## 2011 2nd International Symposium on Intelligence Information Processing and Trusted Computing

(IPTC 2011)

Wuhan, China 22 – 23 October 2011



**IEEE Catalog Number: ISBN:** 

CFP1172K-PRT 978-1-4577-1130-5

## 2011 International Symposium on Intelligence Information Processing and Trusted Computing

## **IPTC 2011**

## **Table of Contents**

Greetings from the General Chairs	
Organizing Committee	
Reviewers	xii
Technical Papers	
A Self Adaptive Jamming Strategy to Restrict Covert Timing Channel	1
A Deterministic Protocol for Rational Secret Sharing in Asynchronous Model	5
Model Update Particle Filter for Multiple Objects Detection and Tracking	9
Design and Analysis on Direct Anonymous Attestation for Security Chip	13
Trusted Bytecode Virtual Machine Module: Towards Dynamic Remote  Attestation in Cloud Computing	19
Efficient Power Saving Adaptive Routing Protocol (EPSAR) for MANETs Using  AODV and DSDV: Simulation and Feasibility Analysis	24
A Comprehensive Prediction Method of Visit Priority for Focused Crawler	27
A Cooperative Relay Method and Performance for Wireless Networks	31

Formal Specification for Byzantine Fault Tolerant Algorithm Suiting Web	
Services	35
Wei Zhou and Liu Chen	
An Active Data Leakage Prevention Model for Insider Threat	39
Multi-feature Method: An Integrated Content Based Image Retrieval System	43
Integrated Visual Saliency Based Local Feature Selection for Image Retrieval	47
A Parallel Gaussian Filtering Algorithm Based on Color Difference	51
Trust Based Secure Localization in Wireless Sensor Networks	55
The Shapes of Halftone-AM-Dots Based on Information Hiding	59
A High Speed Parallel Timing Recovery Algorithm and Its FPGA Implementation	63
Changxing Lin, Jian Zhang, and Beibei Shao	
A Feature-Based Robust Digital Image Watermarking Scheme Using Image  Normalization and Quantization	67
A Deconvolution Approach of 2D Data Statistical	71
Research of Electronic Equipment Fault Diagnosis Algorithm Based on RBF Neural Network	75
Lei Yuan and Heming Zhao	
An Optimization for CAVLC Code Table Lookup Algorithm in H. 264 Decoder	79
Research on Genetic Algorithm Based on Pyramid Model	83
An Improved Bayesian Algorithm for Filtering Spam E-Mail	87
A Comprehensive Trust Model with Multi-participant Viewpoints in Online	
Auctions	91
Multitemporal Images Change Detection Using Nonsubsampled Contourlet  Transform and Kernel Fuzzy C-Means Clustering	96

in Credibility Distribution of Fuzzy Variable	100
The Design and Implementation of C-like Language Interpreter	104
Machine Learning Methods and Their Application Research	108
A Hybrid Watermarking Technique to Resist Tampering and Copy Attacks  Peng Zheng, Weihua Wang, and Juan Wang	111
Some Remarks on Charactertics Function and Density Function of Uncertain  Variable	115
Qin Jiang Intelligent High-Voltage Discharge Fault Detection and Its Diagnosis Methods Based on ANN	119
Ru-jun Xu, Li-xin Ma, Bo Hu, He-ran Ma, and Bo-hao Tao	
The Color Components' Exchanging on Different Color Spaces and the Using for Image Segmentation	123
Study on Approach to Improve the Quality of Veterinary Medicine Graduates by Strengthen Practical Skills	127
Automatic Summarization for Chinese Text Based on Sub Topic Partition and Sentence Features  Xueming Li, Jiapei Zhang, and Minling Xing	131
The Research on Anisotropic Parameter Estimation for Vertical Transerse Isotropy: Based on 3D VSP, Walkaway VSP and Full Azimuth Seismic Data  Xiang-e Sun, Yun Ling, and Jun Gao	135
A New Trust Evaluation Model Based on Cloud Theory in E-Commerce  Environment	139
HongYun Cai, Zhen Li, and JunFeng Tian	
An Improved Multi-objective Population Migration Optimization Algorithm	143
A New Population Migration Algorithm Based on the Chaos Theory	147
Study on QoS Protection Mechanism of VoIP Systems	151
The Application of MapReduce in the Cloud Computing	154

Research and Implementation of Packet Classification Based on NDIS  Intermediate Layer under Windows Platform  Yin Hu and Pei Lin	157
Optimization of Masking Expansion Algorithm in Psychoacoustic Models	161
Secure Digital Library Technology Research Based on VPN	165
VISHNU: A Software Behavior Trustworthiness Control Method Based on DRTM	169
An Analytic Network Process Model of Trust in B2C E-Commerce	173
Study on Histogram Equalization	177
Numerical Simulation and Analysis of Cavitation Characteristics of Ship  Propeller	180
The Chaotic Cipher Based on CNNs and Its Application in Network	184
A Network Construction Solution in Colleges or Universities	188
Research on Thin AP Architecture to Deploy Campus WLAN	192
A Survey of Computer Graphics and Graphics Image Processing Technology	196
IPv4 to IPv6 Transition Research Based on the Campus Network	199
Research of SCM System Based on the Internet of Things on EPC	203
Robust Control of One Arm Space Manipulator with Parameters Uncertainties  Compensated	206
Research of Circular-Like Satellite Formation Flying at Critical Inclination	210
A New Method for Impossible Differential Cryptanalysis of 8-Round AES-128  He Zhonglin and Hu Zhihua	214

Exploration and Example for Mathematical Application Issues in U.S.	
Mathematics Textbooks	218
The EEG Signal Process Based on EEMD	222
Teaching and Research of Cryptography in Information and Computer Science	226
Network Security Mechanisms Research	231
Applied Study on Information Technology and College English Teaching Integration  Jinfeng Wang	235
An Improved Binary Image Watermarking Algorithm Based on Singular Value  Decomposition  Zhang Chao-yang	238
An Improved Computer Notary System Protocols	242
Research and Application of the Stronger Security Dual Signature	245
A New Method for Impossible Differential Cryptanalysis of 7-Round AES-192  Zhihua Hu and Zhonglin He	248
Author Index	252