



IEEE International Conference on Intelligent Information Hiding and Multimedia Signal Processing

Conference Venue: Pasadena Conference Center, Pasadena, CA, USA
Dates: December 18–20, 2006

Conference Program

December 17, 2006

Tutorial I	14:00-15:30
Coffee Break	
Tutorial II	16:00-17:30

December 18, 2006

Opening	08:30-09:00
Keynote Speech A	09:10-10:00
Coffee Break	
Sessions A1-A2	10:20-12:20
Lunch	
Sessions A3-A4	14:00-16:00
Coffee Break	
Sessions A5-A6	16:20-18:20

December 19, 2006

Keynote Speech B	09:10-10:00
Coffee Break	
Sessions B1-B2	10:20-12:20
Lunch	
Sessions B3-B4	14:00-16:00
Coffee Break	
Sessions B5-B6	16:20-18:20

December 20, 2006

Sessions C1-C2	10:20-12:20
Lunch	
Sessions C3-C4	14:00-16:00
Coffee Break	
Sessions C5-C6	16:20-18:20

Conference Program

December 18, 10:20-12:00

Session A1: New Data Hiding and Secreting Techniques for Sound Signals

Session A2: Digital Watermarking (I)

December 18, 14:00-15:40

Session A3: Techniques and Algorithms for Multimedia Security

Session A4: Image Processing

December 18, 16:00-17:40

Session A5: IP Multimedia Services

Session A6: Evolutionary and Soft Computing

December 19, 10:20-12:00

Session B1: Multimedia Networking and Communications in Dynamic Heterogeneous Environments

Session B2: Pattern Recognition

December 19, 14:00-15:40

Session B3: Recognizing Humans and Human Behavior in Video

Session B4: Steganography

December 19, 16:00-17:40

Session B5: Video Surveillance

Session B6: Digital Watermarking (II)

December 20, 10:20-12:00

Session C1: Advanced Algorithms and Systems for Multimedia Processing and Networking

Session C2: Signal Processing and Data Compression

December 20, 14:00-15:40

Session C3: System Implementation

Session C4: Data Hiding and Security

December 20, 16:00-17:40

Session C5: Signal Processing and Coding

Session C6: Cross-Discipline Technology

Session A1: New Data Hiding and Secreting Techniques for Sound Signals

Chairs:

Yoiti Suzuki, Tohoku University, Japan
Ryouichi Nishimura, Tohoku University, Japan

A1-01 (IHMSP-2006-IS01-001)

Paper Title: Spread Spectrum Audio Steganography using Sub-band Phase Shifting
Author List: Hosei Matsuoka
Affiliation: NTT DoCoMo, Inc., Japan

A1-02 (IHMSP-2006-IS01-002)

Paper Title: Data Hiding in Speech Sounds using Subband Amplitude Modulation Robust against Reverberations and Background Noise
Author List: Akira Nishimura
Affiliation: Tokyo University of Information Sciences, Japan

A1-03 (IHMSP-2006-IS01-003)

Paper Title: A Method of High Bit-rate Data Hiding in Music using Spline Interpolation
Author List: Ryuta Fujimoto, Mamoru Iwaki, and Tohru Kiryu
Affiliation: Niigata University, Japan

A1-04 (IHMSP-2006-IS01-004)

Paper Title: Information Hiding on Lossless Data Compression
Author List: Katsunari Yoshioka, Kotaro Sonoda, Osamu Takizawa, and Tsutomu Matsumoto
Affiliation: National Institute of Information and Communications Technology, Japan

A1-05 (IHMSP-2006-IS01-005)

Paper Title: Multiple Description Coding of an Audio Stream by Optimum Recovery Transform
Authors List: Akinori Ito and Shozo Makino
Affiliation: Tohoku University, Japan

A1-06 (IHMSP-2006-IS01-006)

Paper Title: Audio Watermark Enhanced by LDPC Coding for Air Transmission
Author List: Yôiti Suzuki, Ryouichi Nishimura, and Hao Tao
Affiliation: Tohoku University, Japan

A1-07 (IHMSP-2006-IS01-007)

Paper Title: A Novel Audio Watermarking in Wavelet Domain
Author List: Ming Li, Yun Lei, Jian Liu, and Yonghong Yan
Affiliation: Chinese Academy of Sciences, China

A1-08 (IHMSP-2006-IS01-008)

Paper Title: Channel Capacity Analysis of Spread Spectrum Audio Watermarking for Noisy Environments
Author List: Saeed Sedghi, Morteza Khademi, and Nedeljko Cvejjic
Affiliation: Ferdowsi University of Mashhad, Iran

A1-09 (IHMSP-2006-0442)

Paper Title: Audio Watermarking based on Reverberation
Author List: Gui-jun Nian, Zhiyuan Xie, and Shu-xun Wang
Affiliation: Jilin University, China

Session A2: Digital Watermarking (I)

Chairs:

Yao Zhao, Beijing Jiaotong University, China

Feng-Cheng Chang, National Chiao Tung University, Taiwan

A2-01 (IHMSP-2006-0181)

Paper Title: A Subsampling and Quantization Based Watermarking Scheme Resisted the Permutation Attacking

Author List: Chia-An Huang, Jeng-Shyang Pan, Te-Hui Kuo, Jaw-Shyang Wu, and Chuang Lin

Affiliation: National Kaohsiung University of Applied Sciences, Taiwan,

A2-02 (IHMSP-2006-0351)

Paper Title: An Information Hiding Scheme for OFDM Wireless Networks

Author List: Chuang Lin, Jeng-Shyang Pan, Chin-Shiuh Shieh, and Peng Shi

Affiliation: Harbin Institute of Technology, China

A2-03 (IHMSP-2006-0355)

Paper Title: A Novel Asymptotic Deterministic Randomness Based Watermarking Scheme

Author List: Kai Wang, Wenjiang Pei, Zhenya He, and Yiu-ming Cheung

Affiliation: Southeast University, China

A2-04 (IHMSP-2006-0396)

Paper Title: A Novel Watermarking Scheme in Contourlet Domain Based on Independent Component Analysis

Author List: Zhao Xu, Ke Wang, and Xiao-hua Qiao

Affiliation: Jilin University, China

A2-05 (IHMSP-2006-0434)

Paper Title: A Digital Content Protection Scheme Using MPEG-21 REL with Applications to DVB systems

Author List: Ying-Tzu Shih, Feng-Cheng Chang, and Hsueh-Ming Hang

Affiliation: National Chiao Tung University, Taiwan

A2-06 (IHMSP-2006-0523)

Paper Title: CDMA Based Multiple-User Digital Watermarking

Author List: Deyun Peng, Jiazhen Wang, Sumin Yang, Suzhen Wang, and Aizhen Liu

Affiliation: Mechanical Engineering College, China

A2-07 (IHMSP-2006-0531)

Paper Title: Image Watermarking Resisting to Geometrical Attacks Based on Histogram

Author List: Zheng Fang and Yao Zhao

Affiliation: Beijing Jiaotong University, China

A2-08 (IHMSP-2006-0544)

Paper Title: A New Watermarking Protocol of Copyright protection

Author List: Ru Zhang, Xiao-gang Yu, Lin-na Zhou, and Hong-peng Li

Affiliation: Beijing University of Posts and Telecommunication, China

A2-09 (IHMSP-2006-0679)

Paper Title: Chirp-based Image Watermarking as Error-control Coding

Author List: Behnaz Ghoraani and Sridhar Krishnan

Affiliation: Ryerson University, Canada

Session A3: Techniques and Algorithms for Multimedia Security

Chairs:

Isao Echizen, Hitachi Ltd., Japan
Ping-Sung Liao, Cheng Shiu University, Taiwan

A3-01 (IHMSP-2006-IS02-001)

Paper Title: A Digital Document Flexible Sanitizing Scheme
Author List: Takanobu Masubuchi, Mitsuyuki Takatsuka, and Ryoichi Sasaki
Affiliation: Tokyo Denki University, Japan

A3-02 (IHMSP-2006-IS02-002)

Paper Title: Dual-plane Watermarking for Color Pictures Immune to Rotation, Scale, Translation, and Random Bending
Author List: Masanori Dainaka, Shinta Nakayama, Isao Echizen, and Hiroshi Yoshiura
Affiliation: The University of Electro-Communications, Japan

A3-03 (IHMSP-2006-IS02-003)

Paper Title: Improved Guided Position Scrambling for Digital Watermarking
Author List: Akiomi Kunisa and Kousuke Tsujita
Affiliation: SANYO Technology Center, USA

A3-04 (IHMSP-2006-IS02-004)

Paper Title: A New Optimum Detection Scheme for Additive Watermarks Embedded in Spatial Domain
Author List: Maki Yoshida, Takaaki Fujita, and Toru Fujiwara
Affiliation: Osaka University, Japan

A3-05 (IHMSP-2006-0277)

Paper Title: Joint Halftoning and Visible Watermarking
Author List: Hao Luo, Jeng-Shyang Pan, Zhe-Ming Lu, and Bin-Yih Liao
Affiliation: Harbin Institute of Technology Shenzhen Graduate School, China

A3-06 (IHMSP-2006-0346)

Paper Title: A Subsampling and PSK Based Watermarking Scheme Resisted the Permutation Attacking
Author List: Chuang Lin, Jeng-Shyang Pan, Chin-Shiuh Shieh, and Ping-Sung Liao
Affiliation: Harbin Institute of Technology, China

A3-07 (IHMSP-2006-0541)

Paper Title: Extending the Selective MPEG Encryption Algorithm PVEA
Author List: Li Weng, Karel Wouters, and Bart Preneel
Affiliation: Katholieke Universiteit Leuven, Belgium

A3-08 (IHMSP -2006-0792)

Paper Title: A New Image Steganography for Internet Communications Based on Chaotic Sequences
Author List: Niansheng Liu, Donghui Guo, and Gerard Parr
Affiliation: Jimei University, China

A3-09 (IHMSP -2006-0908)

Paper Title: An Image Encryption Approach Based on a New Two-dimensional Map
Author List: Feng Huang and Yong Feng
Affiliation: Harbin Institute of Technology, China

Session A4: Image Processing

Chairs:

Ju Liu, Shandong University, China

Chee-Hung Henry Chu, The University of Louisiana at Lafayette, USA

A4-01 (IHMSP-2006-0202)

Paper Title: Image Robust Hashing based on DCT Sign

Author List: Longjiang Yu and Shenghe Sun

Affiliation: Harbin Institute of Technology, China

A4-02 (IHMSP-2006-0204)

Paper Title: A Self-adaptive Image Encryption Algorithm Based on Composite Discrete Chaotic System

Author List: Sheng-bing Che, Da Huang, and Guang Li

Affiliation: Central South University of Forestry and Technology, China

A4-03 (IHMSP-2006-0225)

Paper Title: Chain Code Distribution-Based Image Retrieval

Author List: Junding Sun and Xiaosheng Wu

Affiliation: Henan Polytechnic University, China

A4-04 (IHMSP-2006-0337)

Paper Title: Lung Cancer Diagnosis System Based on Support Vector Machines and Image Processing Technique

Author List: Kewen Xia, Guan Xu, and Naixun Xu

Affiliation: Hebei University of Technology, China

A4-05 (IHMSP-2006-0368)

Paper Title: A Novel Through-Wall Imaging Method Using Ultra WideBand Pulse System

Author List: Lin Ma, Zhongzhao Zhang, and Xuezhi Tan

Affiliation: Harbin Institute of Technology, China

A4-06 (IHMSP-2006-0401)

Paper Title: A Novel Log-WT based Super-Resolution Algorithm

Author List: Jianping Qiao and Ju Liu

Affiliation: Shandong University, China

A4-07 (IHMSP-2006-0575)

Paper Title: Multiscale Gradient Vector Field with Application to Image Denoising and Enhancement

Author List: Jinye Peng, Wanhai Yang, and Yichun Wang

Affiliation: Xidian University and Northwest University, China

A4-08 (IHMSP-2006-0608)

Paper Title: Recovering Intrinsic Images from Weighted Edge Maps

Author List: Qiang He and Chee-Hung Henry Chu

Affiliation: The University of Louisiana at Lafayette, USA

A4-09 (IHMSP -2006-0778)

Paper Title: An Optimal Independent Component Analysis Approach for Functional Magnetic Resonance Imaging Data

Author List: Nan Zhang, Xianchuan Yu, and Guosheng Ding

Affiliation: Beijing Normal University, China

Session A5: IP Multimedia Services

Chairs:

Wen-Shyang Hwang, National Kaohsiung University of Applied Sciences, Taiwan
Takuo Nakashima, Kyushu Tokai University, Japan

A5-01 (IHMSP-2006-IS03-001)

Paper Title: Adaptive Compression Scheme for Video Delivery over the QoS-aware Residential Gateway

Author List: Pei-Chen Tseng, Ching-Tuey Sung, and Wen-Shyang Hwang

Affiliation: Kaohsiung University of Applied Sciences, Taiwan

A5-02 (IHMSP-2006-IS03-002)

Paper Title: KaiKai: A NAT Traversal Approach by Using Protocol Behavior Analysis

Author List: Yung-Li Chang, Hsiang-Kai Liao, Ce-Kuen Shieh, and Yu-Ben Miao

Affiliation: Cheng Kung University, Taiwan

A5-03 (IHMSP-2006-IS03-003)

Paper Title: Video Transmission Performance Evaluation of Ad Hoc Routing Protocols

Author List: Ku-Lan Kao, Chih-Heng Ke, and Ce-Kuen Shieh

Affiliation: Cheng Kung University, Taiwan

A5-04 (IHMSP-2006-IS03-005)

Paper Title: A Fast-Startup TCP Mechanism for VoIP Services in Long-Distance Networks

Author List: Mong-Fong Horng, Hung-Wei Hsu, Wan-Ling Du, Yi-Hsiang Hung, and Ming-Harn Lee

Affiliation: She-Te University, Taiwan

A5-05 (IHMSP-2006-0313)

Paper Title: Self-similar Property for TCP Traffic under the Bottleneck Bandwidth Restraintment

Author List: Takuo Nakashima

Affiliation: Kyushu Tokai University, Japan

A5-06 (IHMSP-2006-0613)

Paper Title: Video Streaming over 3G Networks with GOP-based Priority Scheduling

Author List: Yongjin Cho, Do-Kyoung Kwon, C.-C. Jay Kuo, Renxiang Huang, Claudio Lima, Jim D. Black, and James J. Pan

Affiliation: University of Southern California, California

A5-07 (IHMSP-2006-0700)

Paper Title: Rate control Scheme based on Cauchy R-D Optimization Model for H.264/AVC under Low Delay Constraint

Author List: N. Eiamjumrus and S. Aramvith

Affiliation: Chulalongkorn University, Thailand

A5-08 (IHMSP -2006-0981)

Paper Title: An Efficient Attestation for Trustworthiness of Computing Platform

Author List: Xiao-Yong Li and Chang-Xiang Shen

Affiliation: Beijing Jiaotong University, China

Session A6: Evolutionary and Soft Computing

Chairs:

Xiamu Niu, Harbin Institute of Technology, China

Te-Jen Su, National Kaohsiung University of Applied Sciences, Taiwan

A6-01 (IIHMSP-2006-0230)

Paper Title: Genetic Algorithm Based Optimal Block Mapping Method for LSB Substitution

Author List: Rongrong Ji, Hongxun Yao, Shaohui Liu, and Liang Wang

Affiliation: Harbin Institute of Technology, China

A6-02 (IIHMSP-2006-0340)

Paper Title: Fast Algorithm of Trigonometric Function of Specific Angle

Author List: Qiusheng He, Wending Liu, Fuzeng Wang, Jianjun Hao, Hui Li, and Yaqi Cheng

Affiliation: China University of Mining and Technology, China

A6-03 (IIHMSP-2006-0671)

Paper Title: Delay Constrained Fuzzy Rate Control for Video Streaming over DVB-H

Author List: Mehdi Rezaei, Moncef Gabbouj, and Imed Bouazizi

Affiliation: Tampere University of Technology, Finland

A6-04 (IIHMSP-2006-0718)

Paper Title: Medical Image Noise Reduction Using Cellular Neural Networks

Author List: Te-Jen Su and Jyun-Wei Jhang

Affiliation: National Kaohsiung University of Applied Sciences, Taiwan

A6-05 (IIHMSP -2006-0836)

Paper Title: Block Mean Value Based Image Perceptual Hashing

Author List: Bian Yang, Fan Gu, and Xiamu Niu

Affiliation: Harbin Institute of Technology, China

A6-06 (IIHMSP -2006-0966)

Paper Title: Forensic Analysis of Document fragment based on SVM

Author List: Binglong Li, Qingxian Wang, and Junyong Luo

Affiliation: Information Engineering University, China

A6-07 (IIHMSP -2006-1056)

Paper Title: Design of Two-dimensional Recursive Filters by Using Quantum-behaved Particle Swarm Optimization

Author List: Wei Fang, Jun Sun, and Wenbo Xu

Affiliation: Southern Yangtze University, China

A6-08 (IIHMSP -2006-1063)

Paper Title: Analysis and Problems on Fuzzy Vault Scheme

Author List: Qiong Li, Zhaoqing Liu, and Xiamu Niu

Affiliation: Harbin Institute of Technology, China

Session B1: Multimedia Networking and Communications in Dynamic Heterogeneous Environments

Chair:

Enrico Magli, Politecnico di Torino, Italy

B1-01 (IHMSP-2006-IS04-001)

Paper Title: GA-based Internet Traffic Classification Technique for QoS Provisioning

Author List: Junghun Park, Hsiao-Rong Tyan and C.-C. Jay Kuo

Affiliation: University of Southern California, USA

B1-02 (IHMSP-2006-IS04-002)

Paper Title: Multi-user Video Streaming over Multi-hop Wireless Networks: A Cross-layer Priority Queuing Scheme

Author List: Hsien-Po Shiang and Mihaela van der Schaar

Affiliation: University of California, Los Angeles, USA

B1-03 (IHMSP-2006-IS04-003)

Paper Title: H.264 Error Resilience Coding based on Multi-hypothesis Motion Compensated Prediction and Adaptive Intra-Refresh

Author List: Yuh-Chou Tsai, Chia-Ming Tsai, and Chia-Wen Lin

Affiliation: Chung Cheng University, Taiwan

B1-04 (IHMSP-2006-IS04-004)

Paper Title: Implementation and performance evaluation of LT and Raptor codes for multimedia applications

Author List: Pasquale Cataldi, Miquel Pedròs Shatarski, Marco Grangetto, and Enrico Magli

Affiliation: Politecnico di Torino, Italy

B1-05 (IHMSP-2006-IS04-005)

Paper Title: HoLiSTiC: Heterogeneous Lightweight Sensornets for Trusted Visual Computing

Author List: Deepa Kundur, Unoma Ndili Okorafor, and William Luh

Affiliation: Texas A&M University, USA

B1-06 (IHMSP-2006-0452)

Paper Title: Positioning Algorithm of Wireless Sensor Network Nodes

Author List: Wenhui Zhao, Daxin Liu, and Yu Jiang

Affiliation: Harbin Engineering University, China

B1-07 (IHMSP -2006-0828)

Paper Title: Domain-based Dynamic Resource Management Mechanism Supporting Large-Scale Grid Application

Author List: Guo-min Zhang, Yong Zhang, Ming Chen, and Huan Xiong

Affiliation: PLA University of Science and Technology, China

Session B2: Pattern Recognition

Chairs:

Chin-Shiuh Shieh, National Kaohsiung University of Applied Sciences, Taiwan
Jiun-Huei Ho, Cheng Shiu University, Taiwan

B2-01 (IHMSP-2006-0200)

Paper Title: Symmetrical Color-Spatial Feature for Medical Image Retrieval

Author List: Jing-yi Qu and Hao-shan Shi

Affiliation: Northwestern Polytechnical University, China

B2-02 (IHMSP-2006-0265)

Paper Title: Discriminant Feature Fusion Strategy for Supervised Learning

Author List: Jun-Bao Li, Shu-Chuan Chu, Jung-Chou Harry Chang, and Jeng-Shyang Pan

Affiliation: Harbin Institute of Technology, China

B2-03 (IHMSP-2006-0390)

Paper Title: A Facial Expression Recognition Approach Based on Confusion-crossed Support Vector Machine Tree

Author List: Qinzhen Xu, Pinzheng Zhang, Wenjiang Pei, Luxi Yang, and Zhenya He

Affiliation: Southeast University, China

B2-04 (IHMSP-2006-0554)

Paper Title: An Improved Design and Implementation of Chinese Name Card recognition system on mobile Devices

Author List: Chi Cui

Affiliation: Tsinghua University, China

B2-05 (IHMSP-2006-0605)

Paper Title: An Adjustable Multipath Flatted-Hexagon Search Algorithm for Block Motion Estimation

Author List: Tsong-Yi Chen, Thou-Ho (Chao-Ho) Chen, Shi-Feng Huang, and Yi-Fan Li

Affiliation: National Kaohsiung University of Applied Sciences, Taiwan

B2-06 (IHMSP-2006-0631)

Paper Title: A Method of Biomimetic Pattern Recognition for Speaker Recognition

Author List: Bo Qian, Yanping Li, Limin Xu, and Zhenmin Tang

Affiliation: Nanjing University of S&T, China

B2-07 (IHMSP-2006-0696)

Paper Title: A PCA based Visual DCT Feature Extraction Method for Lip-Reading

Author List: Xiaopeng Hong, Hongxun Yao, Yuqi Wan, and Rong Chen

Affiliation: Harbin Institute of Technology, China

B2-08 (IHMSP -2006-1018)

Paper Title: The Attacking Method for DC Components Watermarking

Author List: Pei-Wei Tsai, Shu-Chuan Chu, Ching-Sung Lu, Jui-Fang Chang, and Hsing-Yuan Liao

Affiliation: National Kaohsiung University of Applied Sciences

B2-09 (IHMSP-2006-0288)

Paper Title: A Novel Matrix Norm Based Gaussian Kernel for Feature Extraction of Images

Author List: Jun-Bao Li, Shu-Chuan Chu, Jeng-Shyang Pan, and Jiun-Huei Ho

Affiliation: Harbin Institute of Technolog, China

Session B3: Recognizing Humans and Human Behavior in Video

Chair:

Duan-Yu Chen, Academia Sinica, Taiwan

Jun-Wei Hsieh, Yuan Ze University, Taiwan

B3-01 (IHMSP-2006-IS05-001)

Paper Title: Atomic Human Action Segmentation Using a Spatial-Temporal Probabilistic Framework

Author List: Duan-Yu Chen, Sheng-Wen Shih, and Hong-Yuan Mark Liao

Affiliation: Institute of Information Science, Academia Sinica, Taiwan

B3-02 (IHMSP-2006-IS05-002)

Paper Title: Understanding Human Behavior Using a Language Modeling Approach

Author List: Yu-Ming Liang, Sheng-Wen Shih, Arthur Chun-Chieh Shih, and Hong-Yuan Mark Liao

Affiliation: Chiao Tung University, Taiwan

B3-03 (IHMSP-2006-IS05-003)

Paper Title: Human Motion Recognition Using Clay Representation of Trajectories

Author List: Yu-Chun Lai and Hong-Yuan Mark Liao

Affiliation: Chiao-Tung University, Taiwan

B3-04 (IHMSP-2006-IS05-004)

Paper Title: Boosted String Representation and its Application to Video Surveillance

Author List: Yung-Tai Hsu and Jun-Wei Hsieh

Affiliation: Yuan Ze University, Taiwan

B3-05 (IHMSP -2006-0797)

Paper Title: Image Retrieval Based on Improved Entropy and Moments

Author List: Junding Sun

Affiliation: Henan Polytechnic University, China

B3-06 (IHMSP -2006-0806)

Paper Title: SVD Based Robust Image Content Retrieval

Author List: Yuhua Jiao, Bian Yang, He Wang and Xiamu Niu

Affiliation: Harbin Institute of Technology, Harbin, China

B3-07 (IHMSP -2006-0937)

Paper Title: Emotion Recognition Using Physiological Signals from Multiple Subjects

Author List: Lan Li and Ji-hua Chen

Affiliation: Jiangsu University, Zhenjiang, China

B3-08 (IHMSP -2006-1069)

Paper Title: A Fire-Alarm Method Based on Video Processing

Author List: Ping-He Huang, Jing-Yong Su, Zhe-Ming Lu, and Jeng-Shyang Pan

Affiliation: TingYing Industry Corporation Ltd., Taiwan

Session B4: Steganography

Chairs:

Feng-Cheng Chang, National Chiao Tung University, Taiwan

Hsiang-Cheh Huang, National University of Kaohsiung, Taiwan

B4-01 (IHMSP-2006-0246)

Paper Title: A New Steganalysis Method for Adaptive Spread Spectrum Steganography

Author List: Rongrong Ji, Hongxun Yao, Shaohui Liu, Liang Wang, and Jianchao Sun

Affiliation: Harbin Institute of Technology, China

B4-02 (IHMSP-2006-0363)

Paper Title: A Methodology to Improve the Detection Accuracy in Digital Steganalysis

Author List: Antonio Savoldi and Paolo Gubian

Affiliation: University of Brescia, Italy

B4-03 (IHMSP-2006-0565)

Paper Title: A Research on Steganography Method Based on Error-Correcting Codes

Author List: Cui-Qing Liu, Xi-Jian Ping, Tao Zhang, Lin-Na Zhou, and Yun-He Wang

Affiliation: Zhengzhou Information Science and Technology Institute, China

B4-04 (IHMSP-2006-0569)

Paper Title: Research of Chaos Encryption Algorithm Based on Logistic Mapping

Author List: Jinhong Luo and Haiyi Shi

Affiliation: South China University of Technology, China

B4-05 (IHMSP-2006-0676)

Paper Title: Analysis of Current Steganography Tools: Classifications & Features

Author List: Ming Chen, Ru Zhang, Xinxin Niu, and Yixian Yang

Affiliation: Beijing University, China

B4-06 (IHMSP -2006-0848)

Paper Title: Java Applets Copy Protection by Steganography

Author List: Mohammad Shirali-Shahreza

Affiliation: Sharif University of Technology Tehran, Iran

B4-07 (IHMSP -2006-0902)

Paper Title: Novel Steganographic Schemes Based on Row-Major Mapping Relation

Author List: Chung-Chuan Wang, Chin-Chen Chang, Jinn-Ke Jan, and Jieh-Shan Yeh

Affiliation: National Chung Hsing University, Taiwan,

B4-08 (IHMSP -2006-0928)

Paper Title: An Improved Secret Key Estimation Method for Sequential Steganography

Author List: Ping Wang, Xiangyang Luo, and Fenlin Liu

Affiliation: Information Science and Technology Institute, China

Session B5: Video Surveillance (IHMSP-2006-IS06)

Chairs:

Hong-Yuan Mark Liao, Academia Sinica, Taiwan

Thou-Ho (Chao-Ho) Chen, National Kaohsiung University of Applied Sciences, Taiwan

B5-01 (IHMSP-2006-IS06-001)

Paper Title: Design of Gabor Filter Banks for Iris Recognition

Author List: Chia-Te Chou, Sheng-Wen Shih, and Duan-Yu Chen

Affiliation: Chi Nan University, Taiwan

B5-02 (IHMSP-2006-IS06-002)

Paper Title: Abnormal Event Detection in Video using N-cut Clustering

Author List: Chun-Ku Lee, Meng-Fen Ho, Wu-Sheng Wen, and Chung-Lin Huang

Affiliation: Tsing Hua University, Taiwan

B5-03 (IHMSP-2006-IS06-003)

Paper Title: Efficient Moving Object Extraction in Compressed Low-bit-rate Video

Author List: Chih-Chung Hsu, Hsuan T. Chang, and Ting-Cheng Chang

Affiliation: Yunlin University of Science and Technology, Taiwan

B5-04 (IHMSP-2006-IS06-004)

Paper Title: Vision-based Autonomous Vehicle Guidance in Indoor Environments Using Odometer and House Corner Location Information

Author List: Kai-Li Chiang and Wen-Hsiang Tsai

Affiliation: Chiao Tung University, Taiwan

B5-05 (IHMSP-2006-IS06-005)

Paper Title: A Fast Facial Expression Recognition Method at Low-Resolution Images

Author List: Cheng-Chang Lien, Yang-Kai Chang, and Chih-Chiang Tien

Affiliation: Chung Hua University, Taiwan

B5-06 (IHMSP-2006-0205)

Paper Title: The Effect of Frame Freezing and Frame Skipping on Video Quality

Author List: Yining Qi and Mingyuan Dai

Affiliation: Tong Ji University Shanghai, China

B5-07 (IHMSP-2006-0559)

Paper Title: The Smoke Detection for Early Fire-Alarming System Base on Video Processing

Author List: Thou-Ho (Chao-Ho) Chen, Yen-Hui Yin, Shi-Feng Huang, and Yan-Ting Ye

Affiliation: National Kaohsiung University of Applied Sciences, Taiwan

B5-08 (IHMSP-2006-0708)

Paper Title: Automatic Real-time Moving Target Detection from Infrared Video

Author List: Shahryar Karimi-Ashtiani and C.-C. Jay Kuo

Affiliation: University of Southern California, California

Session B6: Digital Watermarking (II)

Chairs:

Isao Echizen, Hitachi, Ltd., Japan
Ping-Sung Liao, Cheng-Shiu University, Taiwan

B6-01 (IHMSP-2006-0596)

Paper Title: Interlacing Domain Partition for Fractal Watermarking
Author List: Ping-Sung Liao, Cheng-Yi Chen, Chun-Chi Chen, and Jeng-Shyang Pan
Affiliation: Cheng-Shiu University, Taiwan

B6-02 (IHMSP-2006-0640)

Paper Title: Improved Video Verification Method Using Digital Watermarking
Author List: Isao Echizen, Takaaki Yamada, Satoru Tezuka, Stephan Singh, and Hiroshi Yoshiura
Affiliation: Systems Development Laboratory, Hitachi, Ltd., Japan

B6-03 (IHMSP-2006-0647)

Paper Title: Blind Watermarking in Contourlet Domain with Improved Detection
Author List: Jayakashmi M., S. N. Merchant, and U. B. Desai
Affiliation: Indian Institute of Technology, Bombay

B6-04 (IHMSP-2006-0741)

Paper Title: A Heuristic Method for Extracting Enhanced Watermarks from Digital Images
Author List: Chin-Chen Chang, Yung-Chen Chang, and Jau-Ji Shen
Affiliation: Feng Chia University, Taiwan

B6-05 (IHMSP -2006-0812)

Paper Title: Image Watermarking based on Singular Value Decomposition
Author List: Jie Liu, Xiamu Niu, and Wenhai Kong
Affiliation: Shenyang Normal University, China

B6-06 (IHMSP -2006-0822)

Paper Title: A Practical Multipurpose Watermarking Scheme for Visual Content Copyright Protection and Authentication
Author List: Zhifang Wang, Bian Yang, Xiamu Niu and Yijia Zhang
Affiliation: Harbin Institute of Technology, China

B6-07 (IHMSP -2006-0985)

Paper Title: Geometrically Invariant Watermark Using Fast Correlation Attacks
Author List: Dan Wang and Peizhong Lu
Affiliation: Fudan University, China

B6-08 (IHMSP -2006-1004)

Paper Title: Audio Integrity Protection and Falsification Estimation by Embedding Multiple Watermarks
Author List: Michael Gulbis, Erika Müller, and Martin Steinebach
Affiliation: University of Rostock, Germany

Session C1: Advanced Algorithms and Systems for Multimedia Processing and Networking (IHMSP-2006-IS07)

Chairs:

Michael Brenner, NASA JPL, California Institute of Technology, USA

Wai-Chi Fang, NASA JPL, California Institute of Technology, USA

C1-01 (IHMSP-2006-IS07-001)

Paper Title: VLSI Bio-Inspired Microsystem for Robust Microarray Image Analysis and Recognition

Author List: Wai-Chi Fang and Jaw-Chyng L. Lue

Affiliation: Jet Propulsion Laboratory, NASA, USA

C1-02 (IHMSP-2006-IS07-002)

Paper Title: Codec Design for Variable-length to Fixed-length Data Conversion for H.263

Author List: Chua-Chin Wang, Gang-Neng Sung, and Jia-Hao Li

Affiliation: National Sun Yat-Sen University, Taiwan

C1-03 (IHMSP-2006-IS07-004)

Paper Title: Reversible Data Hiding for 3D Point Cloud Model

Author List: Hao Luo, Jeng-Shyang Pan, Zhe-Ming Lu, and Hsiang-Cheh Huang

Affiliation: Harbin Institute of Technology, China

C1-04 (IHMSP-2006-IS07-005)

Paper Title: Multiple Description Image Coding Using Shifted Lattice Vector Quantization

Author List: Huihui Bai and Yao Zhao

Affiliation: Beijing Jiaotong University, China

C1-05 (IHMSP-2006-IS07-006)

Paper Title: Implications of a Novel Family of Stochastic Methods for Function Recovery

Author List: Joseph Kolibal and Daniel Howard

Affiliation: University of Southern Mississippi, USA

C1-06 (IHMSP-2006-0206)

Paper Title: A Motion-Compensated Error Concealment Scheme for H.264 Video Transmission

Author List: Chun-Ting Hung and Jin-Jang Leou

Affiliation: National Chung Cheng University, Taiwan

C1-07 (IHMSP-2006-0220)

Paper Title: H.264/AVC Video Encoder Implementation Based on TI TMS320DM642

Author List: Hong-Jun Wang, Yong-Jian Huang, and Hua Li

Affiliation: Shandong University, China

C1-08 (IHMSP-2006-0325)

Paper Title: R-D Optimized Frame-Layer Bit Allocation for H.264

Author List: Do-Kyoung Kwon, Mei-Yin Shen, and C.-C. Jay Kuo

Affiliation: University of Southern California, USA

Session C2: Signal Processing and Data Compression

Chairs:

Thou-Ho (Chao-Ho) Chen, National Kaohsiung University of Applied Sciences, Taiwan
Mong-Fong Horng, She-Te University, Kaohsiung, Taiwan

C2-01 (IHMSP-2006-0211)

Paper Title: Improved SMVQ scheme with edge-directed prediction
Author List: Chin-Chen Chang, Yi-Hui Chen, and Kuan-Ming Li
Affiliation: Feng Chia University, Taiwan

C2-02 (IHMSP-2006-0270)

Paper Title: Chaotic Signal Design with Selected Parameters
Author List: Baishan Zhao and Yi-Sheng Zhu
Affiliation: Dalian Maritime University, China

C2-03 (IHMSP-2006-0460)

Paper Title: Error-tolerance and Multi-media
Author List: Melvin A. Breuer and Haiyang (Henry) Zhu
Affiliation: University of Southern California, California

C2-04 (IHMSP-2006-0491)

Paper Title: An Improved Technique for Blind Audio Source Separation
Author List: Namgook Cho, Yu Shiu, and C.-C. Jay Kuo
Affiliation: University of Southern California, California

C2-05 (IHMSP-2006-0601)

Paper Title: Adaptive Working Window for Impulse Noise Reduction
Author List: Thou-Ho (Chao-Ho) Chen, Shi-Feng Huang, Chao-Yu Chen, and Zhi-Hong Lin
Affiliation: National Kaohsiung University of Applied Sciences, Taiwan

C2-06 (IHMSP-2006-0644)

Paper Title: Improved Linear Prediction Technique for Musical Onset Detection
Author List: Wan-Chi Lee and C.-C. Jay Kuo
Affiliation: University of Southern California, California

C2-07 (IHMSP-2006-0735)

Paper Title: A Novel Image Compression Algorithm Based on Sixteen Most Lately Used Encoded Codewords
Author List: Chin-Chen Chang, Yung-Chen Chang, and Jau-Ji Shen
Affiliation: Feng Chia University, Taiwan

C2-08 (IHMSP -2006-0783)

Paper Title: Quantization Index Modulation Using Vector Quantization with DWT Based State-Codebook Search
Author List: Chin-Chen Chang and Yung-Chen Chou
Affiliation: Feng Chia University, Taiwan,

Session C3: System Implementation

Chairs:

Feng-Cheng Chang, National Chiao Tung University, Taiwan
Hsiang-Cheh Huang, National University of Kaohsiung, Taiwan

C3-01 (IHMSP-2006-0274)

Paper Title: A Novel Low-IF Topology for High Performance Integrated Receivers
Author List: Lingjun Xu, Qiang Wang, Jiansong Gao, Yong Wang, and Ping Zhang
Affiliation: Beijing University of Posts and Telecommunications, China

C3-02 (IHMSP-2006-0298)

Paper Title: Power Optimization for Bus on Multimedia SoC
Author List: Ru Yang, Gang Feng and Donghai Li
Affiliation: Heilongjiang Institute of Technology, China

C3-03 (IHMSP-2006-0437)

Paper Title: Design and Implementation of an MHP Video and Graphics Subsystem on Xilinx ML310 Platform
Author List: Min-Hong Chen, Feng-Cheng Chang, and Hsueh-Ming Hang
Affiliation: National Chiao Tung University, Taiwan

C3-04 (IHMSP -2006-0772)

Paper Title: A Single-Stream Pipelined Instruction Decompression System for Embedded Microprocessors
Author List: Yuan-Long Jeang, Tzoo-Shaang Wey, Hung-Yu Wang, and Chih-Chung Tai
Affiliation: Kun Shan University, Taiwan

C3-05 (IHMSP -2006-1012)

Paper Title: Research on Applying Java Card to Database Encryption Systems
Author List: Han Yu, Xiamu Niu, Duohe Ma, and Changxiang Shen
Affiliation: PLA Information Engineering University, China

C3-06 (IHMSP -2006-1039)

Paper Title: System-on-Chip Architecture Design for Intelligent Sensor Networks
Author List: Wai-Chi Fang, Sharon Kedar, Susan Owen, Gu-Yeon Wei, and David Brooks
Affiliation: NASA Jet Propulsion Laboratory California Institute of Technology Pasadena, USA.

C3-07 (IHMSP -2006-1044)

Paper Title: Low-Power Radio Design for Wireless Smart Sensor Networks
Author List: Wai-Chi Fang and Tsung-Hsien Lin
Affiliation: NASA Jet Propulsion Laboratory California Institute of Technology, USA

C3-08 (IHMSP -2006-1059)

Paper Title: VS-ISA: A Video Specific Instruction Set Architecture for ASIP Design
Author List: Zheng Shen, Hu He, Yanjun Zhang, and Yihe Sun
Affiliation: Tsinghua University, China

Session C4: Data Hiding and Security

Chairs:

Zhe-Ming Lu, Harbin Institute of Technology, China
Xinguang Zou, Harbin Institute of Technology, China

C4-01 (IHMSP-2006-0359)

Paper Title: Reversible Data Hiding for 3D Meshes in the PVQ-Compressed Domain
Author List: Zhen Sun, Zhe-Ming Lu, and Zhen Li
Affiliation: Harbin Institute of Technology, China

C4-02 (IHMSP-2006-0665)

Paper Title: Utilization of Maximum Data Hiding Capacity in Object-based Text Document Authentication
Author List: Imtiaz Awan, S.A.M. Gilani, and S.A. Shah
Affiliation: GIK Institute of Engineering Sciences & Technology, Pakistan

C4-03 (IHMSP-2006-0684)

Paper Title: A Novel Algorithm for Scrambling Digital Image Based on Cat Chaotic Mapping
Author List: Liehuang Zhu, Wenzhuo Li, Lejian Liao, and Hong Li
Affiliation: Beijing Institute of Technology, China

C4-04 (IHMSP -2006-0818)

Paper Title: Focus on the Generalized Information Hiding Technology
Author List: Dai-mao Lin, Lin-na, Zhou Yun-biao Guo, Lan Hu, and Xia-mu Niu
Affiliation: Beijing Institute of Electronic Technology Application, China

C4-05 (IHMSP -2006-0953)

Paper Title: Information Hiding Method in Digital Audio Signal Based on Perfect Codes
Author List: Lin-na Zhou, Cui-qing Liu, Xi-jian Ping, and Yun-he Wang
Affiliation: Beijing University, China

C4-06 (IHMSP -2006-0962)

Paper Title: A Novel Large Capacity Image Hiding Method Based on the Orthogonal Chaotic Sequences
Author List: Yaqin Zhao, Nan Zhao, Guanghui Ren, and Bo Zhang
Affiliation: Harbin Institute of TechnologyChina

C4-07 (IHMSP -2006-1007)

Paper Title: An Image Hiding Scheme Based on Du's Disk Allocation Method
Author List: Chia-Chen Lin and Chin-Chen Chang
Affiliation: Providence University, Taiwan

C4-08 (IHMSP-2006-0231)

Paper Title: Analysis of Anonymity on the Signatures of Knowledge
Author List: Xinguang Zou and Shenghe Sun
Affiliation: Harbin Institute of Technology, China

Session C5: Signal Processing and Coding

Chairs:

Chun-Hsien Chou, Tatung University, Taiwan
Zhe-Ming Lu, Harbin Institute of Technology, China

C5-01 (IHMSP-2006-0446)

Paper Title: Design of Collusion-Free Codes Based on MAI-Free Principle

Author List: Byung-Ho Cha and C.-C. Jay Kuo

Affiliation: University of Southern California, California

C5-02 (IHMSP-2006-0485)

Paper Title: Performance Evaluation of Transcoding Algorithms for MPEG-2 to AVS-P2

Author List: Zhenyu Wu, Hongyang Yu, Bin Tang, and Hong Hu

Affiliation: University of Electronic Science and Technology, China

C5-03 (IHMSP-2006-0730)

Paper Title: Image Inspection System for Defect Detection of Multilayer Ceramic Capacitors

Author List: Chun-Chieh Tseng, Mao-Fu Lai, and Por-Song Lee

Affiliation: National Kaohsiung University of Applied Sciences, Taiwan

C5-04 (IHMSP -2006-0874)

Paper Title: Performance Analysis of Color Image Watermarking Schemes Using Perceptually Redundant Signal Spaces

Author List: Chun-Hsien Chou and Kuo-Cheng Liu

Affiliation: Tatung University, Taiwan

C5-05 (IHMSP -2006-0916)

Paper Title: Fast H.264/AVC Inter-Mode Decision with RDC Optimization

Author List: Yu Hu, Qing Li, Siwei Ma and C.-C. Jay Kuo

Affiliation: University of Southern California, California

C5-06 (IHMSP -2006-0945)

Paper Title: Effects on Statistical Features for Image by Quantization

Author List: Yanqing Guo, Weiwei Quan, Yanwu Zhu, Xingang You, and xiangwei Kong

Affiliation: Dalian University of Technology, China

C5-07 (IHMSP -2006-0957)

Paper Title: Decoder-Friendly Subpel MV Selection for H.264/AVC Video Encoding

Author List: Qi Zhang, Yunyang Dai, Siwei Ma, and C.-C. Jay Kuo

Affiliation: University of Southern California, California

Session C6: Cross-Discipline Technology

Chair:

Xiamu Niu, Harbin Institute of Technology, China

Tsong-Yi Chen, National Kaohsiung University of Applied Sciences, Taiwan

C6-01 (IHMSP-2006-0622)

Paper Title: Voice2SQL: A Hybrid Intelligent System for the Recovery of Information from Databases by Means of Spoken Natural Language

Author List: Omar U. Florez-Choque

Affiliation: National University of San Agustin, Peru

C6-02 (IHMSP-2006-0703)

Paper Title: The Watermarking Model for Relational Database Based on Watermarking Sharing

Author List: Cong Jin, Yu Fu, and Feng Tao

Affiliation: Central China Normal University, China

C6-03 (IHMSP-2006-0721)

Paper Title: Progressive Image Transmission Using Significant Features and Linear Regression Prediction

Author List: Chin-Chen Chang and Jun-Chou Chuang

Affiliation: Feng Chia University, Taiwan

C6-04 (IHMSP-2006-0724)

Paper Title: The Production Algorithm of Pseudo-Random Number Generator Based on Compound Non-Linear Chaos System

Author List: Xiao-jun Tong, Ming-gen Cui, and Wei Jiang

Affiliation: Harbin Institute of Technology and Harbin Normal University, China

C6-05 (IHMSP -2006-0787)

Paper Title: Pervasive Computing Context Access Control Based on $UCON_{ABC}$ Model

Author List: Fang Pu, Daoqin Sun, Qiyang Cao, Haibin Cai, and Fan Yang

Affiliation: Donghua University, China

C6-06 (IHMSP -2006-0801)

Paper Title: A Non-uniform Quantizing Approach to Protect Biometric Templates

Author List: Qi Han, Zhifang Wang, and Xiamu Niu

Affiliation: Harbin Institute of Technology, China

C6-07 (IHMSP -2006-0878)

Paper Title: Detecting the Theft of Natural Language Text Using Birthmark

Author List: Jianlong Yang, Jianmin Wang and Deyi Li

Affiliation: Tsinghua University, China

C6-08 (IHMSP -2006-0974)

Paper Title: A context-aware AmI system based on MAS model

Author List: Yong Zhang, Yibin Hou, Zhangqin Huang, Hui Li, and Rui Chen

Affiliation: Beijing University of Technology, China