

From the journals . . .

Applied Artificial Intelligence

Vol. 15 No. 6

Articles

The virtual other: Aspects of social interaction with synthetic characters

S Payr

Conceptual modeling of multimedia objects for user-tailored information presentations

G Vouros

A stroke-based neuro-fuzzy system for handwritten Chinese character recognition

JW Lin, SJ Lee and HT Yang

Using statutes-based IR to drive legal CBR

MT Elhadi

Vol. 15 No. 7

Articles

A novel hybrid genetic algorithm using local optimizer based on heuristic pattern move

YG Xu, GR Li and ZP Wu

Cooling load prediction in a district heating and cooling system through simplified robust filter and multilayered neural network

M Sakawa, K Kato and S Ushiro

A new method for generating fuzzy rules from numerical data for handling classification problems

SM Chen, SH Lee and CH Lee

Personalized web-document filtering using reinforcement learning

BT Zhang and YW Seo

Vol. 15 No. 8

Articles

Machine learning in computer vision

F Esposito and D Malerba

Learning spatio-temporal relational structures

WF Bischof and T Caelli

A vision system for symbolic interpretation of dynamic scenes using ARSOM

A Chella, D Guarino, I Infantino and R Pirrone

A trainable system for grading fish from images

F Odone, E Trucco and A Verri

Improving the accuracy of decision tree induction by feature preselection

P Perner

A model of abstraction in visual perception

L Saitta and JD Zucker

Vision system development by machine learning: Mashing assessment in brewing

A Song, V Ciesielski and P Rogers

Applied Intelligence

Vol. 15 No. 3

Articles

Simulated evolution and learning: An introduction

X Yao and RI McKay

Robust evolution strategies

K Ohkura, Y Matsumura and K Ueda

Adapting self-adaptive parameters in evolutionary

algorithms

KH Liang, X Yao and CS Newton

Scaling up inductive logic programming: An evolutionary wrapper approach

PGK Reiser and PJ Riddle

A memetic approach to the nurse rostering problem

E Burke, P Cowling, P De Causmaecker and GV Berghe

Artificial Intelligence

Vol. 130 No. 2

Articles

Influence-based model decomposition for reasoning about spatially distributed physical systems

C Bailey-Kellogg and F Zhao

Robust combinatorial auction protocol against false-name bids

M Yokoo, Y Sakurai and S Matsubara

The MIT encyclopedia of the cognitive sciences

C Carr

The MIT encyclopedia of the cognitive sciences

BJ Dorr

The MIT encyclopedia of the cognitive sciences

P Husbands

The MIT encyclopedia of the cognitive sciences

G Lakoff

The MIT encyclopedia of the cognitive sciences

Y Okamoto

The MIT encyclopedia of the cognitive sciences

DM Peterson

The scope of the cognitive sciences: Reply to 6 reviews of The MIT Encyclopedia of the Cognitive Sciences

FC Keil

The cognitive sciences: A comment on 6 reviews of The MIT Encyclopedia of the Cognitive Sciences

RA Wilson

Vol. 131 Nos. 1–2

Articles

The Qualification Problem: A solution to the problem of anomalous models

M Thielscher

Evaluating general purpose automated theorem proving systems

G Sutcliffe, C Suttner

Dynamic tunneling based regularization in feedforward neural networks

YP Singh and P RoyChowdhury

Planning the project management way: Efficient planning by effective integration of causal and resource reasoning in RealPlan

B Srivastava, S Kambhampati and MB Do

A comparison of point-based approaches to qualitative temporal reasoning

J Delgrande, A Gupta and T Van Allen

On functional dependencies in q-Horn theories

T Ibaraki, A Kogan and K Makino

"Field Reviews": A new style of review article for Artificial Intelligence

AG Cohn and D Perlis

On the state of the art in machine learning: A personal review

PA Flach

Author's response to reviews of Machine Learning
T Mitchell

Vol. 132 No. 1

Articles

Artificial nonmonotonic neural networks

B Boutsinas and MN Vrahatis

Computer go: An AI oriented survey

B Bouzy and T Cazenave

Determining if conflict-directed backjumping visits a given node is NP-hard

BSW Schroder

Artificial Intelligence in Engineering

Vol. 15 No. 2

Articles

Conceptual modeling in design

M Rosenman and SJ Simoff

Phenomenological foundations of conceptual product modelling in architecture, engineering and construction

Z Turk

Incremental modelling of ambiguous geometric ideas (I-MAGI): representation and maintenance of vague geometry

SW Lim, BS Lee and AHB Duffy

Some conceptual issues in component-assembly modelling

M Rosenman and SJ Simoff

Design ontology in context – a situated cognition approach to conceptual modelling

D Richards and SJ Simoff

Knowledge level model of an individual designer as an agent in collaborative distributed design

FMT Brazier, LV Moshkina and NJE Wijngaards

Knowledge modeling for design decisions

F Mili, W Shen, I Martinez, P Noel, M Ram and

E Zouras

Conceptual modeling for configuration of mass-customizable products

A Felfernig, G Friedrich and D Jannach

Development of a maintenance management model based on IAI standards

MA Hassanain, TM Froese and DJ Vanier

A model-driven approach to the development of an architectural object model

A Hendricx and H Neuckermans

Conceptual modeling from natural language functional specifications

A Gangopadhyay

Generating code for engineering design systems using software patterns

J Peckham and B MacKellar

Artificial Intelligence Review

Vol. 16 No. 2

Articles

Efficient case-based structure generation for design support

K Borner

Current directions in computational humour

G Ritchie

Conceptual spaces for computer vision representations

A Chella, M Frixione and S Gaglio

Scalable parallel genetic algorithms

W Rivera

Vol. 16 No. 3

Articles

Understanding the crucial role of attribute interaction in data mining

AA Freitas

Incremental evolution in ANNs: Neural nets which grow

C MacLeod and GM Maxwell

Goal-seeking behavior in a connectionist model

TE Portegys

Expert Systems With Applications

Vol. 21 No. 1

Articles

Quasi-optimal case-selective neural network model for software effort estimation

ES Jun and JK Lee

GART: a tool for experimenting with approximate reasoning models

P Baroni, G Guida and M Zanella

Neural networks as a tool for developing and validating business heuristics

S Walczak

A study on time series pattern extraction and processing for competitive intelligence support

ST Yuan and MZ Huang

Vol. 21 No. 2

Articles

If you are a dog lover, build expert systems; if you are a cat lover, build neural networks

J Liebowitz

A knowledge-based system to assist university administrators in meeting disability act requirements

EW Stein, MP Manco and SA Manco

ALEES: an agricultural loan evaluation expert system

K Bryant

Knowledge based approach for productivity adjusted construction schedule

AN Mohamed

Knowledge-based parametric design of mechanical products based on configuration design method

S Myung and SH Han

IEEE Transactions on Knowledge and Data Engineering

Vol. 13 No. 4

Articles

A new approach to online generation of association rules
CC Aggarwal and PS Yu
Toward multidatabase mining: Identifying relevant databases

H Liu, HJ Lu and J Yao

A parametric approach to deductive databases with uncertainty

LVS Lakshmanan and N Shiri

Locating objects in mobile computing

E Pitoura and G Samaras

Segmented Information Dispersal (SID) data layouts for digital video servers

A Cohen and WA Burkhard

A spatio-temporal semantic model for multimedia database systems and multimedia information systems

SC Chen and RL Kashyap

Performance analysis of distributed deadlock detection algorithms

S Lee and JL Kim

Criss-cross hash joins: Design and analysis

RD Gopal, R Ramesh and S Zions

SEE: A spatial exploration environment based on a direct-manipulation paradigm

SR Kaushik and EA Rundensteiner

SQL/SDA: A query language for supporting spatial data analysis and its Web-based implementation

H Lin and B Huang

Toward Web-based application management systems

A Gal and J Mylopoulos

DOLPHIN: Digital online library providing human-like interactive navigation

Y Seki and T Hidaka

A dynamic manifestation approach for providing universal access to digital library objects

NR Adam, V Atluri, I Adiwijaya, S Banerjee and R Holowczak

Vol. 13 No. 5

Articles

Introduction to the Special Section on the Fifth International Workshop on Multimedia Information Systems

L Golubchik, SK Tripathi and VJ Tsotras

Scheduling algorithms for the broadcast delivery of digital products

JL Wolf, MS Squillante, JJ Turek, PS Yu and

J Sethuraman

Minimizing bandwidth requirements for on-demand data delivery

D Eager, M Vernon and J Zahorjan

Indexing animated objects using spatiotemporal access methods

G Kollios, VJ Tsotras, D Gunopulos, A Delis and M Hadjieleftheriou

Constructing communication subgraphs and deriving an optimal synchronization interval for distributed virtual environment systems

JCS Lui

Hierarchical case-based reasoning integrating case-based and decompositional problem-solving techniques for plant-control software design

B Smyth, MT Keane and P Cunningham

Nondeterministic, nonmonotonic logic databases

F Giannotti, G Manco, M Nanni and D Pedreschi

A query model to synthesize answer intervals from indexed video units

S Pradhan, K Tajima and K Tanaka

A graph-based approach for discovering various types of association rules

SJ Yen and ALP Chen

Learning similarity matching in multimedia content-based retrieval

JH Lim, JK Wu, S Singh and D Narasimhalu

Scalable color image indexing and retrieval using vector wavelets

E Albuz, E Kocalar and AA Khokhar

Integrating security and real-time requirements using covert channel capacity (vol 12, pg 865, 2000)

SH Son, R Mulkamala and R David

IEEE Transactions on Neural Networks

Vol. 12 No. 4

Articles

Introduction to the special issue on neural networks in financial engineering

YS Abu-Mostafa, AF Atiya, M Magdon-Ismael and H White

Statistical inference, the bootstrap, and neural-network modeling with application to foreign exchange rates

H White and J Racine

Semiparametric ARX neural-network models with an application to forecasting inflation

XH Chen, J Racine and NR Swanson

The equivalent martingale measure: An introduction to pricing using expectations

M Magdon-Ismael

Regression methods for pricing complex American-Style options

JN Tsitsiklis and B Van Roy

Evolutionary computation and the vega risk of American put options

C Keber and MG Schuster

Risk-neutral density extraction from option prices: Improved pricing with mixture density networks

C Schittenkopf and G Dorffner

Pricing and hedging derivative securities with neural networks: Bayesian regularization, early stopping, and bagging

R Gencay and M Qi

Multiagent modeling of multiple FX-markets by neural networks

HG Zimmermann, R Neuneier and R Grothmann

Computational learning techniques for intraday FX trading using popular technical indicators

MAH Dempster, TW Payne, Y Romahi and GWP Thompson

Modeling exchange rates: Smooth transitions, neural networks, and linear models

MC Medeiros, A Veiga and CE Pedreira

Multiresolution forecasting for futures trading using wavelet decompositions

BL Zhang, R Coggins, MA Jabri, D Dersch and B Flower

Optimization of trading physics models of markets

L Ingber and RP Mondescu

Financial model calibration using consistency hints

YS Abu-Mostafa

- Financial time series prediction using least squares support vector machines within the evidence framework
T Van Gestel, JAK Suykens, DE Baestaens, A Lambrechts, G Lanckriet, B Vandaele, B De Moor and J Vandewalle
- BYY harmony learning, independent state space, and generalized APT financial analyses
L Xu
- Forecasting volatility with neural regression: A contribution to model adequacy
APN Refenes and WT Holt
- Financial volatility trading using recurrent neural networks
P Tino, C Schittenkopf and G Dorffner
- Learning to trade via direct reinforcement
J Moody and M Saffell
- Cost functions and model combination for VaR-based asset allocation using neural networks
N Chapados and Y Bengio
- A comparison of nonlinear methods for predicting earnings surprises and returns
V Dhar and DS Chou
- A comparison of linear and nonlinear statistical techniques in performance attribution
NH Chan and CR Genovese
- Bankruptcy prediction for credit risk using neural networks: A survey and new results
AF Atiya
- Bankruptcy analysis with self-organizing maps in learning metrics
S Kaski, J Sinkkonen and J Peltonen
- Vol. 12 No. 5**
- Articles**
- Theoretical properties of recursive neural networks with linear neurons
M Bianchini, M Gori and F Scarselli
- Geometric neural computing
EJ Bayro-Corrochano
- Shared kernel models for class conditional density estimation
MK Titsias and AC Likas
- Aitken-based acceleration methods for assessing convergence of multilayer neural networks
RS Pilla, SV Kamarthi and BG Lindsay
- Nonlinear system modeling via knot-optimizing B-Spline networks
KFC Yiu, S Wang, KL Teo and AC Tsoi
- Classification of noisy signals using fuzzy ARTMAP neural networks
D Charalampidis, T Kasparis and M Georgiopoulos
- Using localizing learning to improve supervised learning algorithms
S Weaver, L Baird and M Polycarpou
- Weighted least squares training of support vector classifiers leading to compact and adaptive schemes
A Navia-Vazquez, F Perez-Cruz, A Artes-Rodriguez and AR Figueiras-Vidal
- Multiwavelet neural network and its approximation properties
LC Jiao, J Pan and YW Fang
- A neural network for shortest path computation
F Araujo, B Ribeiro and L Rodrigues
- A new gradient-based neural network for solving linear and quadratic programming problems
Y Leung, KZ Chen, YC Jiao, XB Gao and KS Leung
- Perceiving geometric patterns: From spirals to inside-outside relations
K Chen and DL Wang
- Adaptive observer backstepping control using neural networks
JY Choi and JA Farrell
- Control of a class of nonlinear discrete-time systems using multilayer neural networks
S Jagannathan
- Neural-network control of mobile manipulators
S Lin and AA Goldenberg
- Weighted centroid neural network for edge preserving image compression
DC Park and YJ Woo
- Vector quantization of images using modified adaptive resonance algorithm for hierarchical clustering
N Vlajic and HC Card
- Prediction of noisy chaotic time series using an optimal radial basis function neural network
H Leung, T Lo and SC Wang
- Classification of freeway traffic patterns for incident detection using constructive probabilistic neural networks
X Jin, D Srinivasan and RL Cheu
- Adaptive pattern recognition in the analysis of cardiocotographic records
O Fontenla-Romero, A Alonso-Betanzos and B Guijarro-Berdinas
- Temporal updating scheme for probabilistic neural network with application to satellite cloud classification – Further results
MR Azimi-Sadjadi, WF Gao, TH Vonder Haar and D Reinke
- Neural computation approach for developing a 3-D shape reconstruction model
SY Cho and TWS Chow
- A cross-associative neural network for SVD of nonsquared data matrix in signal processing
DZ Feng, Z Bao and XD Zhang
- Improving Leung's bidirectional learning rule for associative memories
B Lenze
- An improved Voronoi-diagram-based neural net for pattern classification
C Gentile and M Sznajder
- Efficient training of RBF neural networks for pattern recognition
F Lampariello and M Sciairone
- Cooperative updating in the Hopfield model
T Munehisa, M Kobayashi and H Yamazaki
- A neural network with asymmetric basis functions for feature extraction of ECG P waves
ED Botter, CL Nascimento and T Yoneyama
- The generalization error of the symmetric and scaled support vector machines
JF Feng and P Williams
- Relaxation of the stability condition of the complex-valued neural networks
DL Lee
- Some queries on "Comments on 'Approximation capability in $C((R)\text{over-bar}(n))$ by multilayer feedforward networks and related problems'"
TP Chen

IEEE Transactions on Pattern Analysis and Machine Intelligence

Vol. 23 No. 8

Articles

- Hybrid evolutionary search method based on clusters
M Li and HY Tam
- Unsupervised segmentation of color-texture regions in images and video
YN Deng and BS Manjunath
- The trace transform and its applications
A Kadyrov and M Petrou
- N-dimensional tensor voting and application to epipolar geometry estimation
CK Tang, G Medioni and MS Lee
- Using association rules as texture features
JA Rushing, HS Ranganath, TH Hinke and SJ Graves

A combined latent class and trait model for the analysis and visualization of discrete data

A Kaban and M Girolami

Event detection and analysis from video streams

G Medioni, I Cohen, F Bremond, S Hongeng and R Nevatia

Genetic algorithm wavelet design for signal classification

E Jones, P Runkle, N Dasgupta, L Couchman and L Carin

On active camera control and camera motion recovery with foveate wavelet transform

J Wei and ZN Li

On fusers that perform better than best sensor

NSV Rao

Minimum-entropy data partitioning using reversible jump

Markov chain Monte Carlo

SJ Roberts, C Holmes and D Denison

Multiple illuminant direction detection with application to image synthesis

YF Zhang and YH Yang

Q-warping: Direct computation of quadratic reference surfaces

A Shashua and Y Wexler

Vol. 23 No. 9

Articles

On the pattern recognition of noisy subsequence trees

BJ Oommen and RKS Loke

SIMPLcity: Semantics-sensitive integrated matching for picture libraries

JZ Wang, J Li and G Wiederhold

A fast nearest-neighbor algorithm based on a principal axis search tree

J McNames

Multispace KL for pattern representation and classification

R Cappelli, D Maio and D Maltoni

Hidden Markov models with patterns to learn Boolean vector sequences and application to the built-in self-test for integrated circuits

L Brehelin, O Gascuel and G Caraux

Offline general handwritten word recognition using an approximate BEAM matching algorithm

JT Favata

A simple strategy for calibrating the geometry of light sources

MW Powell, S Sarkar and D Goldgof

Sectored snakes: Evaluating learned-energy segmentations

SD Fenster and JR Kender

Curvature estimation in oriented patterns using curvilinear models applied to gradient vector fields

J van de Weijer, LJ van Vliet, PW Verbeek and M van Ginkel

Laminae-based feature recognition

T Lim, J Corney and DER Clark

Vol. 23 No. 10

Articles

Introduction to the special section on graph algorithms in computer vision

S Dickinson, M Pelillo and R Zabih

Self-organization in vision: Stochastic clustering for image segmentation, perceptual grouping, and image database organization

Y Gdalyahu, D Weinshall and M Werman

Globally optimal regions and boundaries as minimum ratio weight cycles

IH Jermyn and H Ishikawa

Efficient matching and indexing of graph models in content-based retrieval

S Berretti, A Del Bimbo and E Vicario

A graph-based method for face identification from a single 2D line drawing

JZ Liu and YT Lee

Structural graph matching using the EM algorithm and singular value decomposition

B Luo and ER Hancock

Symbol recognition by error-tolerant subgraph matching between region adjacency graphs

J Lladós, E Marti and JJ Villanueva

On median graphs: Properties, algorithms, and applications

XY Jiang, A Munger and H Bunke

A dyadic wavelet affine invariant function for 2D shape recognition

MI Khalil and MM Bayoumi

A combination fingerprint classifier

A Senior

Toward machine emotional intelligence: Analysis of affective physiological state

RW Picard, E Vyzas and J Healey

Font recognition based on global texture analysis

Y Zhu, TN Tan and YH Wang

Snakes on the watershed

J Park and JM Keller

IEEE Transactions on Robotics and Automation

Vol. 17 No. 3

Articles

A solution to the simultaneous localization and map building (SLAM) problem

MWMG Dissanayake, P Newman, S Clark, HF Durrant-Whyte and M Csorba

Optimization of the simultaneous localization and map-building algorithm for real-time implementation

JE Guivant and EM Nebot

Computing the sensory uncertainty field of a vision-based localization sensor

A Adam, E Rivlin and I Shimshoni

Automatic data segmentation for geometric feature extraction from unorganized 3-D coordinate points

JB Huang and CH Meng

Planning walking patterns for a biped robot

Q Huang, K Yokoi, S Kajita, K Kaneko, H Arai, N Koyachi and K Tanie

Double active universal joint (DAUJ): Robotic joint mechanism for humanlike motions

S Ryew and H Choi

Singularity analysis of a class of composite serial in-parallel robots

N Simaan and M Shoham

Optimizing fixture layout in a point-set domain

MY Wang and DM Pelinescu

Scheduling in dual gripper robotic cells for productivity gains

SP Sethi, JB Sidney and C Sriskandarajah

Deadlock detection, prevention, and avoidance for automated tool sharing systems

NZ Gebraeel and MA Lawley

Positioning of toleranced parts in a 2-D polygonal assembly and its use in tolerance analysis

B Li and U Roy

Analytical time optimal control solution for a two-link planar acrobot with initial angular momentum

T Mita, SH Hyon and TK Nam

Design of steering mechanism and control of nonholonomic trailer systems

Y Nakamura, H Ezaki, Y Tan and W Chung

Vol. 17 No. 4

Articles

Cobot architecture

MA Peshkin, JE Colgate, W Wannasuphoprasit,

CA Moore, RB Gillespie and P Akella

A general framework for cobot control

RB Gillespie, JE Colgate and MA Peshkin

Kinematic controllability for decoupled trajectory planning in underactuated mechanical systems

F Bullo and KM Lynch

Singularity analysis of three-legged parallel robots based on passive-joint velocities

GL Yang, IM Chen, W Lin and J Angeles

Design and analysis of a redundantly actuated parallel mechanism for rapid machining

J Kim, FC Park, SJ Ryu, J Kim, JC Hwang, C Park and CC Iurascu

Sensor-based construction of a retract-like structure for a planar rod robot

H Choset and JY Lee

Set membership localization of mobile robots via angle measurements

A Garulli and A Vicino

Development of an ultrasonic motor as a fine-orienting stage

E Purwanto and S Toyama

Customer demand satisfaction in production systems: A due-time performance approach

JS Li and SM Meerkov

Design criteria for developing an automated live-bird transfer system

KM Lee

Autonomous vehicle navigation utilizing electrostatic potential fields and fuzzy logic

NC Tsourveloudis, KP Valavanis and T Hebert

Smooth motion planning for car-like vehicles

F Lamirault and JP Laumond

Automatic camera calibration for a multiple-sensor integrated coordinate measurement system

TS Shen and CH Menq

A new partitioned approach to image-based visual servo control

PI Corke and SA Hutchinson

Computation of 3-D form-closure grasps

D Ding, YH Liu and SG Wang

A closed-form forward kinematics solution for the 6–6(p) Stewart platform

P Ji and HT Wu

Forward/inverse force transmission capability analyses of fully parallel manipulators

HS Kim and YJ Choi

Fast versions of the Gilbert-Johnson-Keerthi distance algorithm: Additional results and comparisons

CJ Ong and EG Gilbert

International Journal of Computer Vision

Vol. 43 No. 3

Articles

Untitled – Introduction

JJ Clark

Active shape-from-shadows with controlled illuminant trajectories

JJ Clark and L Wang

Face recognition using the discrete cosine transform

ZM Hafed and MD Levine

Active object recognition: Looking for differences

FG Callari and FP Ferrie

On the sequential accumulation of evidence

T Arbel and FP Ferrie

Vol. 44 No. 1

Articles

Recognition, resolution, and complexity of objects subject to affine transformations

M Betke and NC Makris

Implementing a multi-model estimation method

T Vieville, D Lingrand and F Gaspard

Catadioptric stereo using planar mirrors

J Gluckman and SK Nayar

International Journal of Intelligent Systems

Vol. 16 No. 8

Articles

Processing of domain experts' knowledge for development of a KBS for risk analysis

D Janjanam

Integrating WordNet knowledge to supplement training data in semi-supervised agglomerative hierarchical clustering for text categorization

M Benkhalifa, A Mouradi and H Bouyakhf

Discover dependency pattern among attributes by using a new type of nonlinear multiregression

KB Xu, ZY Wang, ML Wong and KS Leung

Comparison of the performances of decision aimed algorithms with Bayesian and beliefs basis

F Delmotte

Systematic design method of stabilization fuzzy controllers for pendulum systems

JQ Yi, N Yubazaki and K Hirota

Product category description for web-shopping in e-commerce

RR Yager and G Pasi

Vol. 16 No. 9

Articles

Knowledge discovery in a direct marketing case using least squares support vector machines

S Viaene, B Baesens, T Van Gestel, JAK Suykens, D Van den Poel, J Vanthienen, B De Moor and G Dedene

A neural network approach to tiling problems

T Tambouratzis

Computational verb systems: The paradox of the liar

T Yang

A comparison of active set method and genetic algorithm approaches for learning weighting vectors in some aggregation operators

D Nettleton and V Torra

Financial laws as algebraic automata

SC Rambaud and JG Perez

Vol. 16 No. 10

Articles

Fusion: General concepts and characteristics

A Appriou, A Ayoun, S Benferhat, P Besnard, L Cholvy, R Cooke, F Cuppens, D Dubois, H Fargier, M Grabisch, R Kruse, J Lang, S Moral, H Prade, A Saffiotti, R Smets and C Sossai

Situation assessment based on spatially ambiguous multisensor measurements

A Appriou

Data association in multi-target detection using the transferable belief model

A Ayoun and P Smets

Conference paper assignment

S Benferhat and J Lang

Merging databases: Problems and examples

L Cholvy and S Moral

International Journal of Software Engineering and Knowledge Engineering

Vol. 11 No. 3

Special issue: Agent-based software engineering

Guest editors' introduction

P Ciancarini and M Wooldridge

Agent UML: A formalism for specifying multiagent software systems

B Bauer, JP Muller and J Odell

Multiagent systems engineering

SA Deloach, MF Wood and CH Sparkman

Interaction-oriented software development

MN Huhns

Roles in agent-oriented modeling

R Depke, R Heckel and JM Kuster

Organisational rules as an abstraction for the analysis and design of multi-agent systems

F Zambonelli, NR Jennings and M Wooldridge

Translating OODB method to RDB routine

J Fong and SK Cheung

Incremental scenario modeling using hierarchical object-oriented Petri Net

JE Hong and DH Bae

Journal of Intelligent Manufacturing

Vol. 12 No. 4

Articles

A genetic algorithm approach to the multiple machine tool selection problem

KW Keung, WH Ip and TC Lee

Supporting rescheduling using CSP, RMS and POB – an example application

G Kelleher and P Cavichiollo

Viewer-centered geometric feature recognition

MGL Sommerville, DER Clark and JR Corney

Automated knowledge acquisition for design and manufacturing: The case of micromachined atomizer

SH Huang, X Hao and M Benjamin

Combinatorial scheme for management of life cycle:

Example for concrete macrotechnology

MS Levin and ML Nisnevich

Vol. 12 Nos. 5–6

Articles

Untitled

A Dolgui and P Lacomme

A two phase optimization method for Petri net models of manufacturing systems

A Zimmermann, D Rodriguez and M Silva

A simulation optimization approach in production planning of failure prone manufacturing systems

JP Kenne and A Gharbi

A Web-based tool and a heuristic method for cooperation of manufacturing supply chain decisions

D Li, A McKay, A De Pennington and C Barnes

High performing evolutionary techniques for solving complex location problems in industrial system design

BK Cheung, A Langevin and B Villeneuve

A multiple objective grouping genetic algorithm for assembly line design

B Rekiek, P De Lit, F Pellichero, T L'Eglise, P Fouda, E Falkenauer and A Delchambre

A hospital facility layout problem finally solved

PM Hahn and J Krarup

A tabu search heuristic for the single vehicle pickup and delivery problem with time windows

A Landrieu, Y Mati and Z Binder

A Hybrid approach for integer programming combining genetic algorithms, linear programming and ordinal optimization

YC Luo, M Guignard and CH Chen

An optimization methodology for intermodal terminal management

LM Gambardella, M Mastrolilli, AE Rizzoli and M Zaffalon

A taboo search approach for deadlock-free scheduling of automated manufacturing systems

Y Mati, N Rezg and XL Xie

Journal of Symbolic Computation

Vol. 32 Nos. 1–2

Special issue on computer algebra and mechanized reasoning: Selected St. Andrews' ISSAC/Calculus 2000 contributions

Foreword

T Recio and M Kerber

Electronic communication of mathematics and the interaction of computer algebra systems and proof assistants

H Barendregt and AM Cohen

Algorithms for finite near-rings and their N-groups

F Binder and P Mayr

Two computational techniques for singularity resolution

G Bodnar and J Schicho

Formal and efficient primality proofs by use of computer algebra oracles

O Caprotti and M Oostdijk

On efficient sparse integer matrix Smith normal form computations

JG Dumas, BD Saunders and G Villard

Constructing homomorphism spaces and endomorphism rings

EL Green, LS Heath and CA Struble

The parametrization of canal surfaces and the decomposition of polynomials into a sum of two squares

G Landsmann, J Schicho and F Winkler

Computing isomorphisms of association schemes and its application

I Miyamoto

Commutative algebra in the Mizar system

P Rudnicki, C Schwarzweller and A Trybulec

Vol. 32 No. 3

Articles

Counting points on curves and Abelian varieties over finite fields

LM Adleman and MD Huang

Squarefree decomposition of univariate polynomials depending on a parameter. Application to the integration of parametric rational functions

GM Diaz-Toca and L Gonzalez-Vega

Computing local integral closures

E Hallouin

Symbolic reachability computation for families of linear vector fields

G Lafferriere, GJ Pappas and S Yovine

Constructing irreducible representations of finitely presented algebras

ES Letzter

Computing the radical of an ideal in positive characteristic

R Matsumoto

Condensation of symmetrized tensor powers

AJE Ryba

Solving the word problem for two classes of non-associative rings by rewriting

A Widiger

Vol. 32 No. 4

Special Issue on Calculemus-99: Integrating Computation and Deduction

Foreword of the guest editors

A Armando, T Jebelean

The control layer in open mechanized reasoning systems: Annotations and tactics

A Armando, A Coglio, F Giunchiglia and S Ranise

Automatic derivation of the irrationality of e

M Beeson

On the role of OpenMath in interactive mathematical documents

O Caprotti and AM Cohen

MBASE: Representing knowledge and context for the integration of mathematical software systems

M Kohlhasse and A Franke

A general framework to build contextual cover set induction provers

S Stratulat

Knowledge-Based Systems

Vol. 14 Nos. 5–6

Special issue: knowledge-based systems in China

Editorial

S Feng, HZ Li and LD Xu

An object-oriented intelligent design tool to aid the design of manufacturing systems

S Feng, LX Li and Cen L

An agent-based geographical information system

C Tang, LD Xu and S Feng

A new type of recurrent fuzzy neural network for modeling dynamic systems

SM Zhou and LD Xu

Feature space theory – a mathematical foundation for data mining

HX Li and LD Xu

Information visualization for intelligent decision support systems

T Li, S Feng and LX Li

An object-oriented intelligent CAD system for ceramic kiln

ZB Chen and LD Xu

An integrated knowledge-based system for grasslands ecosystems

LD Xu, N Liang and Q Gao

Dynamic modelling with an integrated ecological knowledge-based system

Q Gao, LD Xu and N Liang

Scheduling railway freight cars

GY Geng and LX Li

Development of a KBS for managing bank loan risk

BA Yang, LX Li, QH Xie and J Xu

An early warning system for loan risk assessment using artificial neural networks

BA Yang, LX Li and J Xu

Kybernetes

Vol. 30 Nos. 5–6

Articles

Gordon Pask, remembered and celebrated: Part I – Preface

BH Rudall

Gordon Pask, remembered and celebrated: Part I – Introduction

B Scott and R Glanville

A message from Elizabeth Pask

E Pask

About Gordon Pask

R Glanville and B Scott

The poet of cybernetics

A Andrew

Voices of sanity in the conversation of psychotherapy

G Barnes

A filigree friendship

S Beer

Reflections on the conversation theory of Gordon Pask

G Boyd

The extraordinary Gordon Pask

P Cook

Consensus measurement in multi-participant conversations

A Dirkzwager

Working with Gordon Pask: some personal impressions

M Elstob

Styles of learning and approaches to studying in higher education

N Entwistle

The increasing relevance of Pask's work to modern information seeking and use

N Ford

On Gordon Pask

H von Foerster

Fond memories of Gordon Pask

K Forsythe

The cybernetics of architecture: a tribute to the contribution of Gordon Pask

JH Frazer

And he was magic

R Glanville

On Gordon Pask

N Green

A letter from Dik Gregory

D Gregory

Memories of Gordon

RL Gregory

Gordon Pask at the Open University

D Hawkrigge

Bootstrapping knowledge representations – From entailment meshes via semantic nets to learning webs

F Heylighen

My Paskalia and the genesis of the Christman

IntelligenTree

Y Hayut-Man

The Robbins problem: computer proofs and human proofs

LH Kauffman

For Gordon: some comments on architecture and its context

R Landau

Gordon Pask memorial speech: contributions to educational technology

D Laurillard

Gordon Pask

J Littlewood

Learning and teaching machines and conversation theory –

Some contemporary implications and ideas for research

AJ Mayne

Some memories of Gordon

H Moore

The limits of social conversation – A sociological approach

to Gordon Pask's conversation theory

P Navarro

Gordon Pask: an appreciation

T O'Shea

Thoughtsticker 1986 – A personal history of conversation theory in software, and its progenitor, Gordon Pask
P Pangaro
 Intelligent tutoring: from SAKI to Byzantium
A Patel, B Scott and Kinshuk

Gordon Pask
C Price
 Adaptive recommendation and open-ended semiosis
LM Rocha

Machine Learning

Vol. 45 No. 1

Articles

Random forests

L Breiman

On the VC dimension of bounded margin classifiers

D Hush and C Scovel

Iterated phantom induction: A knowledge-based approach to learning control

M Brodie and G DeJong

Optimizing epochal evolutionary search: Population-size dependent theory

E Van Nimwegen and JP Crutchfield

Vol. 45 No. 2

Articles

Learning with maximum-entropy distributions

Y Mansour and M Schain

Robust learning with missing data

M Ramoni and P Sebastiani

A simple generalisation of the area under the ROC curve for multiple class classification problems

DJ Hand and RJ Till

Predicting the future of discrete sequences from fractal representations of the past

P Tino and G Dorffner

Reinterpreting the category utility function

B Mirkin

Vol. 45 No. 3

Articles

Efficient construction of regression trees with range and region splitting

Y Morimoto, H Ishii and S Morishita

Using iterated bagging to debias regressions

L Breiman

Accelerating EM for large databases

B Thiesson, C Meek and D Heckerman

Relative loss bounds for multidimensional regression problems

J Kivinen and MK Warmuth

Vol. 46 Nos. 1–3

Articles

Kernel methods: Current research and future directions

N Cristianini, C Campbell and C Burges

On a connection between kernel PCA and metric multidimensional scaling

CKI Williams

Bayesian methods for support vector machines: Evidence and predictive class probabilities

P Sollich

Hierarchical learning in polynomial support vector machines

S Risau-Gusman and MB Gordon

A probabilistic framework for SVM regression and error bar estimation

JB Gao, SR Gunn, CJ Harris and M Brown

On the dual formulation of regularized linear systems with convex risks

T Zhang

Choosing multiple parameters for support vector machines

O Chapelle, V Vapnik, O Bousquet and S Mukherjee

Training invariant support vector machines

D Decoste and B Scholkopf

Support vector machines for classification in nonstandard situations

Y Lin, Y Lee and G Wahba

An analytic center machine

TB Trafalis and AM Malyscheff

Linear programming boosting via column generation

A Demiriz, KP Bennett and J Shawe-Taylor

Large scale kernel regression via linear programming

OL Mangasarian and DR Musicant

Efficient SVM regression training with SMO

GW Flake and S Lawrence

A simple decomposition method for support vector machines

CW Hsu and CJ Lin

Feasible direction decomposition algorithms for training support vector machines

P Laskov

Convergence of a generalized SMO algorithm for SVM classifier design

SS Keerthi and EG Gilbert

The relaxed online maximum margin algorithm

Y Li and PM Long

Gene selection for cancer classification using support vector machines

I Guyon, J Weston, S Barnhill and V Vapnik

Text categorization with support vector machines. How to represent texts in input space?

E Leopold and J Kindermann

New Generation Computing

Vol. 19 No. 4

Articles

Biomolecular realizations of a parallel architecture for solving combinatorial problems

T Head

Logic-based genetic programming with definite clause translation grammars

BJ Ross

From eager to lazy constrained data acquisition: A general framework

P Mello, M Milano, M Gavanelli, E Lamma, M Piccardi and R Cucchiara

Trends of internet auctions and agent-mediated Web commerce

M Yokoo and S Fujita