

Content Computing

Advanced Workshop on Content Computing, AWCC 2004
ZhenJiang, JiangSu, China, November 15-17, 2004
Proceedings

Table of Contents

Session 1: Mobile Code and Agent Technology

Mobility Prediction-Based Wireless Resource Allocation and Reservation . . .	1
<i>Xiaolong Yang, Qianbin Chen, Youju Mao, Keping Long, and Bin Ma</i>	
An Agent-Enabled Content-Explicit Authorization Model for OGSA-Compliant Grid	12
<i>Yunliang Jiang, Beishui Liao, Yong Liu, and Jun Hu</i>	
A Predictable Mobile Agent Computation Model and Its Fabric Architecture	18
<i>Yong Liu, Congfu Xu, Zhaohui Wu, and Yunhe Pan</i>	
A Novel Reverse Rerouting Mechanism in Mobile Wireless Internet	27
<i>Xingwei Wang, Bo Song, Changqing Yuan, and Huang Min</i>	
An Agents Based Grid Infrastructure of Social Intelligence	33
<i>Jun Hu, Ji Gao, Beishui Liao, and Jiujun Chen</i>	
Agent Aided Workflow Modeling	39
<i>Jinlei Jiang and Meilin Shi</i>	

Session 2: Content Sharing and Consistency Management

An Improved Hybrid Method of Maintaining Content Consistency	46
<i>Changming Ma and Daniel Cooke</i>	
Advanced Architecture for Distributed Systems with a Network Infrastructure Based on CAN and Internet for Content Distribution	58
<i>Juan V. Capella, Alberto Bonastre, and Rafael Ors</i>	
Distributed Document Sharing with Text Classification over Content-Addressable Network	70
<i>Tayfun Elmas and Oznur Ozkasap</i>	
Content Distribution Stochastic Fluid Models for Multi-regions P2P Networks	82
<i>Zhiqun Deng, Dejun Mu, Guanzhong Dai, and Wanlin Zhu</i>	
Construct Campus Peer-to-Peer Networks	88
<i>Zhiqun Deng, Guanzhong Dai, Dejun Mu, and Zhicong Liu</i>	

Session 3: Networking Infrastructure and Performance

Fractional Gaussian Noise: A Tool of Characterizing Traffic for Detection Purpose	94
<i>Ming Li, Chi-Hung Chi, and Dongyang Long</i>	
Performance Analysis of Virtual Time Optimistic Transaction Processing .	104
<i>Cong Liu, Wei Huang, and Zhiguo Zhang</i>	
A Measurement-Based TCP Congestion Control Scheme	112
<i>Lihua Song, Haitao Wang, and Ming Chen</i>	
<i>BM-VF-SBD: An Efficient Data Channel Scheduling Algorithm to Support QoS for Optical Burst Switching Networks</i>	120
<i>Xiaolong Yang, Demin Zhang, Qianbin Chen, Keping Long, and Lianghao Ji</i>	
A Predictive Controller for AQM Router Supporting TCP with ECN	131
<i>Ruijun Zhu, Haitao Teng, and Weili Hu</i>	

Session 4: Content Aware Security (I)

Enhancing the Content of the Intrusion Alerts Using Logic Correlation ...	137
<i>Liang-Min Wang, Jian-Feng Ma, and Yong-Zhao Zhan</i>	
Real-Time Emulation of Intrusion Victim in HoneyFarm	143
<i>Xing-Yun He, Kwok-Yan Lam, Siu-Leung Chung, Chi-Hung Chi, and Jia-Guang Sun</i>	
On the Formal Characterization of Covert Channel	155
<i>Shiguang Ju and Xiaoyu Song</i>	
Availability Analysis and Comparison of Different Intrusion-Tolerant Systems	161
<i>Chao Wang and Jian-Feng Ma</i>	
Security Analysis of User Efficient Blind Signatures	167
<i>Tianjie Cao, Dongdai Lin, and Rui Xue</i>	

Session 5: Content Aware Security (II)

A Novel DDoS Attack Detecting Algorithm Based on the Continuous Wavelet Transform	173
<i>Xinyu Yang, Yong Liu, Ming Zeng, and Yi Shi</i>	
Enhancing the Scalability of the Community Authorization Service for Virtual Organizations	182
<i>Jian-Ping Yong, Kwok-Yan Lam, Siu-Leung Chung, Ming Gu, and Jia-Guang Sun</i>	

Securing Multicast Groups in Ad Hoc Networks	194
<i>Hartono Kurnio, Huaxiong Wang, Josef Pieprzyk, and Kris Gaj</i>	
Improved Privacy-Protecting Proxy Signature Scheme	208
<i>Tianjie Cao, Dongdai Lin, and Rui Xue</i>	
Improving Security Architecture Development Based on Multiple Criteria Decision Making	214
<i>Fang Liu, Kui Dai, and Zhiying Wang</i>	

Session 6: Multimedia Content

A LSB Substitution Oriented Image Hiding Strategy Using Genetic Algorithms	219
<i>Ming-Ni Wu, Min-Hui Lin, and Chin-Chen Chang</i>	
A Prediction Scheme for Image Vector Quantization Based on Mining Association Rules	230
<i>Chih-Yang Lin and Chin-Chen Chang</i>	
Fuzzy Logic-Based Image Retrieval	241
<i>Xiaoling Wang and Kanglin Xie</i>	
Deriving Facial Patterns for Specifying Korean Young Men's 3D Virtual Face from Muscle Based Features	251
<i>Seongah Chin and Seongdong Kim</i>	
A Content-Based Fragile Watermarking Scheme for Image Authentication	258
<i>Mi-Ae Kim and Won-Hyung Lee</i>	

Session 7: Content Mining and Knowledge Extraction

A New FP-Tree Algorithm for Mining Frequent Itemsets	266
<i>Yu-Chiang Li and Chin-Chen Chang</i>	
Evaluation Incompleteness of Knowledge in Data Mining	278
<i>Qiang Li, Jianhuu Li, Xiang Li, and Shenghong Li</i>	
The Variable Precision Rough Set Model for Data Mining in Inconsistent Information System	285
<i>Qingmin Zhou, Chenbo Yin, and Yongsheng Li</i>	
Rule Discovery with Particle Swarm Optimization	291
<i>Yu Liu, Zheng Qin, Zhewen Shi, and Junying Chen</i>	
Data Mining Service Based on MDA	297
<i>Yiqun Chen, Chi-Hung Chi, and Jian Yin</i>	

Session 8: Web Services and Content Applications (I)

Web Service Composition Based on BPWS-Net	303
<i>Jian Sun and Changjun Jiang</i>	
Testing Web Services Using Progressive Group Testing	314
<i>Wei-Tek Tsai, Yinong Chen, Zhibin Cao, Xiaoying Bai, Hai Huang, and Ray Paul</i>	
XFCM – XML Based on Fuzzy Clustering and Merging – Method for Personalized User Profile Based on Recommendation System of Category and Product	323
<i>JinHong Kim and EunSeok Lee</i>	
Analyzing Web Interfaces of Databases for Retrieving Web Information ...	331
<i>Jeong-Oog Lee, Myeong-Cheol Ko, Jinsoo Kim, Chang-Joo Moon, Young-Gab Kim, and Hoh Peter In</i>	
A New Universally Verifiable and Receipt-Free Electronic Voting Scheme Using One-Way Untappable Channels	337
<i>Sangjin Kim and Heekuck Oh</i>	

Session 9: Web Services and Content Applications (II)

Ontology-Based Conceptual Modeling of Policy-Driven Control Framework: Oriented to Multi-agent System for Web Services Management	346
<i>Beishui Liao, Ji Gao, Jun Hu, and JiuJun Chen</i>	
An Approach to Dynamically Reconfiguring Service-Oriented Applications from a Business Perspective	357
<i>Jianwu Wang, Yanbo Han, Jing Wang, and Gang Li</i>	
Dynamically Reconfiguring Sitemaps Using RDF	369
<i>Huijae Lee and Sang Bong Yoo</i>	
A General Model for Heterogeneous Web Services Integration	374
<i>Wei Zhang, Shangfen Guo, and Dan Ma</i>	
Methodology for Semantic Representing of Product Data in XML	380
<i>Xiangjun Fu, Shanping Li, Ming Guo, and Nizamuddin Channa</i>	
Semantic Based Web Services Discovery	388
<i>Jianjun Xu, Qian Zhu, Juanzi Li, Jie Tang, Po Zhang, and Kehong Wang</i>	

Session 10: Content Retrieval and Management (I)

What Are People Looking for in Your Web Page?	394
<i>Chen Ding and Chi-Hung Chi</i>	

The Impact of OCR Accuracy on Automatic Text Classification	403
<i>Guowei Zu, Mayo Murata, Wataru Ohyama, Tetsushi Wakabayashi, and Fumitaka Kimura</i>	
TSS: A Hybrid Web Searches	410
<i>Li-Xin Han, Gui-Hai Chen, and Li Xie</i>	
Determining the Number of Probability-Based Clustering: A Hybrid Approach	416
<i>Tao Dai, Chunping Li, and Jianguang Sun</i>	
Categorizing XML Documents Based on Page Styles	422
<i>Jung-Won Lee</i>	
Session 11: Content Retrieval and Management (II)	
Generating Different Semantic Spaces for Document Classification	430
<i>Jianjiang Lu, Baowen Xu, and Jixiang Jiang</i>	
A Component Retrieval Method Based on Facet-Weight Self-learning	437
<i>Xiaoqin Xie, Jie Tang, Juanzi Li, and Kehong Wang</i>	
The Algorithm About Division and Reducts of Information System Based on Discernibility Index of Attribute	449
<i>Jun Li, Xiongfei Li, Hui Liu, and Xinying Chen</i>	
An Effective Document Classification System Based on Concept Probability Vector	457
<i>Hyun-Kyu Kang, Yi-Gyu Hwang, and Pum-Mo Ryu</i>	
Accuracy Improvement of Automatic Text Classification Based on Feature Transformation and Multi-classifier Combination	463
<i>Xuexian Han, Guowei Zu, Wataru Ohyama, Tetsushi Wakabayashi, and Fumitaka Kimura</i>	
Session 12: Ontology and Knowledge Conceptualization	
Risk Minimization Based Ontology Mapping	469
<i>Jie Tang, Bang-Yong Liang, Juanzi Li, and Kehong Wang</i>	
Evolutionary Parameter Estimation Algorithm for Combined Kernel Function in Support Vector Machine	481
<i>Syng-Yup Ohn, Ha-Nam Nguyen, and Sung-Do Chi</i>	
Enriching Domain Ontology from Domain-Specific Documents with HowNet	487
<i>Yong Cheng and Zhongzhi Shi</i>	

A Framework of Extracting Sub-ontology	493
<i>Baowen Xu, Dazhou Kang, and Jianjiang Lu</i>	
Ontology Based Sports Video Annotation and Summary	499
<i>Jian-guan Ouyang, Jin-tao Li, and Yong-dong Zhang</i>	
Author Index	509