2011 International Conference on Uncertainty Reasoning and Knowledge Engineering

(URKE 2011)

Bali, Indonesia
4-7 August 2011

Volume 1
Pages 1-268

IEEE Catalog Number: CFP1115N-PRT
ISBN: 978-1-4244-9985-4

URKE 2011
Table of Contents
Volume – 1

Preface – Volume 1…..……VI
Conference Organization – Volume 1 ……..……..VII

Alternative implementation techniques of parallelized differential evolution
for multi-core processors……..1
Kiyaharu Tagawa and Takashi Ishimizu
Designing of expert system for troubleshooting diagnosis on gas chromatography
gc-2010 by means of inference method……....5
Suyanto M. Abduh Pancaputra, and Ruri Agung Wahyuono
Selection of districts for data entry sites in aceh household census…….…...9
Bonivasius Prasetya, Stefanie Intan Christienova, and Idaman
Collaborative internet content filtering on the internet infrastructure in Malaysia……..….12
Fajri Achmad Maulana, Sahidan Abdulmana, and Fauzan Alfariti
Reinforcement mechanism and engineering applications of jointed rock mass…….…….…..16
Jingsui Zhang, Fei Wang, Shaojun Fu, and Tingting Liao
Uncertainty, protocol behavior prediction through chaos theory?.....20
Prabhu Shankar Kaliappan
Soaking with uncertainty for problem solving…….……..24
Wei Hui and Fu Xixu
A model for information systems evaluation…..……...28
Liang-Chuan Wu
Flexible decision making in uncertain R&D projects……32
Juite Wang
Semantic technology classification - a defence and security case study……..…….36
Dirk Thorleuchter and Dirk Van den Poel
Companies website optimising concerning consumer's searching for new products…….……..40
Dirk Thorleuchter and Dirk Van den Poel
A framework for vision-based swimmer tracking……..……...44
Wen-Hui Chen, Po-Chuan Cho, Ping-Lin Fan, and Yi-Wen Yang
Initiating layers architecture design for software product line……..48
I Made Murwantara

Research on remote intelligent monitoring system……52
Wang Xiao-li, Gao Xiao-hong, and Li Jian-wei
Empirical study on selection and evaluation of TPL based on CS……56
Wei Xu, Songzheng Zhao, and Liangdong Lu
Research on the application of neural network PID to wipe film motor of molecular distillation……60
Guan Changjun and Li Hui
Design of a pet drinking vessel based on TRIZ & growth design……64
Hongwu Chen, Xuan Liu, and Can Wang
Knowledge sharing platform for project team based on web feeds…….....67
I-Ching Hsu, Lee Jang Yang, and Der-Chen Huang
New switched filtering method for recurrent neural networks……..71
Choon Ki Ahn
Research on China's studying abroad situation and countermeasures……..75
Chen Aijuan and Zhang Qian
Classifier combination for telegraphese restoration…….....79
Leo Willyanto Santoso
Design and implementation of the soft-sensing system for fermentation process…….83
Wu Zi-yue, Xu Zhe, and Jinfeng Geng
The study of mobile education development based on 3G technique and cloud computing…….86
Huang Bin
The analysis of human judgment accuracy using decision tree models……90
Hsi-Peng Lu, Yi-Wen Yang, and Wen-Hui Chen
A weighted fuzzy time series model based on adoptive OWA operators……..94
Jing-Rong Chang, and Yu-Jie Huang
Research on randomized greedy algorithm for k-median problem……...98
Wang Shouqiang
An algorithm for splitting an orthogonal polyhedron with a polyplane…….....102
Jefri Marzal,Hong Xie, and Chun Che Fung
Implementing user-oriented interfaces: from user analysis to framework's components……107
Sergio Inzunza, Andrés Mejía, Reyes Juárez-Ramírez, and Manuel Gómez-Ruelas
Towards a formal model for knowledge transference:
An initial proposal to support the adoption of process models……111
Violeta ocegueda-miramontes, Reyes Juárez-Ramírez, Rafael Pimienta-Romo, and Manuel Gómez-Ruelas
A formal approach for measuring the lexical ambiguity degree in
Natural language requirement specification……115
Carlos Huertas, Reyes Juárez-Ramírez, Manuel Gómez-Ruelas, and Héctor Plata
Towards improving user interfaces: a proposal for integrating functionality
and usability since early phases…….119

Reyes Juárez-Ramírez, Alan A. Gutiérrez, Manuel Gómez-Ruelas, and Pavel Negrete
Using iterative learning control methods for 2-D systems…….....124
Zahra Maghsoodzade Sarvestani, Ahmadreza Argha, and Mehdi Roopaei
Direct torque control of brushless dc motor drives with reduced
starting current using fuzzy logic controller……..129
N. Parhizkar, M. Shafiei, and M. Bahrami Kouhshahi
Application of topic based vector space model with wordnet…….....133
Adi Wibowo and Andreas Handojo
Processing comparisons and evaluations in business intelligence: a question answering system……..137
Kenston Choi, Rosalyn Margret Pacaña, Adrian Lester Tan, Jonathan Yiu,and Nathalie Rose Lim
A study of applying arima and svm model to software reliability prediction…….....141
Jung-Hua Lo
Incorporating information quality criteria in blog search engine……145
Fatemeh Azimzadeh, Abd. R. Ramli, Borhanoddin. M. Ali, and Hamidah Ibrahim
Study on the development trend of the digital printing……...149
Qian Hua
Using particle swarm optimization algorithm for image enhancement…….....154
Hanxing Chen and Jun Tian
Chaos-based gray image watermarking algorithm…….....158
Junmei Guo,Yong Yang, and Ning Wang
Special equipment safety analysis and countermeasures…….161
Jun Tian, and Hanxing Chen
A study on home information network……165
Yong Yang and Junmei Guo
Non-subsampled contourlets and gray level co-occurrence matrix based images segmentation……168
Zhang Jian and Chen Xiaowei
Preparation for strustural path analysis from plain text input output matrix……...171
Nova Nurviana, Rizchi Wahyuni, and Idaman
A study on the design of half pipe……...175
Zhao Yang and Li zhaonan
Evaluation of building materials logistics provider based on FAHP—TOPSIS…….180
Sun Shusheng, Zhang Qin, and Zhang Min
An approach for multimodal biometric fusion under the missing data scenario…….185
Quang Duc Tran, Panos Liatsis, Bing Zhu, and Changzheng He
Hybrid-dimension association rules for diseases track record analysis
at Dr. Soetomo general hospital……....189
Silvia Rostianingsih, Gregorius Satia Budhi, and Ni Wayan Yessy Dwijayanti
The forecast for the engine wear trend based on grey gm(1,1) and markov chain model……..192
Zhang Yong, Chen Liang, and Gu Xiaoxing

Data mining market basket analysis' using hybrid-dimension association rules,
case study in minimarket X……...196
Djoni Haryadi Setiabudi, Gregorius Satia Budhi, I Wayan Jatu Purnama, and Agustinus Noertjahyana
Product cost estimation using supper efficiency data envelopment analysis……..200
Fantahun M. Defersha, Adil Salam, and Nadia Bhuiyan
Prioritization of information quality criteria in the blog context…….205
Mohammad Javad Kargar
Towrads dedicated information quality frameworks in social network products…….....209
Mohammad Javad Kargar
Study on the fast image registration based on genetic algorithm…….....213
Shuai Feng, Yufeng Li, and Weiping Zhao
Compression and realization of power quality disturbance data based on wavelet analysis……..217
Zhao Hongtu and Xi Dongmei
Research on face detection algorithm in instant message robot……..220
Yufeng Li, Haijuan Zhang, and Yanan Zhang
Three-dimensional visual geographic information system……..224
Bo Hang
Runtime monitoring web services implemented in BPEL……..228
Zhang Haiteng, Shao Zhiqing, and Zheng Hong
Based on stm32f103 implement profibus-dp slave with high-speed transmission……..232
Xu Hongyan, Wu Guichu, and Chen Chong
LVMM: a lightweight virtual machine memory management
Architecture for virtual computing environment…….....235
Weizhe Zhang, Tao Cheng, Hui He, and Albert M.K. Cheng
Primary signal detection over rayleigh fading channel for cognitive radio…….239
Yufeng Li, Yanan Zhang, and Haijuan Zhang
A spt-routing key management scheme for heterogeneous wireless sensor
networks based on ECC…….....243
Gang Han, Rui Zhou, and Hua Yang
Design of video surveillance system based on 3G wireless network in underground coal mine……248
Wei Zhou
A hybrid key management scheme for heterogeneous wireless sensor networks
based on ecc and trivariate symmetric polynomial……251
Rui Zhou and Hua Yang
Comprehensive evaluation and selection model of supplier under E-business……...256
Wang Mian

Voice conversion application (VOCAL)…….....259
Liliana, Resmana Lim, and Elizabeth Kwan
Clustering search engine at petra christian university library using suffix tree clustering…….263
Andreas Handojo, Adi Wibowo, and Jemmy Lay Santo
Author Index – Volume 1 ……...267

2011 International Conference on Uncertainty Reasoning and Knowledge Engineering

(URKE 2011)

Bali, Indonesia
4-7 August 2011

Volume 2
Pages 1-273

IEEE Catalog Number: CFP1115N-PRT
ISBN: 978-1-4244-9985-4

URKE 2011
Table of Contents
Volume – 2

Preface – Volume 2…..……VI
Conference Organization – Volume 2 ……..……VII

Study on data stream prediction based on least square support vector machine…….……1
Ma Chuanlian
Digital watermark for document electronic seal system based on DCT technology…….…….…….5
Xu Jian and Ma Bin
Experimental research of Image digital watermark based on DWT Technology…….…….....9
Ma Bin
The scientific and technological secrecy management of military enterprise based on the dynamical theory of tacit knowledge transition.……13
Mei Liu
Research and implementation of digital rights management model for vector graphics…….……..17
Liangbin Zheng, Ruqi Chen, and Xiaojin Cheng
Plants virtual reality simulation based on IFS arithmetic……..21
Li Xiao-jing, Wang Hao-peng, Zhao Kai, and Liu Jin
Speckle Images denoising in laser projection displaying……..…..…..……..24
Wang Junli, Song Zhengxun, and Yin Fuchang
Research on the irregular body expanded and lay-out optimization……..……28
Xiaoming Kang, Haixia An, and Zhigang Huang
Visual analysis on the research of cross-language information retrieval…….....32
Zhao Rongying and Chen Rui
Linking e-commerce users: the role of software agents……..……..……36
Tan feiyan and Liu Huihuang
Study and implementation of automatic fingerprint recognition technology…….……...40
Zhang Jinhai
Research of embedded FAT file system……44
Zhang Jinhai
The Desgin of Embedded SQLite3 and Application of Commodity Rapid Positioning System Based on Wi-Fi Technology…….…….48
He Jianfeng, Liu Lin, Zhang Wei, He Yueshun, and Liu Xiong

Research of storing technology about w5100……52
Liang Zhijian and Ma Tiehua
VCRs control system based on LANC bus rotocol……..…….55
Zhao Lianyu, Wang Feng, and Zhang Yu
A research of collaborative filtering recommendation based on ant colony algorithm……58
Yueping Wu,Yi Du, and Liping Li
The analysis of interaction between monetary market and capital market…….....62
Sun Cuixia
E-commerce and its implication for managing …….66
Yuan Ling and Tian Tian
The Comprehensive benefits evaluation in application of the regenerative concrete
hollow block--which is based on the fuzzy comprehensive evaluation method of entropy….……70
Liao Fangwei, Zhang Qiang, and Ma Jinshan
An electronic bidding system based on AI and J2EE……74
Yongchun Wu, Jianfeng Xun, and Zhenjian Jiang
Customer value evaluation model of vocational college student custom…….…….78
Han Bangyun
Implementation of web services composition system based on SOA……...82
Shujun Pei and Deyun Chen
Heterogeneous wireless LAN-based wireless network attack analysis and research……86
Chengjun Xu, and Hongxia Wang
The semantic annotation method of knowledge element…….....91
Wu Di, Feng Ying, and Zhang Chengwei
The design of ontology-based semantic label and classification system of knowledge elements…….95
Wu Di, Li Xiaojing, and Zhang Chengwei
A study on the development of web-based moral education course…….....99
Hongqing Yu
Teaching research on sensor diagnosis based on information syncretic technology…….....103
Hu Mingjiang and Qi Liqiao
On the instruction of college English enrichment courses in e-learning environment……....107
Shourong Ji
The research of library innovation serviceunder ubiquitous environment……..111
Liu Huancheng and Zheng Miaolei
Information technology: the important means for effective teaching and efficient class …..…….115
Ming Pang
Research about neural network approach based on agent…….……..119
Yanhua Shao
Research on cavlc audio-video synchronization coding approach based on H.264……123
Xiaoyin Qi, Xiaoni Li, Mianshu Chen, and Hexin Chen

Search of Network real-time intrusion detection system base on data mining..……..127
He Min and Luo Laijun
The research of geographic space information network sharing key technology
GML in the storage system…….…..……..130
Feng Feng and Xu Qi
Research about component retrieval based on data mining…….……134
Meng Mei, Baozhen Li, and Wei Ke
Research on enterprise competition based on complex adaptive system……138
Wei Ke, Lingyun Zhao, and Meng Mei
Laser speckle images research based on wavelet-domain hidden markov models…….142
Wang Junli, Yin Fuchang, and Song Zhengxun
Covering fuzzy rough set based on multi-granulations…….....146
Caihui Liu and Meizhi Wang
Multi-dimension association rule mining based on adaptive genetic algorithm…….…….150
Min Wang, Qin Zou, and Caihui Liu
Exploring the stability and stratification of journal mutual citation network of
Library and information science in China……...154
Su Xiaobo and Ru Huahuang
A secure cross-platform mobile im system for enterprise applications……...158
Xue Sun, Zhenjun Du, and Rong Chen
Cloud computing promotes the progress of m-learning…….…….162
Qin Shuai and Zhou Ming-quan
A study on the construction of accounting information system based on REA model……...165
Chunying Zheng
Intelligent design in fire prevention based on WSN……169
Sun Junying and Jin Huilong
Performance analysis of dynamic CoMP cell selection in
LTE-advanced heterogeneous networks Scenario……...173
Yuan Gao, Yi Li, Hongyi Yu, and Shihai Gao
The research focused on multiple criteria decision-making in the
second-hand house transaction…….…….……..177
Bingnan Liu and Hui Liu
A new spatial data management architecture based on global subdivision grid…….181
Bogang Yang, Li Guan, and Ming Dong
A modeling methodology for mas based on AUML…….....185
Zhang Hong-han and Ma Rui-zhong
Value calculation of universities scientific research achievements in cybertimes……..189
Liu Manying and Miao Hong

Empirical analysis of internal control disclosure in China:
based on independent directors' standpoint…….193
Yao Huaying
The reasonable range of housing price rise rate……..197
Zhang Hongli
A collaborative-context oriented policy model for usage-control in business federation……...201
Ziyi Su and Frédérique Biennier
A modified model of information search process for e-learning systems……...205
Yajun Cheng, Ruirui Zhang, and Hongwei Jiang
A conceptual approach for project-based pedagogical processes
embedded in an existing e-learning platform……..…….208
Yajun Cheng, Ruirui Zhang, and Hongwei Jiang
Research and application of value-aware service engineering methodology……..211
Li Baoan
Multi-dimension data model for emergency event and analysis of similarity…….215
Wang En-yan and Li Xiang-yang
An algorithm for joint angle and frequency estimation in colored noise…….…..……..219
Zhang Zhi-cheng , Shi Yao-wu, and Zhang Hui
The status and development prospect of information construction of
Regional comprehensive universities from the view of web3.0……..……223
Wang Hui
Strategy of foreign trade enterprises' e-commerce integration……...…….226
Yu Wang
The research of routing algorithm based on density control for
Underwater acoustic sensor networks…….....230
Guangzhong Liu and Min Liu
Mutually-inversistic web services composition based on transformation
of linear logic theorem prover……234
Xunwei Zhou
Aplication of social software in educational knowledge management: take rss
and micro-blogging for example……...237
Liyong Wan, Guihuan Guo, Sisi Hu, and Rui Zeng
Urban spatial expansion and traffic pulsation based on GIS: a case study of Xuzhou……242
Cao Yan-jia, Zou Yu-ting, and Shen Yi
On the development of information literacy of finance and economic university
Studentsunder current employment environment……246
Zheng Huaili and Li Zhi
Design on the scheme of an integrated website for art training……...251

Wang Zhengxia and Xiao Laisheng
Modeling and simulation of the permanent-magnet synchronous motor drive……...256
ZhangHaigang, Qian Weiguo, Wu Yanxiang, Gan Shihong, and Yu Yuan
Study on data sharing of digital basin…….....261
Yanbin Yuan , Wenzhao Xia, Ying Chen, and Xiao Liang
Analysis and design of web system of new countryside informatization……..…….265
Xiaohong Gan
Current situation and reflections on setup of modern educational
technology course for PE Students..……269
Libing Jiang
Author Index – Volume 2 ……**……...272**