

From the journals . . .

Applied Artificial Intelligence

Vol. 16 No. 4

Articles

User profiling for the Melvil knowledge retrieval system

J Furnkranz, C Holzbaur and R Temel

Mining a Web citation database for document clustering

Y He, SC Hui and ACM Fong

Machining process planning of prismatic parts using case-based reasoning and past process knowledge

HC Chang, WF Lu and FX Liu

Vol. 16 No. 5

Articles

Discovering causality in large databases

SC Zhang and ZG Zhang

Negotiation in a multi-agent system for construction claims negotiation

Z Ren, CJ Anumba and OO Ugwu

Improving biosignal processing through modeling

uncertainty: Bayes vs. non-Bayes in sleep staging

P Sykacek, G Dorffner, P Rappelsberger and J Zeithofer

Applied Intelligence

Vol. 16 No. 3

Articles

Neural networks approach to the random walk dilemma of financial time series

R Sitte and J Sitte

Effective query size estimation using neural networks

HJ Lu and R Setiono

The supervised network self-organizing map for classification of large data sets

S Papadimitriou, S Mavroudi, L Vladutu, G Pavlides and A Bezerianos

Applying learning by examples for digital design automation

B Choi

Generalized radial basis function networks trained with instance based learning for data mining of symbolic data

S Papadimitriou, S Mavroudi, L Vladutu and A Bezerianos

Towards combinatorial analysis, adaptation, and planning of human-computer systems

MS Levin

Soft computing based pattern classifiers for the obstacle avoidance behavior of intelligent autonomous vehicles (IAV)

O Azouaoui and A Chohra

Vol. 17 No. 1

Articles

Guest editorial for special issue on scalable applications of neural networks to robotics

P van der Smagt and D Bullock

Searching a scalable approach to cerebellar based control

J Peters and P van der Smagt

A scalable model of cerebellar adaptive timing and

sequencing: The recurrent slide and latch (RSL) model

BJ Rhodes and D Bullock

Scalable techniques from nonparametric statistics for real time robot learning

S Schaal, CG Atkeson and SV Vijayakumar

Modelling of complete robot dynamics based on a multi-dimensional, RBF-like neural architecture

M Krabbes and C Doschner

A scalable intelligent takeoff controller for a simulated running jointed leg

PI Doerschuk, V Nguyen and A Li

Evolving receptive-field controllers for mobile robots

R Salomon

A self-organizing context-based approach to the tracking of multiple robot trajectories

AFR Araujo and GD Barreto

Vol. 17 No. 2

Articles

An intelligent system combining different resource-bounded reasoning techniques

AI Mouaddib, E Gregoire and JF Dauchez

Neural and neuro-fuzzy integration in a knowledge-based system for air quality prediction

CD Neagu, N Avouris, E Kalapanidas and V Palade

Automatic extraction of eye and mouth fields from a face image using eigenfeatures and ensemble networks

YS Ryu and SY Oh

Using extended logic programming for alarm-correlation in cellular phone networks

CV Damasio, P Frohlich, W Nejdli, LM Pereira and M Schroeder

Fuzzy non-homogeneous Markov systems

MA Symeonaki, GB Stamou and SG Tzafestas

Artificial Intelligence

Vol. 137 Nos. 1–2

Articles

Combining topological and size information for spatial reasoning

A Gerevini and J Renz

Learning Bayesian networks from data: An information-theory based approach

J Cheng, R Greiner, J Kelly, D Bell and WR Liu

Diagnosis of discrete-event systems from uncertain temporal observations

G Lamperti and M Zanella

Parallel randomized Best-First Minimax Search

Y Shoham and S Toledo

A re-weighting strategy for improving margins

F Aiolli and A Sperduti

A hybrid graphical model for rhythmic parsing

C Raphael

Ensembling neural networks: Many could be better than all

ZH Zhou, JX Wu and W Tang

Vol. 138 Nos. 1–2**Articles**

Knowledge representation and logic programming

M Gelfond and N Leone

Logic programming and knowledge representation – The A-Prolog perspective

M Gelfond and N Leone

Answer set programming and plan generation

V Lifschitz

Fixed-parameter complexity in AI and nonmonotonic reasoning

G Gottlob, F Scarcello and M Sideri

LUPS – A language for updating logic programs

JJ Alferes, LM Pereira, H Przymusinska and

TC Przymusinski

Preference Logic Grammars: Fixed point semantics and application to data standardization

BQ Cui and T Swift

Annotated revision programs

V Marek, I Pivkina and M Truszczynski

Extending and implementing the stable model semantics

P Simons, I Niemela and T Soininen

Artificial Intelligence Review**Vol. 17 No. 4**

Evolutionary algorithms for multi-objective optimization:

Performance assessments and comparisons

KC Tan, TH Lee and EF Khor

Problems in representing liquid tanks with monotonicity constraints: A case study in model-imposed limitations on the coverage of qualitative simulators

ACC Say

Engineering Applications of Artificial Intelligence**Vol. 14 No. 5****Articles**

Continuous action reinforcement learning automata and their application to adaptive digital filter design

MN Howell and TJ Gordon

Reinforcement learning control of nonlinear multi-link system

IO Bucak and MA Zohdy

Adaptive reconstruction of free-form surfaces using

Bernstein basis function networks

GK Knopf and J Kofman

An expert control system using neural networks for the electrolytic process in zinc hydrometallurgy

M Wu, JH She and M Nakano

KBS-aided design of tube bending processes

Z Jin, S Luo and XD Fang

Knowledge discovery from process operational data using PCA and fuzzy clustering

YM Sebzalli and XZ Wang

A new methodology for deriving the rule-base of a fuzzy logic controller with a new internal structure

I Eksin, M Guzelkaya and F Gurleyen

Intelligent control of a rotary kiln fired with producer gas generated from biomass

M Jarvensivu, E Juuso and O Ahava

Intelligent on-line quality control of washing machines using discrete wavelet analysis features and likelihood classification

S Goumas, M Zervakis, A Pouliezios and

GS Stavrakakis

Reactive scheduling using a multi-agent model: the SCEP framework

B Archimede and T Coudert

Flexible real-time mobile robotic architecture based on behavioural models

H Hassan, J Simo and A Crespo

Vol. 14 No. 6**Articles**

BBIPS: a blackboard-based integrated process supervision

KW Oh and C Quek

An agent-based learning framework for modeling microbial growth

S Katare and V Venkatasubramanian

Genetic programming: principles and applications

S Sette and L Boullart

A Pareto-optimal genetic algorithm for warehouse multi-objective optimization

PN Poulos, GG Rigatos, SG Tzafestas and AK Koukos

A heuristic search algorithm with lexicographic goals

L Mandow and JLP de la Cruz

Comparison of two inference methods for P-type fuzzy logic control through experimental investigation using a hydraulic manipulator

R Rahbari and CW de Silva

Design of a PID-like compound fuzzy logic controller

DD Kukolj, SB Kuzmanovic and E Levi

A comparison of model-based and neural network-based diagnostic methods

R Rengaswamy, D Mylaraswamy, KE Arzen and

V Venkatasubramanian

Control of properties in injection molding by neural networks

S Kenig, A Ben-David, M Omer and A Sadeh

Artificial intelligence heuristics in solving vehicle routing problems with time window constraints

KC Tan, LH Lee and K Ou

Expert Systems With Applications**Vol. 22 No. 4****Articles**

Intelligent agent-based systems for personalized recommendations in Internet commerce

WP Lee, CH Liu and CC Lu

Learning rules from incomplete training examples by rough sets

TP Hong, LH Tseng and SL Wang

An application of genetic algorithm methods for teacher assignment problems

YZ Wang

Rule induction in data mining: effect of ordinal scales

HM Moshkovich, AI Mechitov and DL Olson

A knowledge grid model and platform for global knowledge sharing

H Zhuge

Knowledge management system on flow and water quality modeling

KW Chau, C Chuntian and CW Li

Value management and common accounting performance measures for corporations

KS Kim

Vol. 23 No. 1**Articles**

Knowledge-based data mining of news information on the Internet using cognitive maps and neural networks

TH Hong and I Han

MACE: multi-agents coordination engine to resolve conflicts among functional units in an enterprise

OB Kwon and KC Lee

A knowledge flow model for peer-to-peer team knowledge sharing and management

H Zhuge

Learning discriminant functions with fuzzy attributes for classification using genetic programming

BC Chien, JY Lin and TP Hong

Computer systems that learn: an empirical study of the effect of noise on the performance of three classification methods

JR Nolan

Expert systems in finance – a cross-section of the field

L Nedovic and V Devedzic

International Journal of Computer Vision

Vol. 48 No. 2**Articles**

Geotensity: Combining motion and lighting for 3D surface reconstruction

A Maki, M Watanabe and C Wiles

Self-calibration from image derivatives

T Brodsky and C Fermuller

Plenoptic image editing

SM Seitz and KN Kutulakos

Estimation of error in curvature computation on multi-scale free-form surfaces

F Mokhtarian, N Khalili and P Yuen

Construction of panoramic image mosaics with global and local alignment

HY Shum and R Szeliski

Vol. 48 No. 3**Articles**

Omnivergent stereo

SM Seitz, A Kalai and HY Shum

Multi-frame correspondence estimation using subspace constraints

M Irani

A pupil-centric model of image formation

M Aggarwal and N Ahuja

Hamilton-Jacobi skeletons

K Siddiqi, S Bouix, A Tannenbaum and SW Zucker

Vision and the atmosphere

SG Narasimhan and SK Nayar

International Journal of Intelligent Systems

Vol. 17 No. 5**Special issue on hierarchical fuzzy systems****Introduction**

V Torra

Fuzzy behavior hierarchies for multi-robot control

E Tunstel, MAA de Oliveira and S Berman

On the role of context in hierarchical fuzzy controllers

L Magdalena

A structure identification method of submodels for hierarchical fuzzy modeling using the multiple objective genetic algorithm

K Tachibana and T Furuhashi

Hierarchical fuzzy modeling and jointly expandable functions

H Kikuchi and N Takagi

A review of the construction of hierarchical fuzzy systems

V Torra

Vol. 17 No. 6**Articles**

Formal semantics of meta-level architectures: Dynamic control of reasoning

J Treur

The uncertain OWA operator

ZS Xu and QL Da

Implied trees in illiquid markets: A Choquet pricing approach

S Muzzioli and C Torricelli

Tracking a partially occluded target with a cluster of Kalman filters

DS Jang, SW Jang and HI Choi

Storage of linguistic information in a continuous classifying associative memory

AB Bailon, M Delgado and W Fajardo

Vol. 17 No. 7**Articles**

Applying a fuzzy sets-based heuristic to the protein structure prediction problem

A Blanco, DA Pelta and JL Verdegay

Semantic formalization of interactive reasoning functionality

J Treur

On the valuation of alternatives for decision-making under uncertainty

RR Yager

The ordered weighted geometric averaging operators

ZS Xu and WL Da

International Journal of Software Engineering and Knowledge Engineering

Vol. 12 No. 1**Articles**

Binary encoding of discernibility patterns to find minimal coverings

R Felix and T Ushio

Use case patterns

LW Li

A compositional knowledge level process model of Requirements Engineering

DE Herlea, CM Jonker, J Treur and NJE Wijngaards

Evaluating theories for managing imperfect knowledge in human-centric database reengineering environments

JH Jahnke and A Walenstein

Journal of Intelligent & Robotic Systems

Vol. 33 No. 3

Articles

Planning of regrasping operations for a dextrous hand in assembly tasks

DR Rapela, U Rembold and B Kuchen

Three-dimensional robotic vision using ultrasonic sensors

JR Llata, EG Sarabia and JP Oria

A fast parallel algorithm for convex hull problem of multi-level images

O Bouattane, J Elmesbahi and A Rami

Parameter tuning of stable fuzzy controllers

JY Dieulot and P Borne

Self-tuning of the fuzzy inference rule by integrated method

MR Lee, H Rhee, KD Cho and BJ Cho

On the measurement of enterprise agility

NC Tsourveloudis and KP Valavanis

Vol. 33 No. 4

Articles

The design and role of synthetic creative traits in artificial ant colonies

PS Heck and S Ghosh

Detection, tracking and avoidance of multiple dynamic objects

KM Krishna and PK Kalra

Geometrical analysis of two sets of 3D correspondence data patterns for the registration of free-form shapes

YH Liu and MA Rodrigues

Robotic intelligence for industrial automation: Object flaw auto detection and pattern recognition by object location searching, object alignment, and geometry comparison

CL Su

Vol. 34 No. 1

Articles

A new conceptual approach to the design of hybrid control architecture for autonomous mobile robots

H Yavuz and A Bradshaw

DECM, a user oriented formalism for high level discrete event specifications of real-time systems

JL Paillet and N Giambiasi

Color segmentation applied to study of the angiogenesis. Part I

RM Rodriguez, TE Alarcon, RW Navarro and LS Cuello

Building 3-D visual perception of a mobile robot employing extended Kalman filter

S Patnaik, A Konar and AK Mandal

Vol. 34 No. 2

Articles

Internet-based robotic system using CORBA as communication architecture

SM Jia and K Takase

A genetic algorithm for mobile robot localization using ultrasonic sensors

L Moreno, JM Armingol, S Garrido, A de la Escalera and MA Salichs

Enhancement of probabilistic grid-based map for mobile robot applications

KM Chow, AB Rad and YL Ip

Design and implementation of fuzzy parallel-parking control for a car-type mobile robot

SJ Chang and THS Li

Kalman filter approach for lane extraction and following

M Oussalah, A Zaatari and H Van Brussel

Prediction of critical desalination parameters using radial basis functions networks

MM Jafar and A Zilouchian

Vol. 34 No. 3

Articles

Editorial: Medical & rehabilitation robotics

S Tzafestas

Mobile robot command by man-machine co-operation – Application to disabled and elderly people assistance

P Hoppenot and E Colle

An overview of the development of Handy 1. a rehabilitation robot to assist the severely disabled

M Topping

Fixation devices for long bone fracture reduction: An overview and new suggestions

R Di Gregorio and V Parenti-Castelli

Wheelchair guidance strategies using EOG

R Barea, L Boquete, M Mazo and E Lopez

A wheelchair steered through voice commands and assisted by a reactive fuzzy-logic controller

G Pires and U Nunes

Semi-autonomous navigation of a robotic wheelchair

A Argyros, P Georgiadis, P Trahanias and D Tsakiris

Journal of Intelligent Manufacturing

Vol. 13 No. 3

Articles

Automatic inspection for phase-shift reflection defects in aluminum web production

F Torres, LM Jimenez, FA Candelas, JM Azorin and RJ Agullo

A novel disassembly tool with screwdriver endeffectors

BR Zuo, A Stenzel and G Seliger

Application of artificial neural network and fuzzy logic in a case-based system for initial process parameter setting of injection molding

SL Mok and CK Kwong

Evaluation of expert systems for automatic shape recognition by ultrasound

JR Llata, EG Sarabia and JP Oria

Digitizing uncertainty modeling for reverse engineering applications: regression versus neural networks

CX Feng and XF Wang

Agent-based material handling and inventory planning in warehouse

T Ito and SMMJ Abadi

Mean shifts detection and classification in multivariate process: a neural-fuzzy approach

TY Wang and LH Chen

Vol. 13 No. 4

Articles

Manufacturing cost estimation for machined parts based on manufacturing features

JY Jung

A matrix formulation for integrating assembly trees and manufacturing resource planning with capacity constraints

B Harris, F Lewis and DJ Cook

Expert systems in production planning and scheduling:

A state-of-the-art survey

KS Metaxiotis, D Askounis and J Psarras

A hybrid PC/PLC architecture for manufacturing-system control-theory and implementation

A Ramirez-Serrano, SC Zhu, SKH Chan, SSW Chan, M Ficocelli and B Benhabib

Rotating machine fault detection based on HOS and artificial neural networks

CC Wang and GPJ Too

Extending IDEF1X to model fuzzy data

ZM Ma, WJ Zhang and WY Ma

Optimizing modular product design for reconfigurable manufacturing

AS Yigit, AG Ulsoy and A Allahverdi

Journal of Machine Learning Research

Vol. 1 No. 2

Articles

SVM-Torch: Support Vector Machines for Large-Scale Regression Problems

R Collobert and S Bengio

Vol. 1 No. 3

Articles

Lagrangian Support Vector Machines

OL Mangasarian and DR Musicant

Vol. 1 No. 6

Articles

Regularized Principal Manifolds

AJ Smola, S Mika, B Schoelkopf and C Williamson

Sparse Bayesian Learning and the Relevance Vector Machine

ME Tipping

Vol. 1 No. 8

Articles

Bayes Point Machines

R Herbrich, T Graepel and C Campbell

Vol. 1 No. 9

Articles

Tracking the Best Linear Predictor

M Herbster and MK Warmuth

Prior Knowledge and Preferential Structures in Gradient

Descent Learning Algorithms

RE Mahony, RC Williamson

Vol. 1 No. 10

Articles

Learning with Mixtures of Trees

M Meila and MI Jordan

Dependency Networks for Inference, Collaborative

Filtering, and Data Visualization

D Heckerman, D Maxwell Chickering, C Meek,

R Rounthwaite and C Kadie

Vol. 1 No. 11

Articles

Learning Evaluation Functions to Improve Optimization by Local Search

J Boyan and AW Moore

Vol. 1 No. 12

Articles

Reducing Multiclass to Binary: A Unifying Approach for Margin Classifiers

EL Allwein, RE Schapire and Y Singer

Vol. 2 No. 2

Articles

Recommender Systems Using Linear Classifiers

T Zhang and VS Iyengar

Machine Learning with Data Dependent Hypothesis Classes

A Cannon, JM Ettinger, D Hush and C Scovel

On Using Extended Statistical Queries to Avoid

Membership Queries

NH Bshouty and V Feldman

The Learning-Curve Sampling Method Applied to Model-Based Clustering

C Meek, B Thiesson and D Heckerman

Text Classification using String Kernels

H Lodhi, C Saunders, J Shawe-Taylor, N Cristianini and

C Watkins

Learning Equivalence Classes of Bayesian-Network Structures

DM Chickering

Vol. 2 No. 3

Articles

Stability and Generalization

O Bousquet and A Elisseeff

Covering Number Bounds of Certain Regularized Linear Function Classes

T Zhang

Introduction to Special Issue on Machine Learning

Approaches to Shallow Parsing

J Hamerton, M Osborne, S Armstrong and

W Daelemans

Memory-Based Shallow Parsing

EF Tjong Kim Sang

Shallow Parsing using Specialized HMMs

A Molina and F Pla

Text Chunking based on a Generalization of Winnow

T Zhang, F Damerau and D Johnson

Shallow Parsing with PoS Taggers and Linguistic Features

B Megyesi

Learning Rules and Their Exceptions

H Dejean

Shallow Parsing using Noisy and Non-Stationary Training Material

M Osborne

Round Robin Classification

J Fürnkranz

Vol. 2 No. 10

Articles

On the Size of Convex Hulls of Small Sets

S Mendelson

Graph-Based Hierarchical Conceptual Clustering

I Jonyer, DJ Cook, LB Holder

Vol. 2 No. 11

Articles

Support Vector Machine Active Learning with Applications to Text Classification

S Tong, D Koller

On the Influence of the Kernel on the Consistency of Support Vector Machines

I Steinwart

Vol. 2 No. 12

Articles

Introduction to the Special Issue on Kernel Methods

N Cristianini, J Shawe-Taylor and RC Williamson

Kernel Partial Least Squares Regression in Reproducing

Kernel Hilbert Space

R Rosipal and LJ Trejo

Support Vector Clustering

A Ben-Hur, D Horn, HT Siegelmann and V Vapnik

One-Class SVMs for Document Classification

LM Manevitz and M Yousef

Uniform Object Generation for Optimizing One-class Classifiers

DMJ Tax and RPW Duin

A Generalized Kernel Approach to Dissimilarity-based Classification

E Pekalska, P Paclik and RPW Duin

A New Approximate Maximal Margin Classification Algorithm

C Gentile

Efficient SVM Training Using Low-Rank Kernel Representations

S Fine and K Scheinberg

On the Algorithmic Implementation of Multiclass Kernel-based Vector Machines

K Crammer and Y Singer

Exact Simplification of Support Vector Solutions

T Downs, KE Gates and A Masters

Classes of Kernels for Machine Learning: A Statistics Perspective

MG Genton

Knowledge-Based Systems

Vol. 15 No. 4

Special issue on biological knowledge discovery and data mining

Foreword

M Elloumi

A data mining approach based on machine learning techniques to classify biological sequences

M Maddouri and M Elloumi

Mining DNA sequences to predict sites which mutations cause genetic diseases

J Ponomarenko, T Merkulova, G Orlova, O Fokin, E Gorshkov and M Ponomarenko

A data mining approach to discover genetic and environmental factors involved in multifactorial diseases

L Jourdan, C Dhaenens, EG Talbi and S Gallina

A data mining approach to discover unusual folding regions in genome sequences

SY Le, WM Liu and JV Maizel

Data mining and knowledge discovery in proton nuclear magnetic resonance (H-1-NMR) spectra using frequency to information transformation (FIT)

H Valafar and F Valafar

Vol. 15 Nos. 5–6

Special issue

Untitled

M Bramer

Detecting mismatches among experts ontologies acquired through knowledge elicitation

A Hameed, D Sleeman and A Preece

A database architecture for reusable CommonKADS agent specification components

DJ Allsopp, A Harrison and C Sheppard

Integrating AI planning techniques with workflow management system

MDR Moreno and P Kearney

The inseparability problem in interactive case-based reasoning

D McSherry

Using J-pruning to reduce overfitting in classification trees

M Bramer

Going beyond stemming: creating concept signatures of complex medical terms

T Kurz and K Stoffel

Finite element mesh design expert system

B Dolsak

SMART software for decision makers KDD experience

G Oatley, J MacIntyre, B Ewart and E Mugambi

Residential property price time series forecasting with neural networks

ID Wilson, SD Paris, JA Ware and DH Jenkins

When eigenfaces are combined with wavelets

B Li and YH Liu

Automated control of an actively compensated Langmuir probe system using simulated annealing

L Nolle, A Goodyear, AA Hopgood, PD Picton and NS Braithwaite