

2009 International Conference on Communication Software and Networks

ICCSN 2009

Table of Contents

Preface	xvii
Organizing Committee	xix
ICCET 2009 Committee Members	xx

Session 1

An Object Tracking Technique in Wireless Sensor Network Based on Prediction.....	3
<i>Yang Hai-bo, Qiu Ning, and Chen You-rong</i>	
An Anti-Jamming GPS Receiver Based on Subspace Decomposition Method.....	9
<i>Hou You-guo, Guo Wei, and Jin Xiao-zhang</i>	
Design and Realization of Remote Control in Smart Home System.....	13
<i>Ping Wang, Huali Jiang, WenZao Shi, and MingChuan Cheng</i>	
The Frequency-Domain Method for UWB Pulse Design.....	16
<i>Junping Hu, Yongchong Liu, and Jie Yang</i>	
A Real-Time Multi-Channel Signal Acquisition Card Based on PCI Express Interface.....	20
<i>Gu Sun and Zishu He</i>	
A Cross-Layer Queue Management Algorithm in 802.16 Wireless Networks.....	25
<i>Lai Jun, Ye Wu, Feng Suili, Guo Hua, and Zhuang Hongcheng</i>	
Study on Throughput for AOS Packet Service and Channel Adaptive Strategy.....	30
<i>Bi Mingxue, Pan Chengsheng, Wang Hongxia, and Tian Ye</i>	
Clothes Image Searching System Based on CTS.....	35
<i>Ouyang Yi and Zhang Sanyuan</i>	
Design and Implementation of a SIP-Based Centralized Multimedia Conferencing System.....	40
<i>Junchao Li, Weimin Lei, and Xiuwu Zhang</i>	

Joint Detection and Decoding Based on MIMO Systems	45
<i>Zhongpeng Wang</i>	
A New Iterative Channel Estimation Scheme for V-BLAST MIMO-OFDM Systems	48
<i>Xiaoqiang Qiao, Hangsheng Zhao, Yusheng Li, and Yongxiang Liu</i>	
A Uniform Negotiation and Delivery Mechanism for SIP-Based Conferencing System	53
<i>Wei Zhang, Weimin Lei, Kunyang Tian, and Xiuwu Zhang</i>	
Session 2	
An Innovative Hybrid P2P Location Network for P2P Workflow Systems	61
<i>Lei Gao and Guangzhou Zeng</i>	
Grouped Linear ZF Receiver for Multiple Antenna Systems	66
<i>Zhongpeng Wang</i>	
A P2P Security Model Based on Trust and Availability	69
<i>Liu Yihe</i>	
MIMO Time-Varying Channel Tracking with a Polynomial Channel Model via Particle Filtering	73
<i>Du Zheng-cong, Liu Li-xin, and Xu Li-jun</i>	
A Cross-layer Relay Selection Algorithm for Infrastructure-Based Two-hop Relay Networks	77
<i>Huan Zhang, Wenbo Wang, Dong Liang, and Mugen Peng</i>	
Short-Range WLAN Compatible Hybrid Cognitive Radio Networks System and MAC Protocol	82
<i>Nan Hao and Sang-Jo Yoo</i>	
New Code Synchronization Algorithm for the Secondary Cell-search Stage in WCDMA	87
<i>Deng Liao, Dongyu Qiu, and Ahmed K. Elhakeem</i>	
A Group Sphere Decoder for the MIMO System	93
<i>Chi-Min Li, Jia-Chyi Wu, I-Tseng Tang, and Yu-Hong Huang</i>	
Optimal Structure Analysis for Ubiquitous Access of Mobile Collectors in Clustered Sensor Networks	97
<i>Bo Sun, Canfeng Chen, and Jian Ma</i>	
Topology Discovery Algorithm Based on Ant Colony Algorithm of Power Line Carrier Sensor Network	102
<i>Hong Li, Chu Dan, Bo Huaixiang, and Li Shurong</i>	
A Measurement Based Uplink Packet Latency Analysis in GPRS Network	106
<i>Xiaohui Chen, Weidong Wang, and Guo Wei</i>	
Mobile Agent Based Middleware Using Publish/Subscribe Mechanism in Wireless Sensor Networks	111
<i>Zhong Shen, Renfa Li, and Juan Luo</i>	

Session 3

Character Recognition Using Geometrical Features of Alphabet: A Novel Technique	119
<i>Sunil Bhooshan, Vinay Kumar, Ateendra K. Singh, Tanupriya Negi, and Jyoti Miglani</i>	
A Tangent Area Method to Restrict the RREQ Braodcasting Frame	126
<i>Xu Shenglei, SungDae Jung, Usman Hassan, and SangSun Lee</i>	
Process Algebra Approach to Verifying Safety Specification of Hybrid Embedded Systems	129
<i>Jinzhao Wu and Shihan Yang</i>	
SCSRM: A Splitting-Connection Scheme for Satellite Reliable Multicast	134
<i>Gongliang Liu and Wenjing Kang</i>	
The Evaluation of Modulation Techniques for Underwater Wireless Optical Communications	138
<i>Sui Meihong, Yu Xinsheng, and Zhang Fengli</i>	
Pilot-Aided Channel Estimation Techniques in OFDM System	143
<i>He Chunlong and Hao Li</i>	
The Design and Implementation of the Complex Network Three-Dimensional Genetic Topology Generator	147
<i>Da-Yu Fu, Hai Zhao, Xin Ge, and Jun Zhang</i>	
Learning Task Allocation for Multiple Flows in Multi-Agent Systems	153
<i>Zheng Xiao, Shengxiang Ma, and Shiyong Zhang</i>	
A Service-Oriented Framework of Distributed QoS Measurement Based on Multi-Agent for Overlay Network	158
<i>Yang Jianren, Hu Ruiming, Chen Jun, and Zhong Jianbo</i>	
Implementation of Real-time Network Extension on Embedded Linux	163
<i>Yuan Tian, Guoqiang Ren, and Qin Zhang Wu</i>	
Metamorphic Viruses Detection Using Artificial Immune System	168
<i>Essam Al Daoud</i>	
The Modified PPM Modulation for Underwater Wireless Optical Communication	173
<i>Sui Meihong, Yu Xinsheng, and Zhou Zhangguo</i>	

Session 4

Energy Efficient and Reliable Routing Scheme for Wireless Sensor Networks	181
<i>Muhammad Tariq, Yong Pyo Kim, Jun Hwan Kim, Yong Jin Park, and Eui Hyun Jung</i>	
Research on Compensation Policy Scheduling Algorithm for Multi-core Processors	186
<i>Benhai Zhou, Jianzhong Qiao, Shukuan Lin, and Enze Wang</i>	
A Complex Interface Modeling Approach Based on Design Pattern	191
<i>Teng Gao, Qingzhong Li, and Shuaiqiang Wang</i>	

Study on Supernode Election Algorithm in P2P Network Based upon District Partitioning	196
<i>Cuibo Yu, ChunHong Zhang, XueRong Gou, and Yang Ji</i>	
Performance Evaluation for Providing Service Differentiation in OPS Networks with Wavelength Converters	200
<i>lv Guanghong and Lv Xing</i>	
On the Uniform Sampling of the Web: An Improvement on Bucket Based Sampling	205
<i>Sanaz Heidari, Hamid Mousavi, and Ali Movaghar</i>	
Mining Frequent Flows Based on Adaptive Threshold with a Sliding Window over Online Packet Stream	210
<i>Zhen Zhang, Binqiang Wang, Shuqiao Chen, and Ke Zhu</i>	
An Adaptive Sampling Methodology for Internet Traffic Data Measurement	215
<i>Bin Zeng, Dafang Zhang, Wenwei Li, Mei Zhang, and Qiao Hong</i>	
Efficient Traffic Dynamical Process on Complex Networks	219
<i>Dan Wang, Yucheng Zhou, Yuanwei Jing, and Siying Zhang</i>	
Inter-Carrier Interference Cancellation in OFDM via Independent Component Analysis	224
<i>Alireza Homayounzadeh and Mohammad Ali Masnadi Shirazi</i>	
Analysis and Improvement of BDFE Algorithm for DTMB Standard	228
<i>Yan Xu, Qiuyuan Huang, and Biqi Long</i>	
An Energy-Efficient Cooperative Node Selction Scheme in Wireless Sensor Networks	232
<i>Yu Zhang, Yueming Cai, Wendong Yang, and Youyun Xu</i>	
Session 5	
Coexistence between Cognitive Radio Network and Digital TV	239
<i>Hongjie Liu, Shufang Li, and Min Yi</i>	
Unspecific Event Detection in Wireless Sensor Networks	243
<i>Chongming Zhang, Chunmei Wang, Dazhi Li, Xi Zhou, and Chuanshan Gao</i>	
A Scalable and Cooperative Caching Scheme in a Distributed VOD System	247
<i>Jing Li, Jian Yang, and Hongsheng Xi</i>	
A Method of Simplifying Residual Test Algorithm	251
<i>Zengyou Xu, Jianping Xing, Lei Jiao, and Yuting Zhang</i>	
A Fair MAC Algorithm with Dynamic Priority for 802.11e WLANs	255
<i>Rong He and Xuming Fang</i>	
A Model of Web Server's Performance-Power Relationship	260
<i>Li Li, Tian RuiXiong, Yang Bo, and Gao ZhiGuo</i>	
Software Design and Implementation for a DEMO on ZigBee Information Delivery	265
<i>Weijia Li, Claudio Borean, and Tiecheng Song</i>	

The Period Estimation of PN Sequence Using Reprocessing Spectrum of DS-UWB signal	270
<i>Xuesong Li, Tianqi Zhang, Liufei Yang, Pu Miao, and Shufang Xia</i>	
Paper Application of Partial Coefficient Update LMS Algorithm to Suppress Narrowband Interference in DSSS System	275
<i>Zhangsheng Wang, Ming Lv, and Bin Tang</i>	
An Improved Solution for IPv6 Network Topology Discovery Based on Source Routing Mechanism	279
<i>Zhu Mingming and Luo Junyong</i>	
Delay and Throughput Trade-Off in WiMAX Mesh Networks	283
<i>Saeed Bastani, Saleh Yousefi, Mojtaba Mazoochi, and Alireza Ghiamatyoun</i>	
Implementation Architecture of Proxy Mobile IPv6 Protocol for NS2 Simulator Software	287
<i>Farhana Ferdousi Liza and Wenbing Yao</i>	
Session 6	
General BBV Model of Weighted Complex Networks	295
<i>Binbin Hao, Yucheng Zhou, Yuanwei Jing, and Siying Zhang</i>	
A Novel Cross-Layer Scheduling Scheme for MPEG Traffic in High Speed WPANs	299
<i>Sheng Xu, Xiaohui Chen, Weidong Wang, and Dongjin Wang</i>	
A Real-Time Software Simulator of Wideband HF Propagation Channel	304
<i>Yang Guo and Ke Wang</i>	
Research on the Stability of Load Balancing Algorithm for Scalable Parallel Computing	309
<i>Qingyang Meng, Jianzhong Qiao, Jun Liu, and Shukuan Lin</i>	
A 3-10GHz Low-Noise Amplifier Using Resistive Feedback in SiGe HBT Technology	313
<i>Yi-wen Huang, Wan-rong Zhang, Hong-yun Xie, Pei Shen, Jia Li, Jun-ning Gan, Lu Huang, and Ning Hu</i>	
Supernode Election Algorithm in DHT Based upon Network Coordinate and District Partition	316
<i>Gang Wang, Cuibo Yu, Yuyan Zhang, Chunhong Zhang, Lichun Li, and Tao Ma</i>	
Contrast Analysis of NETCONF Modeling Languages: XML Schema, Relax NG and YANG	322
<i>Huiyang Cui, Bin Zhang, Guohui Li, Xuesong Gao, and Yan Li</i>	
k-Span: A k-Redundant Multicast Algorithm in Mobile Wireless Ad Hoc Network	327
<i>Panlong Yang, Guangcheng Qin, Hai Wang, and Guihai Chen</i>	

A Novel Dual-Band Power Amplifier for Wireless Communication	332
<i>Hongyun Xie, Lijian He, Pei Shen, Junning Gan, Jia Li, Yiwen Huang, Lu Huang, and Wanrong Zhang</i>	
An Empirical Study on Performance Comparison of Lucene and Relational Database	336
<i>Yinan Jing, Chunwang Zhang, and Xueping Wang</i>	
A New Algorithm for Channel Estimation Based on Pilot-Aided and EM in Software Radio OFDM System	341
<i>Wu Dingxue and Tian Jinwen</i>	
Blind Channel Estimation Based on Optimal Window Function and HOS for MIMO System	346
<i>Li Li, Ke Wang, and Juan Li</i>	
Session 7	
Wireless Locating Method for Point of Impact Based on Acoustic Technique	353
<i>Jingrong Zhao and Ke Wang</i>	
The adaptabilities of Different UWB Technologies to the FCC UWB Emission Limit	358
<i>Junping Hu and Jie Yang</i>	
Mobility Management for Satellite/Terrestrial Multi-Service Convergence Networks	363
<i>Kwong Chiew Foong</i>	
P2P File Sharing Software in IPv4/IPv6 Network	368
<i>Rui Zhao, Ruhua Liu, and Guangxuang Fu</i>	
Face Detection Based on Facial Features and Linear Support Vector Machines	372
<i>Jinxin Ruan and Junxun Yin</i>	
A Policy-Based CAC Scheme for Fixed WiMAX System	377
<i>Sida Luo, Zhishu Li, Jian Hu, Tao Liu, and Biao Cai</i>	
A Load-Balance Routing Algorithm for Multi-Sink Wireless Sensor Networks	381
<i>Chunping Wang and Wei Wu</i>	
Research on Designing and Implementing an Experimental MANET Testbed	386
<i>Lixin Li and Huisheng Zhang</i>	
A Link-Quality Aware Routing Metric for Multi-hop Wireless Network	391
<i>Yafeng Zhou, Sang-Hwa Chung, Lihua Yang, and Hee-jin Choi</i>	
A Multi-Service Bit and Power Allocation in WiMAX Networks	396
<i>Jiaying Song, Xu Li, and Zhangdui Zhong</i>	
Effect of Network Structure on Packet Delivery in Small-World Network	400
<i>Dan Wang, Na Cai, Yuanwei Jing, and Minxiu Yan</i>	
Load Balancing across ECUs in Automotives	405
<i>Rajeshwari Hegde and K.S. Gurumurthy</i>	

Session 8

Advanced PROPHET Routing in Delay Tolerant Network	413
<i>Jingfeng Xue, Jiansheng Li, Yuanda Cao, and Ji Fang</i>	
An Efficient Static Compressed Data Management System for an Embedded DBMS	416
<i>Jin-Ho Hwang, Jeong Wha Lee, Gun-Woo Kim, Hak Soo Kim, and Jin Hyun Son</i>	
Design of Flight Service Vehicle Dispatching Management System	421
<i>Lei Deng and De-yuan Gao</i>	
Distributed Execution of an Inherently Sequential Network Simulator	424
<i>Sadaqat Jan, Shahbaz Khan, Maozhen Li, and Hamed Al-Raweshidy</i>	
Design and Implementation of Distributed Firewall System for IPv6	430
<i>Yingxu Lai, Guangzhi Jiang, Jian Li, and Zhen Yang</i>	
Classification and Analyses of Business Process Anomalies	435
<i>Gun-Woo Kim, Jeong Hwa Lee, and Jin Hyun Son</i>	
The Solution of Packet Reordering in LEO Satellite Networks	440
<i>Guyin Wang, Junfeng Wang, and Lu Liu</i>	
Real-Time Adaptive Link Layer Trigger Based Cross Layer Fast Handoff Mechanism in IEEE 802.11 WLANs	445
<i>Xiaoyu Cheng and Duyan Bi</i>	
CROEQS: Contemporaneous Role Ontology-based Expanded Query Search - Implementation and Evaluation	450
<i>Stijn Vandamme, Johannes Deleu, Tim Wauters, Brecht Vermeulen, and Filip De Turck</i>	
A Novel Message Fabrication Detection for Beaconless Routing in VANETs	455
<i>Sam Ang Chhoeun, Kannikar Siriwong Na Ayutaya, Chalernpol Charnsripinyo, Kosin Chamnongthai, and Pinit Kumhom</i>	
Threat Scenarios Targeting the Trust Model of Mobile Agent Platforms	460
<i>Michail Fragkakis and Nikolaos Alexandris</i>	
Wireless Ad Hoc Networks Remote Meter Reading System Based on GPRS	465
<i>Jingjing Wang</i>	

Session 9

The Design and Implementation of Marine Data Integration System Based on SOA	471
<i>Jingjing Wang</i>	
Leakage Identification for Secret Relational Data Using Shadowed Watermarks	475
<i>Hequn Xian and Dengguo Feng</i>	
Improving Network Processing Dependability with Heterogeneous Reliability Cores	481
<i>Peter David Ungsunan, Chuang Lin, Yi Gai, and Xiangzhen Kong</i>	

Performance Analysis of Proactive and Reactive Routing Protocols for Mobile Ad-hoc Grid in e-health Applications	486
<i>Sadaqat Jan, I.A. Shah, and Hamed Al-Raweshidy</i>	
Improved Active Queue Management Algorithm for High Performance Networks	491
<i>Long Ge, Jinsheng Sun, and Zhiquan Wang</i>	
Packet Loss Based Real Time Network Condition Estimation	496
<i>Xiaoyu Cheng and Duyan Bi</i>	
Localization Algorithm Based on Difference Estimation for Wireless Sensor Networks	501
<i>Fugen Su, Weizheng Ren, and Hongli Jin</i>	
An Energy-Constrained Routing Protocol for Mobile Ad Hoc Networks	506
<i>Liu Zhanjun, Wang Rui, Liu Qilie, Li Yun, Chen Qianbin, and Wang Ping</i>	
Study on N-Policy Working Vacation Polling System for WDM	510
<i>Xingjie Hui, Haiyan Chen, Naishuo Tian, and Lu Donghua</i>	
A Multi Objective Programming Algorithm for Wireless Sensor Networks	514
<i>Guomin Zhou</i>	
A Modified Belief Propagation Decoding Algorithm of LDPC Codes for Fast Convergence	518
<i>Zhu Aimin and Yao Senjie</i>	
Design of Optimal LDPC Code for the System of MDPSK Concatenated with LDPC Codes	522
<i>Zhu Aimin and Yao Senjie</i>	
Session 10	
A Novel Error Classification Simulation Method for Rayleigh Fading Channel	529
<i>Liang Dong and Wang Wenbo</i>	
The Research about Balanced Route MTSP Based on Hybrid Algorithm	533
<i>Xu Hong-li and Zhang Cheng-Ming</i>	
Research of a Traffic Advisory System Based on Deep Web	537
<i>Zhuo Wang, Ran Hu, and Jun Hu</i>	
Experimental Study on Connectivity for Wireless Sensor Networks	541
<i>Qi Xiaogang, Liu Lifang, and Liu Sanyang</i>	
Using API Sequence and Bayes Algorithm to Detect Suspicious Behavior	544
<i>Cheng Wang, Jianmin Pang, Rongcai Zhao, and Xiaoxian Liu</i>	
Error Control Mechanisms using CODEC	549
<i>S.V. Viraktamath, G.V. Attimarad, V.P. Gejji, and Ravi H.</i>	
The Future of Mobile Wireless Communication Networks	554
<i>Xichun Li, Abudulla Gani, Rosli Salleh, and Omar Zakaria</i>	

A Fast Fault Location Algorithm Based on Pre-computed for Optical Burst Switching Network	558
<i>Dan Liu and Ruyan Wang</i>	
Analytical PI Design by Using Closed-Loop Stability Constraints and H_{∞} Theory for Relativity Rotary Machine	562
<i>Shuang Liu and Bin Liu</i>	
Optimal Hopfield Neural Network and Applicationg for Multi-User Detection	567
<i>Wang Hongbin and Zhang Liyi</i>	
A Clustering Algorithm Based on Communication Facility with Deterministic Cluster-Size in WSN	571
<i>Yuhua Liu, Jingju Gao, Longquan Zhu, and Xiaoxu Li</i>	
Performance Comparision of Autocorrelation and CPRDIC Algorithm Implemented on FPGA for OFDM Based WLAN	575
<i>P. Sudhakar Reddy and G. Ramachandra Reddy</i>	
Session 11	
Multi-Network Data Path for 5G Mobile Multimedia	583
<i>Xichun Li, Rosli Salleh, Abdulla Aani, and Omar Zakaria</i>	
The Evaluation Report of SHA-256 Crypt Analysis Hash Function	588
<i>Arul Lawrence Selvakumar and C. Suresh Ganadhas</i>	
A PIN Diode SiGe HBT Variable Gain Amplifier for WCDMA Applications	593
<i>Jun-ning Gan, Wan-rong Zhang, Hong-yun Xie, Dong-yue Jin, Pei Shen, Jia Li, Lu Huang, Yi-wen Huang, and Ning Hu</i>	
Research on Asymmetry Multi-Terminal Sources Audio Coding Algorithm	597
<i>Jiang Yan, Ning Gengxin, Wei Gang, and Yang Yucun</i>	
The Grid-Based Data Integration	601
<i>Zhang Wendong and Ma Zhen</i>	
Load-Balanced Algorithm in Wireless Sensor Networks Based on Pruning Mechanism	604
<i>Yanbo Zhang, Zhengqi Zheng, Yingni Jin, and Xiuzhen Wang</i>	
Study on ZigBee Network Routing Based on Nodal Heterogeneity	607
<i>Liu Dan and Qianzhi Hong</i>	
Verification and Analysis of Access Control Policy with Colored Petri Net	610
<i>Fujun Feng and Junshan Li</i>	
Research on the Composition Approach of Service-Oriented Enterprises Collaborative Web Services Composition Model	615
<i>Jing Bi, Zhi-liang Zhu, and Ming Tie</i>	
S-SPIN: A Provably Secure Routing Protocol for Wireless Sensor Networks	620
<i>Liang Tang and QiaoLiang Li</i>	
Outage Probability of Multinode Coexistent CUWB System	625
<i>Yi Zhu, Jun Zhu, and Gang Wang</i>	

Performance Evaluation of Multimedia Application QoS over Wireless and Wired IPv6 Networks	629
<i>Khanista Namee</i>	

Session 12

Research on the Method of Features Extraction for Non-Stationary Transient Signal Based on EMD Method	637
<i>Jiang Jinshui, Liu Bin, Chen Hao, and Shi Peiming</i>	
Archimedean t-Norms and an Open Problem	642
<i>Hu Qu-Fei and Song Li-Xia</i>	
Substitution Encryption Algorithm Study for Embedded Mobile Code Protection	645
<i>Hu JingDe and Shi Gang</i>	
The Method of Text Categorization on Imbalanced Datasets	650
<i>Li Xin-fu, Yu Yan, and Yin Peng</i>	
Selective Cooperative Schemes Using Quasi-Cyclic LDPC Codes over Rayleigh Fading Channels	654
<i>Zhixiong Chen and Jinsha Yuan</i>	
Study of Communication Gateway Based on IEC61850 Protocol	659
<i>Qu Zhijian, Liu Mingguang, Jiang Zhiling, Wu Feng, Liu Jing, and Sun Lichao</i>	
Design of a Database System for Linking Geo-Scientific Data	663
<i>Zhao Di</i>	
A Recording Method of Virtual Reality Interaction	666
<i>Zhiyong He and Chunsheng Zhao</i>	
Research on Distributed Architecture Based on SOA	670
<i>Hongqi Li and Zhuang Wu</i>	
The Design of Automatic Classification System of Integrated Emergency Response System	675
<i>Yang Cheng, Zhishu Li, Hongjun Wang, Peng Zhou, and Wei Zhou</i>	
Trust Decision Making in Structured P2P Network	679
<i>Cai Biao, Li Zhishu, Cheng Yang, Fu Die, and Cheng Liangyang</i>	
Latent Dirichlet Conditional Naive-Bayes Models for Privacy-Preservation Clustering	684
<i>Hongjun Wang, Zhishu Li, Yang Cheng, and Liping Liu</i>	

Session 13

Bayesian Mixture Model for Features-Preservation Clustering	691
<i>Xinming Guo</i>	
Synchronization Algorithms for SMS Based Wireless Distributed System for Electric Grid Monitor	696
<i>Wei Zhou, Zhishu Li, Yang Cheng, and Hongjun Wang</i>	

Document Clustering Based on Fuzzy Rough Set	701
<i>Zhou Peng, Li Zhishu, Cheng Yang, and Huang Zhiguo</i>	
Fast Independent Component Analysis Based Digital Modulation Recognition Method	704
<i>Xu Yiqiong, Ge Lindong, and Wang Bo</i>	
Digital Modulation Recognition Method Based on Tree-Structured Neural Networks	708
<i>Xu Yiqiong, Ge Lindong, and Wang Bo</i>	
Research on Mine Through-Earth Communication System Based on Spectrum Spreading Technology	713
<i>Zhang Qinghui and Zhang Donglin</i>	
UBSFQ: An Urgency-Based Start-time Fair Queuing Scheduling	716
<i>Liu Wen-Bo, Guo Yun-Fei, Ma Hai-long, and Zhang Fan</i>	
CWDM-Based Switching Network Design for High Vision Real-Time Transmission	721
<i>Jun-ichi Mizusawa and Takayuki Sugeta</i>	
A New Congestion Control Method for IEEE 802.16 Mesh Mode	726
<i>Yun Li, Dengyu Wei, Hongcheng Zhuang, Haibao Wang, and Ping Wang</i>	
A Historical-Information-Based Algorithm in Dynamic Spectrum Allocation	731
<i>Lili Yang, Xianzhong Xie, and Yi Zheng</i>	
Performance Analysis of Cooperative Spectrum Sensing under Constrained Scheme	737
<i>Yunxue Liu, Dongfeng Yuan, Mingyan Jiang, Hui Yu, Chunyuan Xu, and Riwei Sun</i>	
Impact of Doppler on High Speed UAV OFDM System	742
<i>He Jian and Zhang Yue-tong</i>	
Session 14	
SIP Offload Engine for Accelerating J2EE Based SIP Application Server	749
<i>Gao Zhiguo, Xiang Zhe, Xue Wei, Liang Zhiyong, and Yang Bo</i>	
Multi-ary Soft Output Viterbi decoding Algorithm for Unitary Space-Time Symbol-Based Turbo Code	754
<i>Dapeng Zhang, Ju Liu, Qiangjun Niu, and Hui Ji</i>	
Combined Serial Concatenated Convolutional Coding and Unitary Space-Time Modulation	758
<i>Dapeng Zhang, Ju Liu, Hui Ji, and Qiangjun Niu</i>	
New Bandwidth Management Framework for Supporting Differentiated Services in MPLS Networks	762
<i>Afef Kotti, Rached Hamza, and Kamel Bouleimen</i>	

Analysis of Real-time Multimedia Transmission over PR-SCTP with Failover Detection Delay and Reliability Level Differential	768
<i>Changqiao Xu, Enda Fallon, Yuansong Qiao, Gabriel-Miro Muntean, Xiaoguang Li, and Austin Hanley</i>	
A Facilitate Layered Network Architecture Model for Pervasive Grid	773
<i>Bin Ma</i>	
A Method of P2P Traffic Identification on Internet Based on the Deep Flow Inspection	777
<i>Tianming Xia and Ruiqi Song</i>	
Distributed Multichannel Spectrum Sharing Algorithm for Cognitive Radio Networks	781
<i>Zengqin Xu and Qinyu Zhang</i>	
DCR: An Energy-Efficient Distributed Clustering and Routing Protocol for Wireless Sensor Networks	786
<i>Wenjun Liu, Yue Sun, Yang Bai, Jiguo Yu, and Baoxiang Cao</i>	
Short-Term Traffic Flow Prediction Based on ANFIS	791
<i>Chen Bao-ping and Ma Zeng-qiang</i>	
Session 15	
A Novel Stereoscopic Security Architecture with Trust Management for Wireless Sensor Networks	797
<i>Bin Ma</i>	
Throughput Validation of an Advanced Channel Assignment Algorithm in an IEEE 802.11 WLAN	801
<i>Mohamad Haidar, Hussain Al-Rizzo, Robert Akl, Yupu Chan, and Mohamed Bouharras</i>	
Fingerprint Template Matching Algorithm Based on Daubechies Wavelet	807
<i>Zhang Baohua, Jia Yuanchun, Zhao Jianfeng, Yu Dahua, and Zhou Quanlin</i>	
Cross-Layer Trust Model and Algorithm of Node Selection in Wireless Sensor Networks	812
<i>Bin Ma</i>	
Designing a Sytolic Matcher for 2-Dim Patterns	816
<i>Mohammad Kheyrandish, Mohammad Mosleh, Saeid Setayeshi, and Mohammad Golshahi</i>	
Software Radio-Based Universal Digital Modulator Research	821
<i>Li Mingfu, Lin Xunchao, and Qian Guangdi</i>	
QoS-Based Grid Resource Reservation and Adjustment Mechanisms	825
<i>Zhang Jingmiao and Gao Shuangxi</i>	
Trajectory Optimization of Mobile Element for Sparse Wireless Sensor Networks	829
<i>Jing Wang</i>	
Author Index	834