

2008 International Conference on Apperceiving Computing and Intelligence Analysis

(ICACIA 2008)

**Chengdu, China
13-15 December 2008**



**IEEE Catalog Number: CFP0881F-PRT
ISBN: 978-1-4244-3427-5**

TABLE OF CONTENTS

LOCAL PERFORMANCE ANALYSIS OF CLUSTERED FAULTS FOR SHARED STRUCTURES	1
<i>XIAO-JUN LU, JIAN-PING LI</i>	
PROBABILISTIC ANALYSIS OF NANOSCALE XOR GATE	4
<i>XIAO-JUN LU, JIAN-PING LI</i>	
A NOVEL ASYMPTOTICAL STABILITY CRITERION FOR FUZZY NEUTRAL SYSTEMS	8
<i>JUN YANG, SHOU-MING ZHONG, WEN-PIN LUO, DE-ZHONG YAO</i>	
SOM CLASSIFICATION METHOD BASED ON TRANSDUCTION SCHEME	12
<i>BIN TONG, ZHI-GUANG QIN, XIN-XIN MA, YONG WANG, WEI-FENG JIA</i>	
SPLINE INTERPOLATION UESED IN ELECTRONCHEMICAL IMPEDANCE SPECTROSCOPY	16
<i>ZHE-SHENG FENG, BAO-RUI SUN, JIA DING, ZI LIANG</i>	
SURVIVABILITY RECONFIGURATION FRAMEWORK: ISSUES AND APROACHES	20
<i>LI WANG, ZHI-SHU LI</i>	
OPTIMIZATION DESIGN OF TIP CLEARANCE SHAPE	24
<i>XING-MING QI, ZHI-GANG HUA, JIN-YI JIAO</i>	
DEFINITION OF MISCLASSIFICATION COST & REDISTRIBUTION STRATEGY OF TELECOM CHURN ANALYSIS	31
<i>XUE ZENG, YUE WU, YUAN TANG</i>	
AN UNIFORM APPLICATION SUPPORTING PLATFORM BASED ON SOA	34
<i>XIN LU, MING-TIAN ZHOU, SHAN-GMING YANG</i>	
A MULTI-SENSOR INFORMATION FUSION ALGORITHM BASED ON SVM	40
<i>JIAN-HUA ADU, DE-KUN HU, HUI PENG, JU-HONG TIE</i>	
RUDIMENTS OF GRANULAR ROUGH THEORY	44
<i>BO CHEN, MING SUN, MING-TIAN ZHOU</i>	
APPLICATION OF WAVELETS ANALYSIS IN IMAGE DENOISING	49
<i>XIAO-FENG GU, JIN-XIN SHI, JIAN-PING LI, YUAN-YUAN HUANG, JIE LIN</i>	
ANALYSIS AND IMPROVEMENT OF INTELLIGENT PID CONTROL ALGORITHM BASED ON NEURAL NETWORK	53
<i>ZHUO ZENG, JIAN MING LIAO, JIAN-PING LI</i>	
ROBUST FACE RECOGNITION WITH PARTIAL DISTORTION AND OCCLUSION FROM SMALL NUMBER OF SAMPLES PER CLASS	57
<i>JIE LIN, JIAN-PING LI, HUI LIN, JI MING, YI WANG</i>	
RESEARCH ON FACE RECOGNITION METHOD BASED ON COGNITIVE MECHANISM	62
<i>JIA CUI, JIAN-PING LI, YU-JIE HAO</i>	
STUDY ON MULTI-BIOMETRIC FEATURE FUSION AND RECOGNITION MODEL	66
<i>JIA CUI, JIAN-PING LI, XIAO-JUN LU</i>	
A NEW WATERMARKING ALGORITHM BASED ON SLOWLY FEATURE ANALYSIS	70
<i>QI XIA, JIAN-BIN GAO, CHUN-XIANG XU</i>	

A PRACTICAL TAINT-BASED MALWARE DETECTION	73
<i>XIAO-SONG ZHANG, LIU ZHI, DA-PENG CHEN</i>	
A THEOREM OF QUASI-CONFORMAL HOMOMORPHISM IN n-SPACE	78
<i>QIONG LIN, YI-CHUAN WANG</i>	
AN ANT COLONY OPTIMIZATION APPROACH TO DISASSEMBLY PLANNING	81
<i>C. LU, H. Z. HUANG, B. ZHENG, J. Y. H. FUH, Y. S. WONG</i>	
THE CHOICE OF PARAMETERS IN ARC LENGTH ALGORITHM	85
<i>XIAO-WEN NIE, XIAN-LIANG LU, HAI-MEI XU, YONG-XIANG PENG</i>	
DIGITAL AUDIO WATERMARKING ALGORITHM BASED ON NEURAL NETWORKS	89
<i>JIAN HU, XIAO-MEI QIU, DE-TAO HE</i>	
EFFICIENT ALGORITHM OF MINING THE LEADING USERS FROM SMS NETWORK	93
<i>HU XIA, YAN FU</i>	
FINITE-ELEMENT ANALYSIS THE VIBRANCIES OF FLOATING STEEL-PIPELINE ON SEA	97
<i>SHI-FU ZHANG, XIU-MEI SHU, QIXIN ZHANG</i>	
ROBUST EXPONENTIAL STABILIZATION OF STOCHASTIC NEURAL NETWORKS WITH MARKOVIAN SWITCHING	100
<i>GUO-CAI JIANG, SHOU-MING ZHONG</i>	
A METHOD OF SECURITY EVALUATION BASED ON FUZZY MATHEMATICS	106
<i>GUO-MING LU, XUE-ZHI HE, ZHI-HONG CHEN, JIAN-PING LI</i>	
STABILITY FOR NEURAL NETWORKS OF NEUTRAL-TYPE SYSTEMS WITH TIME-VARYING DELAYS ARGUMENTS	110
<i>WEI-CHUN BU, SHOU-MING ZHONG</i>	
THE EMULATION OF FLOW FIELD IN NOZZLES BASED ON FEM	114
<i>XIU-MEI SHU , SHI-FU ZHANG, SHENG-QIANG ZHENG, XUE-MING PENG</i>	
STUDY ON AN ADAPTIVE TASK ASSIGNMENT METHOD IN MEDIA CONTEXT INVENTION	117
<i>YI-FENG SHI, HAO TAN, RONG-FANG MA</i>	
BLIND SIGNAL EXTRACTION METHOD IN UNDERDETERMINED MIXTURES	121
<i>YING XIONG, BIN TANG, JIAN-MING LIAO</i>	
A MIXED ADAPTIVE LOAD BALANCING POLICY FOR CHORD	124
<i>JIE XU, HUI-JUN LUO, MENG-JUAN LIU</i>	
PROTEIN SECONDARY STRUCTURE PREDICTION BASED ON BP NEURAL NETWORK AND QUASI-NEWTON ALGORITHM	128
<i>JIAN WANG, JIAN-PING LI</i>	
TOPOLOGY OPTIMIZATION OF PIEZOELECTRIC FORCE SENSOR	132
<i>BIN ZHENG, CONG LU, HONG-ZHONG HUANG</i>	
A SPATIAL DOMAIN COLOR WATERMARKING SCHEME BASED ON CHAOS	137
<i>QIAN-CHUAN ZHONG, QING-XIN ZHU , PING-LI ZHANG</i>	
A SCHEME OF IMPROVING TCP PERFORMANCE IN WIRELESS ENVIRONMENT	143
<i>FA-SHENG YI, HAI-GANG GONG</i>	
REGION-BASED RATE CONTROL AND BIT ALLOCATION FOR VIDEO CODING	147
<i>DA-YONG WANG, SHI-XIN SUN</i>	

THE MODEL OF COMMON DATA SECURITY ACCESS	152
<i>QING-HUA ZHANG</i>	
RESEARCH ON THE DISTRIBUTED TEST AND CONTROL SYSTEM'S REAL-TIME MESSAGE	156
<i>YONG YI, CHI-MIN ZHOU, TIAN-XIANG GU, YI-NAN GE</i>	
THREE WAYS TO IMPROVE THE EFFICIENCY OF VIRTUAL/CLOUD COMPUTING LAB	160
<i>WEN-HONG TIAN</i>	
THE EFFECT OF DUTY CYCLE ON SUPPRESSING EMI LEVEL IN RANDOM CARRIER FREQUENCY MODULATION OF PWM	164
<i>HAI-YAN GUO, ZHAO-JI LI, BO ZHANG, PING LUO, ZHE-HONG LI</i>	
DISTANCE MEASURE BETWEEN VAGUE SETS	168
<i>YU-JIE HAO, CAO YANG, SHUANG-YAN QUAN, JIAN-PING LI</i>	
PROTEIN FOLDING STRUCTURE PREDICTION BASED ON DISTANCE DISTRIBUTION AND DIHEDRAL ANGLE DISTRIBUTION	173
<i>JIAN WANG, JIAN-PING LI</i>	
SLOWLY FEATURE ANALYSIS OF GABOR FEATURE FOR FACE RECOGNITION	177
<i>JIAN-BIN GAO, JIAN-PING LI, QI XIA</i>	
ROUGH INVARIANT SUBGROUP'S PROPERTIES AND ROUGH QUOTIENT GROUP	181
<i>YUE-HAO YAN, JIAN-PING LI, DE-SONG WANG</i>	
USE OF IMAGING PROBABILITY FUNCTION TO REDUCE GHOST IMAGE	185
<i>YONG-ZHONG HU, TING-JUN LI, ZHENG-OU ZHOU</i>	
A SMALL TARGET DETECTION METHOD BASED ON GENERALIZED S-TRANSFORM	189
<i>YANG YONG, XIN-FANG YANG, BING-XUE WANG, JIE ZHANG</i>	
ANALYSIS OF OPTIMIZED CONTROL OF TRANSIENT WITH FLUID-STRUCTURE INTERACTIONS	193
<i>MING CHEN, JIA-NING PU</i>	
PERSONAL RECOMMENDATION USING WEIGHTED BIPARTITE GRAPH PROJECTION	198
<i>MING-SHENG SHANG, YAN FU, DUAN-BIN CHEN</i>	
PANORAMA IMAGE DISTORTION CORRECTION METHOD BASED ON STRAIGHT BASELINE	203
<i>QUAN-HAI WANG, FANG MIAO, BIAO LIU, CAN-PING LI</i>	
THE CONTOURLET TRANSFORM AND SVM CLASSIFICATION FOR FACE RECOGNITION	208
<i>YI WANG, JIAN-PING LI, JIE LIN, LIN LIU</i>	
A NOVEL AUTHENTICATION SCHEME OF THE DRM SYSTEM BASED ON MULTIMODAL BIOMETRIC VERIFICATION AND WATERMARKING TECHNIQUE	212
<i>DE-SONG WANG, JIAN-PING LI, YUE-HAO YAN</i>	
COMBINING TOP-DOWN AND NCUT METHODS FOR FIGURE-GROUND SEGMENTATION	216
<i>DE-KUN HU, JIANG-PING LI, SIMON X. YANG, STEFANO GREGORI</i>	
APPLICATION OF WEDGELET TRANSFORM FOR IMAGE PROCESS	220
<i>JIAN-BIN GAO, JIAN-PING LI, QI XIA</i>	

DATA CLASSIFICATION BASED ON ARTIFICIAL NEURAL NETWORKS	223
<i>XIAO-FENG GU, LIN LIU, JIAN-PING LI, YUAN-YUAN HUANG, JIE LIN</i>	
EXTRACT THE 3D FACIAL REGION FROM POINT CLOUDS	227
<i>ZHAO-JUN SHI, JIAN-PING LI</i>	
MULTI-BIOMETRIC FEATURE IDENTIFICATION TECHNOLOGIES BASED ON VISUAL PERCEPTION AND COGNITIVE MECHANISM	232
<i>RUI ZHANG, YU-JIE HAO, WEI-HUA ZHANG, QIAO-LING HAN, ZHI-PENG LU</i>	
STUDY ON SUBPIXEL REGISTRATION METHODS BASED ON WAVELET ANALYSIS	236
<i>SEN-HUA WANG, JIAN-PING LI, YONG-QIN YANG</i>	
COMPARISON OF PCA AND ICA IN FACE RECOGNITION	241
<i>BING LUO, YU-JIE HAO, WEI-HUA ZHANG, ZHI-SHEN LIU</i>	
EXPONENTIAL STABILITY OF DELAYED NEURAL NETWORKS WITH IMPULSES	244
<i>JIN-XIANG YANG, SHOU-MING ZHONG, JIAN-CHENG SONG</i>	
STABILITY AND L_2-GAIN ANALYSIS FOR SWITCHED NEUTRAL SYSTEMS	247
<i>DU-YU LIU, SHOU-MING ZHONG, YUAN-QING HUANG</i>	
EXPONENTIAL STABILITY ANALYSIS OF BIDIRECTIONAL ASSOCIATIVE MEMORY NEURAL NETWORKS WITH DISTRIBUTE DELAYS	251
<i>BAO-ZHU ZHAO, SHOU-MING ZHONG</i>	
FEEDBACK CONTROL QUALITY ADAPTATION FRAMEWORK FOR SEDA SYSTEM	255
<i>CHEN JUN, ZHOU MING-TIAN, YANG XIAO-YAN</i>	
A BANDWIDTH RESERVATION SCHEME IN MPLS BASED MOBILE IPv6 NETWORK	260
<i>YONG YU, JIA-LEI WU, WEI SUN</i>	
A NEW PRIVACY-ENHANCED AUTHENTICATION SCHEME FOR WIRELESS MESH NETWORKS	265
<i>YONG FENG, MING-YU FAN, CHANG-PING LIU</i>	
A NOVEL METHOD OF SOFTWARE VULNERABILITY DETECTION BASED ON FUZZING TECHNIQUE	270
<i>XIAO-SONG ZHANG, LIN SHAO, JIONG ZHENG</i>	
AN ILP APPROACH TO MINE THE ASSOCIATION RULES ON LOG ONTOLOGY	274
<i>MING SUN, BO CHEN, MING-TIAN ZHOU</i>	
A NETWORK MANAGEMENT MODEL BASED ON MOBILE AGENT SYSTEM	279
<i>JIAN HU, RUI ZHAO, XIAO-MEI QIU</i>	
DESIGN AND REALIZATION OF TCP-BASED NAT TRAVERSAL IN P2P	284
<i>XIAN-HAO ZHANG</i>	
QOS SPECIFICATION FOR DYNAMIC SCHEDULING APPLICATIONS IN DISTRIBUTED REAL TIME EMBEDDED SYSTEM	287
<i>WEN-YU CHEN, XIAO-OU CHENG, SHI-XIN SUN</i>	
ONLINE REACTIVE ANOMALY DETECTION OVER STREAM DATA	291
<i>YAN FU, JUN-LIN ZHOU, YUE WU</i>	
CLASSIFICATION OF SENSITIVE WEB DOCUMENTS	295
<i>HUI GAO, YAN FU, JIAN-PING LI</i>	

INTERNET ANOMALY DETECTION WITH WEIGHTED FUZZY MATCHING OVER FREQUENT EPISODE RULES	299
<i>DA-PENG CHEN, XIAO-SONG ZHANG</i>	
SYSTEM REQUIREMENT MANAGE MODEL SUSTAIN WEB-BASED INFORMATION PUBLISHING SYSTEM	303
<i>AI-KUI TIAN</i>	
A NEW MALWARE DETECTION METHOD BASED ON RAW INFORMATION	307
<i>QIAO-LING HAN, YU-JIE HAO, YAN ZHANG, ZHI-PENG LU, RUI ZHANG</i>	
A NOVEL ANTI-TROJAN APPROACH USING BEHAVIORAL ANALYSIS	311
<i>BO XIANG, YU-JIE HAO, YAN ZHANG, HONG-YU LIU</i>	
FAST FORWARDING SYSTEM FOR CENTRALIZED ROUTER	315
<i>KANG LI, XIAO-JUN LU, JIAN-PING LI,</i>	
INTELLIGENT FAULT DIAGNOSIS SYSTEM IN LARGE INDUSTRIAL NETWORKS	319
<i>YUAN-YUAN HUANG, JIAN-PING LI, FU-LONG XU, YUAN TANG, JIE LIN</i>	
AN IMPROVED DFT-MSN DATA DELIVERY SCHEME FOR DELAY TOLERANT MOBILE SENSOR NETWORKS	324
<i>FU-LONG XU, JIAN-PING LI, QIAO-LI SHEN, SHANG-GUO WANG</i>	
AN IMPROVED DISTRIBUTED CLUSTER ORGANIZATION ALGORITHM OF WIRELESS SENSOR NETWORKS	329
<i>JUN-FENG ZHAO, JIAN-PING LI</i>	
TAINT-GRAPH-BASED FOR AUTOMATIC SPYWARE ANALYSIS	334
<i>ZHI-PENG LU, YU-JIE HAO, ZHI-JIAN DING, RUI ZHANG, QIAO-LING HAN</i>	
THE IMPROVEMENT OF CLUSTERING ROUTING PROTOCOL FOR WIRELESS SENSOR NETWORKS	338
<i>WEN-SHENG GUO, YONG LIAO, NAN SANG, GUANG-ZE XIONG</i>	
TELECOM ETHERNET OAM RESEARCH IN THE METROPOLITANS AREA NETWORK MULTI-OPERATION PLATFORM	343
<i>YU-XIA LI, LEI HE, YU-ZHEN LI</i>	
PRELIMINARY STUDY OF ROUTING AND DATE INTEGRITY IN MOBILE AD HOC UAV NETWORK	347
<i>KE ZHANG, WEI ZHANG, JIA-ZHI ZENG</i>	
PHYSICAL TOPOLOGY DISCOVERY IN NETWORK WITH REDUNDANT LINKS	351
<i>TING-QIANG YAN, XIN LU</i>	
A VISUAL MANAGEMENT PLATFORM DESIGNED FOR WIRELESS SENSOR NETWORK BASED ON ZIGBEE	355
<i>YU-TING CAI, GUANG-ZHONG XIE, YA-DONG JIANG, XIAO-SONG DU</i>	
A METHODOLOGY TO DETECT KERNEL LEVEL ROOTKITS BASED ON DETECTING HIDDEN PROCESSES	359
<i>JIE HAO, YU-JIE HAO, ZHI-JIAN DING, LIN-TAO SONG</i>	
STUDY ON STABILITY OF EQUILIBRIUM POINT OF ASYMMETRICAL INTERNET NEURAL NETWORK	362
<i>DAN QI, JIAN-PING LI,</i>	
S2DPCA WITH DM AND FM IN FACE RECOGNITION	365
<i>JI-CHENG MENG, WEN-BIN ZHANG</i>	
EXPONENTIALLY STABLE CONDITIONS OF PARAMETRIC UNCERTAINTY IMPULSIVE SWITCHED SYSTEMS WITH TIME DELAY	369
<i>ZI-XIN LIU, SHU LV, SHOU-MING ZHONG, MAO YE</i>	

GLOBAL EXPONENTIAL STABILITY FOR IMPULSIVE CELLULAR NEURAL NETWORKS WITH DISCRETE AND DISTRIBUTED TIME-VARYING DELAYS	373
<i>ZE-YING XIANG, SHOU-MING ZHONG, HAO LUO</i>	
BP-NEURAL NETWORK USED TO CHOOSE THE STYLE OF GRAPHIC-INTERFACE OF APPLICATION PROGRAM	377
<i>ZHI KONG, JIAN-MING LIAO, JIAN-PING LI</i>	
DESIGN AND APPLICATION OF WIRELESS SENSOR NETWORKS FOR GROUND VERIFICATION OF REMOTE SENSING	381
<i>YU TIAN, BO GAO, LING TONG</i>	
A NOVEL CLONAL SELECTION ALGORITHM AND ITS APPLICATION	385
<i>MING-YUAN ZHAO, KE TANG, GANG LU, MING-TIAN ZHOU, CHONG FU, FAN YANG, CHENG-GONG ZHANG</i>	
GENERAL OBSERVER BASED PROJECTIVE SYNCHRONIZATION MEHOD FOR A CLASS OF CHAOTIC SYSTEM	389
<i>CHUN-FU LI, JUE-BANG YU</i>	
MODELING FOR LOGISTICS SYSTEM	393
<i>XIU-QING LIU, LIANG SUN</i>	
ON THE INTELLIGENT FAULT DIAGNOSIS METHOD FOR MARINE DIESEL ENGINE	397
<i>PENG LI, BAKU SU</i>	
THE INNOVATION DESIGN OF THE CENTRIFUGAL GRINDING MACHINE	401
<i>HAI-XIA ZHAO, JI-QING XU, SHOU-CHENG WANG</i>	
MULTI-AGENT AND HYBRID GENETIC ALGORITHM APPROACH FOR DISTRIBUTED JOBSHOP SCHEDULING	404
<i>YAN-HONG WANG, HONG LI, HONG-WEI LIU</i>	
DISRUPTION-TOLERANT WIRELESS SENSOR NETWORKS FOR WIND TUNNEL MONITORING	408
<i>CHANG-JUN LUO, MING-TIAN ZHOU, ZHENG-YIN CAO</i>	
THE RESEARCH AND DEVELOPMENT AS WELL AS INDUSTRIALIZATION OF POWER TRAIN CONTROL UNIT BASED ON CHANGAN HYBRID ELECTRIC VEHICLE	412
<i>LIN FU, JIN-QIANG YU, HONG XIAO</i>	
A NETWORK SECURITY EVALUATION MODEL BASED ON COMMON CRITERIA	416
<i>XIAO-HUA WU, JIAN-PIN LI, WANG YAO</i>	

Author Index