial-temporal approach for video caption detection and recognition

X Tang, XB Gao, JZ Liu and HJ Zhang

From members to teams to committee – A robust approach to gestural and multimodal recognition

LZ Wu, SL Oviatt and PR Cohen

Visual recognition of continuous hand postures

C Nolker and H Ritter

The simplicial neural cell and its mixed-signal circuit implementation: An efficient neural-network architecture for intelligent signal processing in portable multimedia applications

R Dogaru, P Julian, LO Chua and M Glesner

Multi-illuminant color reproduction for electronic cameras via CANFIS neuro-fuzzy modular network device characterization

E Mizutani and K Nishio

BYY harmony learning, independent state space, and generalized APT financial analyses

L Xu

The relevance vector machine technique for channel equalization application

S Chen, SR Gunn and CJ Harris

On the convergence of the decomposition method for support vector machines

CJ Lin

A comparison of methods for multiclass support vector machines

CJ Lin

Vol. 13 No. 5

Articles

Welcome to the IEEE Neural Networks Society

PP Bonissone

Generalized information potential criterion for adaptive system training

D Erdogmus and JC Principe

A formal analysis of stopping criteria of decomposition methods for support vector machines

CJ Lin

A recurrent neural network for solving Sylvester equation with time-varying coefficients

YN Zhang, DC Jiang and W Jun

Two highly efficient second-order algorithms for training feedforward networks

N Ampazis and SJ Perantonis

GenSoFNN: A generic self-organizing fuzzy neural network

WL Tung and C Quek

Bounds of the incremental gain for discrete-time recurrent neural networks

YC Chu

Underwater target classification in changing environments using an adaptive feature mapping

MR Azimi-Sadjadi, D Yao, AA Jamshidi and GJ Dobeck

Application of adaptive constructive neural networks to image compression

LY Ma and K Khorasani

A phase-based approach to the estimation of the optical flow field using spatial filtering

T Gautama and MM Van Hulle

A class of physical modeling recurrent networks for analysis/synthesis of plucked string instruments

AWY Su and SF Liang

Adaptive acquisition and tracking for deep space array feed antennas

R Mukai, VA Vilnrotter, P Arabshahi and V Jamnejad

Web mining in soft computing framework: Relevance, state of the art and future directions

SK Pal, V Talwar and P Mitra

A CMOS feedforward neural-network chip with on-chip parallel learning for oscillation cancellation

L Jin, MA Brooke and K Hirotsu

A new k-groups neural network

YenJC

Chaotifying linear Elman networks

X Li, GR Chen, ZQ Chen and ZZ Yuan

Neighborhood based Levenberg-Marquardt algorithm for neural network training

G Lera and M Pinzolas

Any reasonable cost function can be used for a posteriori probability approximation

M Saerens, P Latinne and C Decaestecker

RBF neural network center selection based on Fisher ratio class separability measure

KZ Mao

Fast orthogonal forward selection algorithm for feature subset selection

KZ Mao

Efficient tuning of SVM hyperparameters using radius/margin bound and iterative algorithms

SS Keerthi

Some extensions of a new method to analyze complete stability of neural networks

M. Forti

An analysis of global asymptotic stability of delayed cellular neural networks

S Arik

Improved neural network for SVM learning

D Anguita and A Boni

Nonlinear model structure design and construction using orthogonal least squares and D-optimality design

X Hong and CJ Harris

IEEE Transactions on Pattern Analysis and Machine Intelligence

Vol. 24 No. 8

Articles

On the individuality of fingerprints

S Pankanti, S Prabhakar and AK Jain

Blobworld: Image segmentation using expectation-maximization and its application to image querying

C Carson, S Belongie, H Greenspan and J Malik

An algorithm with reduced operations for connected components detection in ITU-T group 3/4 coded images

E Regentova, S Latifi, S Deng and DS Yao

An object-oriented progressive-simplification-based vectorization system for engineering drawings: Model, algorithm, and performance

JQ Song, F Su, CL Tai and SJ Cai

Extraction of 2D motion trajectories and its application to hand gesture recognition

MH Yang, N Ahuja and M Tabb

Discovering useful concept prototypes for classification based on filtering and abstraction

W Lam, CK Keung and DY Liu

Human activity recognition using multidimensional indexing

J Ben-Arie, ZQ Wang, P Pandit and S Rajaram

Surface signatures: An orientation independent free-form surface representation scheme for the purpose of objects registration and matching

SM Yamany and AA Farag

Online fingerprint template improvement

XD Jiang and W Ser

Detecting binocular half-occlusions: Empirical comparisons of five approaches

G Egnal and RP Wildes

Bidirectional deformable matching with application to handwritten character extraction

KW Cheung, DY Yeung and RT Chin

Match propagation for image-based modeling and rendering

M Lhuillier and L Quan

Normalized Kemeny and Snell distance: A novel metric for quantitative evaluation of rank-order similarity of images

JB Luo, SP Etz, RT Gray and A Singhal

Vol. 24 No. 9

Articles

Information-theoretic bounds on target recognition performance based on degraded image data

A Jain, P Moulin, MI Miller and K Ramchandran

- Limits on super-resolution and how to break them
S Baker and T Kanade
- Constructing boosting algorithms from SVMs: An application to one-class classification
G Ratsch, S Mika, B Scholkopf and KR Muller
- Universal analytical forms for modeling image probabilities
A Srivastava, XW Liu and U Grenander
- Robust factorization
H Aanaes, R Fisker, K Astrom and JM Carstensen
- Depth estimation from image structure
A Torralba and A Oliva
- A multiscale method for the reassembly of two-dimensional fragmented objects
HCD Leitao and J Stolfi
- A region-based fuzzy feature matching approach to content-based image retrieval
YX Chen and JZ Wang
- Camera self-calibration from unknown planar structures enforcing the multiview constraints between collineations
E Malis and R Cipolla
- A maximum variance cluster algorithm
CJ Veenman, MJT Reinders and E Backer
- Locally adaptive metric nearest-neighbor classification
C Domeniconi, J Peng and D Gunopulos
- Oriented structure of the occlusion distortion: Is it reliable?
WC Yu, G Sommer, S Beauchemin and K Daniilidis
- An HMM-based segmentation method for traffic monitoring movies
J Kato, T Watanabe, S Joga, J Rittscher and A Blake

Vol. 24 No. 10**Articles**

- Generalized spatio-chromatic diffusion
G Boccignone, M Ferraro and T Caelli
- Elastically adaptive deformable models
DN Metaxas and IA Kakadiaris
- Analytic PCA construction for theoretical analysis of lighting variability in images of a Lambertian object
R Ramamoorthi
- Generalized mosaicing: Wide field of view multispectral imaging
YY Schechner and SK Nayar
- Efficient simplicial reconstructions of manifolds from their samples
D Freedman
- Reconstructing surfaces by volumetric regularization using radial basis functions
HQ Dinh, G Turk and G Slabaugh
- A maximum-likelihood surface estimator for dense range data
RT Whitaker and J Gregor
- Automatic multilevel thresholding for image segmentation by the growing time adaptive self-organizing map
H Shah-Hosseini and R Safabakhsh
- Infrared-image classification using hidden Markov trees
P Bharadwaj and L Carin
- Restoration of archival documents using a wavelet technique
CL Tan, RN Cao and PY Shen
- Estimating the intrinsic dimension of data with a fractal-based method
F Camastra and A Vinciarelli

IEEE Transactions on Robotics and Automation**Vol. 18 No. 3****Articles**

- Manipulability, force, and compliance analysis for planar continuum manipulators
IA Gravagne and ID Walker
- Spatial stiffness realization with parallel springs using geometric parameters
KW Choi, SL Jiang and ZX Li
- Dynamic model with slip for wheeled omnidirectional robots
RL Williams, BE Carter, P Gallina and G Rosati
- Controllers for unicycle-type wheeled robots: Theoretical results and experimental validation
B Kim and P Tsiotras
- Behavior-based robot navigation on challenging terrain: A fuzzy logic approach
H Seraji and A Howard
- Positioning a camera with respect to planar objects of unknown shape by coupling 2-D visual servoing and 3-D estimations
C Collewet and F Chaumette
- An SVD-based projection method for interpolation on SE(3)
C Belta and V Kumar

- Robust supervisory control policies for manufacturing systems with unreliable resources
MA Lawley and W Sulistyono
- Fluid-stochastic-event graphs for evaluation and optimization of discrete-event systems with failures
XL Xie
- Eclipse II: A new parallel mechanism enabling continuous 360-degree spinning plus three-axis translational motions
J Kim, JC Hwang, JS Kim, CC Iurascu, FC Park and YM Cho
- Adaptive SP-D control of a robotic manipulator in the presence of modeling error in a gravity regressor matrix: Theory and experiment
H Yazarel, CC Cheah and HC Liaw
- Experimental verifications of virtual-decomposition-based motion/force control
WH Zhu and J De Schutter
- Two solutions to the adaptive visual servoing problem
A Astolfi, L Hsu, MS Netto and R Ortega
- Hough transform for distance computation and collision avoidance
EJ Bernabeu and J Tornero
- The odometry error of a mobile robot with a synchronous drive system
A Martinelli

International Journal of Computer Vision**Vol. 49 No. 1****Articles**

- Appearance-based structure from motion using linear classes of 3-D models
SB Kang and M Jones
- Epipolar geometry for central catadioptric cameras
T Svoboda and T Pajdla
- A VLSI-compatible computer vision algorithm for stereoscopic depth analysis in real-time
B Porr, B Nurnberg and F Worgotter

- Partially occluded object recognition using statistical models
ZR Ying and D Castanon

- Algorithmic fusion for more robust feature tracking
B McCane, B Galvin and K Novins

Vol. 49 Nos. 2–3**Articles**

- Untitled
KN Kutulakos and A Shashua

Factorization with uncertainty
P Anandan and M Irani

Linear multi view reconstruction and camera recovery
using a reference plane

C Rother and S Carlsson

Scalable extrinsic calibration of omni-directional image
networks

M Antone and S Teller

Multi-view scene capture by surfel sampling: From video
streams to non-rigid 3D motion, shape and reflectance

RL Carceroni and KN Kutulakos

Helmholtz stereopsis: Exploiting reciprocity for surface
reconstruction

TE Zickler, PN Belhumeur and DJ Kriegman

Relighting with the reflected irradiance field:

Representation, sampling and reconstruction

ZC Lin, TT Wong and HY Shum

Vol. 50 No. 1

Articles

Towards active machine-vision-based driver assistance for
urban areas

F Heimes and HH Nagel

Bayesian model estimation and selection for epipolar

geometry and generic manifold fitting

PHS Torr

Vol. 50 No. 2

Articles

Guest introduction: The changing shape of computer vision
in the twenty-first century

M Shah

Visual estimation and compression of facial motion
parameters – Elements of a 3D model-based video coding
system

H Tao and TS Huang

Motion-based video representation for scene change
detection

CW Ngo, TC Pong and HJ Zhang

Modeling and animating realistic faces from images

F Pighin, R Szeliski and DH Salesin

Natural language description of human activities from
video images based on concept hierarchy of actions

A Kojima, T Tamura and K Fukunaga

Rendering by manifold hopping

HY Shum, LF Wang, JX Chai and X Tong

View-invariant representation and recognition of actions

C Rao, A Yilmaz and M Shah

International Journal of Intelligent Systems

Vol. 17 No. 8

Articles

Introduction: Intelligent systems for process monitoring
and diagnosis

D Ruan

Heuristic, systematic, and informational regularization for
process monitoring

AV Gribok, JW Hines, A Urmanov and RE Uhrig

A hybrid fuzzy-fractal approach for time series analysis
and plant monitoring

O Castillo and P Melin

Plant diagnostics by transient classification: The
ALADDIN approach

D Roverso

Hidden Markov model-based real-time transient
identifications in nuclear power plants

KC Kwon, JH Kim and PH Seong

An application of genetic algorithms to surveillance test
optimization of a PWR auxiliary feedwater system

CMF Lapa, CMNA Pereira and PFFE Melo

Vol. 17 No. 9

Articles

Editorial Introduction

T Martin

Fuzzy unification and first order probabilistic logic

M Piastra

A similarity-based resolution rule

FA Fontana and F Formato

Uncertain fuzzy values still in the framework of first-order
logic

O Pons, JC Cubero, A Gonzalez and MA Vila

Towards an automated deduction system for first-order
possibilistic logic programming with fuzzy constants

T Alsinet and L Godo

International Journal of Software Engineering and Knowledge Engineering

Vol. 12 No. 2

Special issue: Embedded software engineering

Introduction

Y Deng and FB Bastani

Component-based embedded software engineering:
Development framework, quality assurance and a generic
assessment environment

X Cai, MR Lyu and KF Wong

Development of wireless embedded systems using
component based software

SJH Yang, JJP Tsai and I Chen

From scenarios to hierarchical broadcasting software
architectures using UML-RT

I Kruger, W Prenninger, R Sandner and M Broy

Automated generation of test trajectories for embedded
flight control systems

B Cukic, BJ Taylor and H Singh

Predicting fault-prone modules in embedded systems using
analogy-based classification models

TM Khoshgoftaar, B Cukic and N Seliya

Vol. 12 No. 3

Articles

A software test and evaluation environment based on
longitudinal database

S Ohara, F Tsunoda, H Maezawa, AK Onoma, M Hui,

T Wang, PCY Sheu and R Paul

A formal framework to support workflow adaptation

SZ Liu and AGE Soong

Test Agent System

J Choi and B Choi

Association analysis of software measures

W Pedrycz, G Succi and MG Chun

A feature-oriented copyright owner proving technique for
still images

CC Chang, KF Hwang and MS Hwang

Journal of Intelligent & Robotic Systems

Vol. 34 No. 4

Articles

Flexible-joint and flexible-link robots

S Tzafestas

Robust linear control of flexible joint robot systems

HA ElMaraghy, T Lahdhiri and F Ciuca

Geometric calibration of robots with flexible joints and links

W Khalil and S Besnard

Flexible links manipulators: from modelling to control

M Benosman, F Boyer, G Le Vey and D Primault

Augmented sliding mode control for flexible link manipulators

DG Wilson, RD Robinett, GG Parker and GP Starr

Hybrid control scheme for robust tracking of two-link flexible manipulator

SH Lee and CW Lee

Observer-based adaptive controller design of flexible manipulators using time-delay neuro-fuzzy networks

H Deng, FC Sun and ZQ Sun

Robustness comparative study of two control schemes for 3-DOF flexible manipulators

V Feliu, JA Somolinos, A Garcia and L Sanchez

Observer-based optimal control of flexible Stewart parallel

robots

S Tzafestas, M Kotsis and T Pimenides

Vol. 35 No. 1

Articles

A mobile agents approach to virtual laboratories and remote supervision

LM Camarinha-Matos, O Castolo and W Vieira

Environment modelling for robot navigation using VLSI-efficient logarithmic approximation method

SK Lam and T Srikanthan

Robotic tasks using path control: Two case studies

J Moreno and R Kelly

CAD-vision-range-based self-localization for mobile robot using one landmark

XJ Li, ATP So and SK Tso

Basic theoretical results for describing expert systems.

Application to the supervision of adaptation transients in a planar robot

M De la Sen, JJ Minambres, AJ Garrido, A Almansa and JC Soto

Analyzing the multiple-target-multiple-agent scenario using optimal assignment algorithms

KS Kwok, BJ Driessen, CA Phillips and CA Tovey

Journal of Intelligent Manufacturing

Vol. 13 No. 5

Articles

Internet-based manufacturing: A review and a new infrastructure for distributed intelligent manufacturing

GY Tian, GF Yin and D Taylor

Robust design of flexible manufacturing systems using colored Petri net and genetic algorithm

K Saitou, S Malpathak and H Qvam

Variable neighborhood decomposition search for the optimization of power plant cable layout

MC Costa, FR Monclar and M Zrikem

A fuzzy AHP approach to the determination of importance weights of customer requirements in quality function deployment

CK Kwong and H Bai

Improving machining accuracy in precision line boring

MG Mehrabi, G O'Neal, BK Min, Z Pasek, Y Koren and P Szuba

A spline algorithm for modeling cutting errors on turning centers

DE Gilsinn, HT Bandy and AV Ling

Journal of Symbolic Computation

Vol. 33 No. 5

Articles

Computer algebra: Selected papers from ISSAC 2001 – Preface

G Villard

Rational normal forms and minimal decompositions of hypergeometric terms

SA Abramov and M Petkovsek

On multivariate rational function decomposition

J Gutierrez, R Rubio and D Sevilla

Scalable parallel coset enumeration: Bulk definition and the memory wall

G Cooperman and V Grinberg

Hybrid sparse resultant matrices for bivariate polynomials

C D'Andrea and IZ Emir

Derivations and radicals of polynomial ideals over fields of arbitrary characteristic

E Fortuna, P Gianni and B Trager

An iterated eigenvalue algorithm for approximating roots of univariate polynomials

S Fortune

On computer-assisted classification of coupled integrable equations

MV Foursov and MM Maza

Irreducible decomposition of curves

A Galligo and D Rupprecht

Relations between roots and coefficients, interpolation and application to system solving

B Mourrain and O Ruatta

Univariate polynomials: Nearly optimal algorithms for numerical factorization and root-finding

VY Pan

A probabilistic algorithm to test local algebraic observability in polynomial time

A Sedoglavic

Subquadratic computation of vector generating polynomials and improvement of the block Wiedemann algorithm

E Thome

Vol. 33 No. 6

Articles

Cancellative Abelian monoids and related structures in refutational theorem proving (part I)

U Waldmann

Cancellative Abelian monoids and related structures in refutational theorem proving (part II)

U Waldmann

Normal parametrizations of algebraic plane curves

JR Sendra

Calculating the Galois group of $Y' = AY + B$, $Y' = AY$ completely reducible

P Berman

Vol. 34 No. 1**Articles**

Orbit-stabilizer problems and computing normalizers for polycyclic groups

B Eick

Modular termination proofs for rewriting using dependency pairs

J Giesl, T Arts and E Ohlebusch

Barnett's theorems about the greatest common divisor of several univariate polynomials through Bezout-like matrices

GM Diaz-Toca and L Gonzalez-Vega

Quartic fields and radical extensions

H Chu and MC Kang

Vol. 34 No. 2**Articles**

Identifying half-twists using randomized algorithm methods

S Kaplan and M Teicher

Computation of the dual of a plane projective curve

D Bouziane and M El Kahoui

Elimination theory in codimension 2

A Dickenstein and B Sturmfels

On the resolution of resultant type equations

I Gaal

Interval arithmetic in cylindrical algebraic decomposition

GE Collins, JR Johnson and W Krandick

Knowledge-Based Systems**Vol. 15 No. 7****Articles**

Message passing between individual and socially acquainted objects in Smalltalk

A Demaid and J Zucker

SL method for computing a near-optimal solution using linear and non-linear programming in cost-based hypothetical reasoning

M Ishizuka and Y Matsuo

Formalization of weighted factors analysis

A Hessami and A Hunter

Formalising optimal feature weight setting in case based diagnosis as linear programming problems

L Zhang, F Coenen and P Leng

Mining the optimal class association rule set

JY Li, H Shen and R Topor

An approach to developing computational supports for reciprocal tutoring

CY Chou, CJ Lin and TW Chan

Modeling discourse in collaborative work support systems:

A knowledge representation and configuration perspective

N Karacapilidis

Knowledge organisation of product design blackboard systems via graph decomposition

CH Chen, T Wu and LG Occena

Vol. 15 No. 8**Articles**

Knowledge acquisition for expert systems in accounting and financial problem domains

WP Wagner, J Otto and QB Chung

A knowledge-based approach for managing urban infrastructures

A Quintero and S Pierre

Knowledge flow management for distributed team software development

H Zhuge

A knowledge-based approach for business process reengineering, SHAMASH

R Aler, D Borrajo, D Camacho and A Sierra-Alonso

Multi-agent collaboration for B2B workflow monitoring

DM Xu and HQ Wang

A knowledge intensive multi-agent framework for cooperative/collaborative design modeling and decision support of assemblies

XF Zha

TCRM: diagnosing tuple inconsistency for granulized datasets

CH Wu

Hybrid decision tree

ZH Zhou and ZQ Chen

Kybernetes**Vol. 31 Nos. 3-4****Articles**

Preface – Special double issue – Contemporary cybernetic and systemic researches

BH Rudall

Evolution of intelligence – Direct modeling of temporal effects of environment on a global absolute scale vs statistics

HM Hubey

Temporal and simultaneous processing in the brain: a possible cellular basis of cognition

U Fidelman

Direct and indirect causality in living systems

M Lloret-Climent

Physical system theory: fundamentals, recent developments and relationships with system dynamics

Sushil

Neural network process vision systems for flotation process

HCS Rughooputh and SDDV Rughooputh

A new approach to solve a diffusion-convection problem

M Inc and Y Cherruault

An expert system for the selection of strategic planning technique

S Subramoniam and KV Krishnankutty

Semantics of L(M-T): a language for ecological modelling

JL Uso-Domenech and P Sastre-Vazquez

Approximation of the solution for a class of first order p.d.e. by Adomian method

S Khelifa and Y Cherruault

A cybernetic approach to the multiscale minimization of energy function: Grey level image segmentation

P Arques, P Compan, R Molina, M Pujol and R Rizo

Internet commentary

AM Andrew

ISAAC: Irreducible semi-autonomous adaptive combat

A Adamatzky

Vol. 31 Nos. 5-6**Articles**

Contemporary systems and cybernetics

BH Rudall

Reaction-diffusion and ant-based load balancing of communication networks

A Adamatzky and O Holland

Scaling observation with complex-valued coefficients: some remarks and prospects

G Jumarie

Approximation of several variables functions by products or sums of one variable functions

A Benabidallah, Y Cherruault and Y Tourbier

On the analysis and modelling of computer communication systems

I Hanuliak

Dynamic modelling and optimal time-energy off-line programming of mobile robots – A cybernetic problem

A Khoukhi

On the solution of the non-linear Korteweg-de Vries equation by the decomposition method

Y Cherruault, M Inc and K Abbaoui

Contemporary systems and cybernetics

BH Rudall

Internet commentary

AM Andrew

Productions and rules in artificial intelligence

VL Stefanuk and AV Zhozhikashvili

Multiagent communication combining genetic programming and pheromone communication

KJ Mackin and E Tazaki

Biomedical and biocybernetics applications – The decomposition method for solving first order partial differential equations

S Khelifa and Y Cherruault

Line-oriented two-dimensional parallel computer languages

ET Lee

Improvement of convergence of Adomian's method using Pade approximants

M Chrysos, F Sanchez and Y Cherruault

Case-based reasoning model applied as a decision support for construction projects

G Cirovic and Z Cekic

The design of hybrid fuzzy controllers based on genetic algorithms and estimation techniques

SK Oh and W Pedrycz

New Generation Computing

Vol. 20 No. 4

Articles

Mathematical models of quantum computation

T Nishino

Functional queries in Datalog

S Basta, S Flesca and S Greco

PAN: A portable, parallel Prolog: Its design, realisation and performance

G Xirogiannis and H Taylor