Conference Schedule

November 20 th , 2016		
15:00	Registration	
17:00	The corridor on the 7F	

November 21st, 2016				
09:00 16:00	Registration Registration Desk on the M3F (In front of the elevator)			
09:30 09:50	Opening <i>BANQUET HALL</i> on the M3F			
09:50 10:40	Keynote Speech (I): Some Steganographic Methods for Delivering Secret Messages Using Cover Media by Prof. Chin-Chen Chang BANQUET HALL on the M3F			
10:40 11:00	Coffee Break BANQUET HALL - I on the M3F			
11:00 11:50	Keynote Speech (II): Fuzzy Forecasting Based on High-Order Fuzzy Time Series and Genetic Algorithms by Prof. Shyi-Ming Chen BANQUET HALL on the M3F			
11:50 13:50	Lunch BANQUET HALL - I on the M3F			
13:50 15:10	Session A01 Multimedia Security and Its Applications (I) BANQUET HALL on the M3F	Session A02 Computational Intelligence and Applications (I) BANQUET HALL - II on the M3F		
15:10 15:30	Coffee Break BANQUET HALL - II on the M3F Coffee Break BANQUET HALL - I on the M3F			
15:30 16:50	Session A03 Multimedia Security and Its Applications (II)	Session A04 Multimedia analysis and security		
17:00	BANQUET HALL on the M3F Reception Champs Eligan	n Dinner sysees on 5F		

November 22 nd , 2016				
08:30 16:00	Registration <i>The corridor</i> on the 7F			
09:00 10:20	Session B01 IPv6 Network Management and Services	Session B02 SoC Design for Signal Processing		
10:20	Phoenix Room on the 7 th Floor	Balsam Room on the 7 th Floor		
10:40	Coffee Break Golden Dragon Hall – II on the 7 th Floor			
10:40 12:00	Session B03 Computational Intelligence and Applications (II)	Session B04 Recent Advances in Information Hiding and Enrichment Technologies for Audio and Speech Signals		
	Phoenix Room on the 7 th Floor	Balsam Room on the 7 th Floor		
12:00 13:50	Lunch Golden Dragon Hall – II on the 7 th Floor			
13:50 15:10	Session B05 Cross-discipline Techniques in Signal Processing and Networking	Session B06 Recent Advances in Spatial Audio Technologies and Systems		
15:10 15:30	Phoenix Room on the 7 th Floor Coffee Break Golden Dragon Hall – II on the 7 th Floor			
15:30 16:50	Session B07 Wearable Computing and Information Security Phoenix Room on the 7 th Floor	Session B08 Information Hiding and Signal Processing Balsam Room on the 7 th Floor		
17:30	Banquet Golden Dragon Hall – I on the 7 th Floor			

November 23 rd , 2016		
08:40	D	
	Registration The corridor on the 7F	
10:30	210 66776467 612 413 72	
09:00	Session C01	
	Network Security, Communication, Image Analysis, and Sensor Science	
10:20	Technology	
	Balsam Room on the 7 th Floor	
10:20	Coffee Break	
	Golden Dragon Hall – II on the 7 th Floor	
10:30	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
10:30	Session C02	
	Smart Distribution Systems and Applications	
11:50	Balsam Room on the 7 th Floor	
12:00	Lunch	
12.00	Champs Elysees on 5F	

Session A01: Multimedia Security and Its Applications (I)

Session Chairs:

Dr. Tzu-Chuen Lu, Chaoyang University of Technology, Taiwan

Dr. Yung-Chen Chou, Asia University, Taiwan

Dr. Chin-Feng Lee, Chaoyang University of Technology, Taiwan

IIH-MSP-2016-IS05-01

High Payload Data Hiding Based on Just Noticeable Distortion Profile and LSB Substitution

Hui-Shih Leng and Hsien-Wen Tseng

IIH-MSP-2016-IS05-02

An Improved Data Hiding Method of Five Pixel Pair Di erencing and LSB Substitution Hiding Scheme

Tzu-Chuen Lu and Yu-Ching Lu

IIH-MSP-2016-IS05-03

A Data Hiding Method based on Multi-predictor and Pixel Value Ordering Yung-Chen Chou, Tzu-Chuen Lu, and Jhih-Huei Wu

IIH-MSP-2016-IS05-04

Advanced Center-Folding based Reversible Hiding Scheme with Pixel Value Ordering *Tzu-Chuen Lu, Chi-Quan Lin, Jia-Wei Liu, and Yu-Ci Chen*

IIH-MSP-2016-IS05-05

A Large Payload Webpage Data Embedding Method Using CSS Attributes Modi cation Jing-Xun Lai, Yung-Chen Chou, Chiung-Chen Tseng, and Hsin-Chi Liao

IIH-MSP-2016-IS05-08

The Study of Steganographic Algorithms Based on Pixel Value Difference *Chin-Feng Lee, Jau-Ji Shen, and Kuan-Ting Lin*

Session A02: Computational Intelligence and Applications (I)

Session Chairs:

Dr. Pei-Wei Tsai, Fujian University of Technology, China

Dr. Shu-Chuan Chu, Flinders University, Australia

IIH-MSP-2016-IS09-06

A Parallel Optimization Algorithm Based on Communication Strategy of Pollens and Agents

Pei-Wei Tsai, Trong-The Nguyen, Jeng-Shyang Pan, and Thi-Kien Dao

IIH-MSP-2016-0058

The Linear Transformation Image Enhancement Algorithm Based on HSV Color Space *Maolin Zhang, Fumin Zou, and Jiansheng Zheng*

IIH-MSP-2016-IS09-15

An Unmanned Aerial Vehicle Optimal Route Planning Based on Compact Artificial Bee Colony

Tien-Szu Pan, Thi-Kien Dao, Jeng-Shyang Pan, and Trong-The Nguyen

IIH-MSP-2016-IS09-20

A Multi-Objective Optimal Vehicle Fuel Consumption Based on Whale Optimization Algorithm

Mong-Fong Horng, Thi-Kien Dao, Chin-Shiuh Shieh, and Trong-The Nguyen

IIH-MSP-2016-IS09-21

An Improved Learnable Evolution Model for Discrete Optimization Problem Wenguo Wu and Shih-Pang Tseng

IIH-MSP-2016-0088

Optimum Design and Simulation of New Type Single Phase PMSG *Zhong-Shu Liu*

Session A03: Multimedia Security and Its Applications (II)

Session Chairs:

Dr. Tzu-Chuen Lu, Chaoyang University of Technology, Taiwan

Dr. Yung-Chen Chou, Asia University, Taiwan

Dr. Chin-Feng Lee, Chaoyang University of Technology, Taiwan

IIH-MSP-2016-IS05-06

A High Performance Compression Method Using SoC and LAS *Yu-Hsaun Chiu, Min-Rui Hou, and Yung-Chen Chou*

IIH-MSP-2016-IS05-07

The Reduction of VQ Index Table Size by Matching Side Pixels *Ya-Feng Di, Zhi-Hui Wang, Chin-Feng Lee, and Chin-Chen Chang*

IIH-MSP-2016-0070

Blind Quantum Computation with Two Decoy States *Qiang Zhao and Qiong Li*

IIH-MSP-2016-0075

A Bayesian based Finite-size Effect Analysis of QKD Xuan Wen, Qiong Li, Hongjuan Wang, Hui Yang, and Hanliang Bai

IIH-MSP-2016-0082

A Novel Aeromagnetic Compensation Method Based on the Improved Recursive Least-Squares

Guanyi Zhao, Yuqing Shao, Qi Han, and Xiaojun Tong

IIH-MSP-2016-0108

An Improved Adaptive Median Filter Algorithm and Its Application Rui Ha, Pengyu Liu, and Kebin Jia

Session A04: Multimedia analysis and security

Session Chairs:

Dr. Yao Zhao, Beijing Jiaotong University, China

Dr. Rongrong Ni, Beijing Jiaotong University, China

IIH-MSP-2016-IS13-01 (IIH-MSP-2016-IS09-07)

Forensics of Operation History Including Image Blurring and Noise Addition based on Joint Features

Yahui Liu, Rongrong Ni, and Yao Zhao

IIH-MSP-2016-IS13-02 (IIH-MSP-2016-IS09-08)

Copyright Protection Method based on the Main Feature of Digital Images Xinyi Wang, Zhenghong Yang, and Shaozhang Niu

IIH-MSP-2016-IS13-03 (IIH-MSP-2016-IS09-09)

An Improvement Image Subjective Quality Evaluation Model Based on Just Noticeable Difference

Bohan Niu

IIH-MSP-2016-IS13-04 (IIH-MSP-2016-IS09-11)

A New Image Encryption Instant Communication Method Based On Matrix Transformation

Jiancheng Zou and Tengfan Weng

IIH-MSP-2016-0013

The Election of Spectrum Bands in Hyper-spectral Image Classification *Yi Yu, Yi-Fan Li, Jun-Bao Li, Jeng-Syang Pan, and Wei-Min Zheng*

IIH-MSP-2016-0042

Evaluating a Virtual Collaborative Environment for Interactive Distance Teaching and Learning: A Case Study

Wen Qi

Session B01: IPv6 Network Management and Services

Session Chairs:

Dr. Shian-Shyong Tseng, Asia University, Taiwan

Dr. Hui-Kai Su, National Formosa University, Taiwan

IIH-MSP-2016-IS07-01

Comparison of IPv4-over-IPv6 (4over6) and Dual Stack Technologies in Dynamic Configuration for IPv4/IPv6 Address

Ta Te Lu, Cheng Yen Wu, Wen Yen Lin, Hsin Pei Chen, and Kuang Po Hsueh

IIH-MSP-2016-IS07-02

A Framework for Supporting Application Level Interoperability between IPv4 and IPv6 *Yeong-Sheng Chen and Shang-Yi Liao*

IIH-MSP-2016-IS07-03

Design and Implementation of an IPv4/IPv6 Dual-Stack Automatic Service Discovery Mechanism for an Access Control System

Hui-Kai Su, Chih-Hsueh Lin, Jia-Long Hu and Chun Liang Chang

IIH-MSP-2016-IS07-04

Decision Support for IPv6 Migration Planning

Shian-Shyong Tseng, Ai-Chin Lu, Wen-Yen Lin, Ching-Heng Ku, and Geng-Da Tsai

IIH-MSP-2016-0085

An MTSA Algorithm for Unknown Protocol Format Reverse Fanghui Sun, Shen Wang, and Hongli Zhang

IIH-MSP-2016-0094

High Precision 3D Point Cloud with Modulated Pulses for LiDAR System *Kai-Jiun Yang and Chi-Tien Sun*

Session B02: SoC Design for Signal Processing

Session Chairs:

Dr. Chih-Feng Wu, Fujian University of Technology, China

Dr. Wen-Kai Tsai, National Formosa University, Taiwan

IIH-MSP-2016-IS04-01

Vehicle Detection Algorithm Based on Modified Gradient Oriented Histogram Feature Wen-Kai Tsai, Sheng-Kai Lo, Ching-De Su, and Ming-Hwa Sheu

IIH-MSP-2016-IS04-02

Modular Design of a General Purpose Controller for Hybrid Electric Power Conversion System

Yu-Cian Syu, Jian-Feng Tsai, Lieh-Kuang Chiang, and Wen-Ching Ko

IIH-MSP-2016-0032

Infrared Video Based Sleep Comfort Analysis Using Part-based Features Lumei Su, Min Xu, and Xiangsong Kong

IIH-MSP-2016-0066

Fall Detection Algorithm Based on Human Posture Recognition Kewei Zhao, Kebin Jia, and Pengyu Liu

IIH-MSP-2016-0132

Design of a Hardware Efficient Antenna-Configurable Multiple-input Multiple-output Detector

Syu-Siang Long, Chin-Kuo Jao, Shih-Kun Lin, Chang-Hsuan Hsu, Wei-Cheng Wang, and Muh-Tian Shiue

IIH-MSP-2016-IS09-03

The Design of Distributed Hardware Platform for Complex Electronic System Testing Chang'an Wei, Gang Wang, Yunlong Sheng, Shouda Jiang, and Xiangyu Tian

Session B03: Computational Intelligence and Applications (II)

Session Chairs:

Dr. Pei-Wei Tsai, Fujian University of Technology, China

Dr. Shu-Chuan Chu, Flinders University, Australia

IIH-MSP-2016-IS09-01

DBN-based Classification of Spatial-spectral Hyperspectral Data Lianlei Lin, Hongjian Dong, and Xinyi Song

IIH-MSP-2016-IS09-02

Using CNN to Classify Hyperspectral Data Based on Spatial-spectral Information Lianlei Lin and Xinyi Song

IIH-MSP-2016-IS09-04

Multiple Kernel-learning Based Hyperspectral Data Classification Wei Gao and Yu Peng

IIH-MSP-2016-IS09-05

Rolling Element Bearings Fault Intelligent Diagnosis Based on Convolutional Neural Networks Using Raw Sensing Signal

Wei Zhang, Gaoliang Peng, and Chuanhao Li

IIH-MSP-2016-0218

Silhouette Imaging for Smart Fence Applications with ZigBee Sensors *Kaide Huang, Zhengshun Zhang, and Jinwen Cai*

IIH-MSP-2016-IS09-13

A Comparative Analysis of Stock Portfolio Construction by IABC and GARCH with the ISCI in Taiwan Stock Market

Pei-Wei Tsai, Ko-Fang Liu, Xingsi Xue, Jui-Fang Chang, Cian-Lin Tu, Vaci Istanda, and Chih-Feng Wu

Session B04: Recent Advances in Information Hiding and Enrichment Technologies for Audio and Speech Signals

Session Chairs:

Dr. Masashi Unoki, Japan Advanced Institute of Science and Technology, Japan.

Dr. Kotaro Sonoda, Nagasaki University, Japan

IIH-MSP-2016-IS06-01

Improvement of the Embedding Capacity for Audio Watermarking Method Using Nonnegative Matrix Factorization

Harumi Murata and Akio Ogihara

IIH-MSP-2016-IS06-02

Digital Audio Watermarking Robust Against Locality Sensitive Hashing Kotaro Sonoda and Kentaro Morisaki

IIH-MSP-2016-IS06-03

On a Synchronization Method for Audio Watermarks Robust Against Aerial Transmission Using Embedded Random Synchronization Pattern *Kazuhiro Kondo and Joji Yamada*

IIH-MSP-2016-IS06-04

Tampering Detection in Speech Signals by Semi-Fragile Watermarking Based on Singular-Spectrum Analysis

Jessada Karnjana, Masashi Unoki, Pakinee Aimmanee, and Chai Wutiwiwatchai

IIH-MSP-2016-IS06-05

A Study on Tailor-Made Speech Synthesis Based on Deep Neural Networks Shuhei Yamada, Takashi Nose, and Akinori Ito

IIH-MSP-2016-0027

Cross-similarity Measurement of Music Sections: A Framework for Large-scale Cover Song Identification

Kang Cai, Deshun Yang, and Xiaoou Chen

Session B05: Cross-discipline Techniques in Signal Processing and Networking Session Chairs:

Dr. Feng-Cheng Chang, Tamkang University, Taiwan

Dr. Yueh-Hong Chen, Far East University, Taiwan

Dr. Hsiang-Cheh Huang, National University of Kaohsiung, Taiwan

IIH-MSP-2016-IS01-01

Design of Dipole Slot Antenna for 700/900/1800 MHz Applications *Yuh-Yih Lu, Chih-Wei Fan, and Hsiang-Cheh Huang*

IIH-MSP-2016-IS01-02

Gender Recognition Using Local Block Difference Pattern

Chih-Chin Lai, Chih-Hung Wu, Shing-Tai Pan, Shie-Jue Lee, and Bor-Haur Lin

IIH-MSP-2016-IS01-03

A Design of Genetic Programming Scheme with VLIW Concepts Feng-Cheng Chang and Hsiang-Cheh Huang

IIH-MSP-2016-IS01-04

Robust Transmission of Compressed Sensing Signals with Error Correction Codes *Hsiang-Cheh Huang, Feng-Cheng Chang, Yueh-Hong Chen, and Po-Liang Chen*

IIH-MSP-2016-IS01-05

A Quantization-based Image Watermarking Scheme Using Vector Dot Product *Yueh-Hong Chen and Hsiang-Cheh Huang*

IIH-MSP-2016-0037

Demonstration Experiment of Data Hiding into OOXML Document for Suppression of Plagiarism

Akinori Ito

Session B06: Recent Advances in Spatial Audio Technologies and Systems Session Chairs:

Prof. Shuichi Sakamoto, Tohoku University, Japan

Dr. Ryouichi Nishimura, National Institute of Information and Communications
Technology, Japan

Prof. Kazuhiro Kondo, Yamagata University, Japan

IIH-MSP-2016-IS08-01

Introduction and Comparison of Machine Learning Techniques to the Estimation of Binaural Speech Intelligibility

Kazuhiro Kondo and Kazuya Taira

IIH-MSP-2016-IS08-02

Impact of Variation in Interaural Level and Time Differences due to Head Rotation in Localization of Spatially Segregated Sound

Daisuke Morikawa

IIH-MSP-2016-IS08-03

An Improved 5-2 Channel Downmix Algorithm for 3D Audio Reproduction Xingwei Sun, Risheng Xia, Lei Yang, Lizhong Wang, and Junfeng Li

IIH-MSP-2016-IS08-04

Investigation on the Head-related Modulation Transfer Function for Monaural DOA Nguyen Khanh Bui, Daisuke Morikawa, and Masashi Unoki

IIH-MSP-2016-IS08-05

Temporal Characteristics of Perceived Reality of Multimodal Contents Shuichi Sakamoto, Hiroyuki Yagyu, Zhenglie Cui, Tomoko Ohtani, Yoiti Suzuki, and Jiro Gyoba

IIH-MSP-2016-0120

Frames Motion Detection of Quantum Video *Shen Wang*

Session B07: Wearable Computing and Information Security Session Chairs:

Dr. Ching-Yu Yang, National Penghu University of Science and Technology,

Taiwan

Dr. Wen-Fong Wang, National Yunlin University of Science and Technology,

Taiwan

IIH-MSP-2016-IS02-01

High-capacity Robust Watermarking Approach for Protecting Ownership Right Chun-Yuan Hsiao, Ming-Feng Tsai, and Ching-Yu Yang

IIH-MSP-2016-IS02-02

A Novel Approach to the Quadratic Residue Code Ching-Fu Huang, Wan-Rong Cheng, and Chang-Ching Yu

IIH-MSP-2016-0159

A Secure Authentication Scheme for Telecare Medical Information Systems Chin-Chen Chang, Jung-San Lee, Yu-Ya Lo, and Yanjun Liu

IIH-MSP-2016-0200

Reversible Authentication Scheme for Demosaicked Images without False Detection Xiao-Long Liu, Chia-Chen Lin, Cheng-Han Lin, Li-Juan Lin, and Bo-Jun Qiu

IIH-MSP-2016-IS09-12

A Three-Party Password Authenticated Key Exchange Protocol Resistant to Stolen Smart Card Attacks

Chien-Ming Chen, Linlin Xu, Weicheng Fang, and Tsu-Yang Wu

IIH-MSP-2016-IS09-17

More Efficient Algorithm to Mine High Average-Utility Patterns

Jerry Chun-Wei Lin, Shifeng Ren, Philippe Fournier-Viger, Ja-Hwung Su, and Bay Vo

Session B08: Information Hiding and Signal Processing

Session Chair:

IIH-MSP-2016-0078

Development of an Easy Japanese Writing Support System with Text-to-Speech Function

Takeshi Nagano, Hafiyan Prafianto, Takashi Nose, and Akinori Ito

IIH-MSP-2016-0136

Synthesis of Photo-Realistic Facial Animation from Text Based on HMM and DNN with Animation Unit

Kazuki Sato, Takashi Nose, and Akinori Ito

IIH-MSP-2016-0171

Behavior Steganography in Social Network *Xinpeng Zhang*

IIH-MSP-2016-0176

Robust Steganography Using Texture Synthesis

Zhenxing Qian, Hang Zhou, Weiming Zhang, and Xinpeng Zhang

IIH-MSP-2016-0197

A Reversible Data Hiding Scheme in AMBTC Compression Code Using Joint Neighborhood Coding

Pei-Feng Shiu, Chia-Chen Lin, Jinn-Ke Jan, Cheng-Lin Hsieh, and Yi-Ming Tang

IIH-MSP-2016-0228

An Optimization Approach for Potential Power Generator Outputs Based on Parallelized Firefly Algorithm

Chia-Hung Wang, Trong-The Nguyen, Jeng-Shyang Pan, Thi-Kien Dao

Session C01: Network Security, Communication, Image Analysis, and Sensor Science Technology

Session Chairs:

Dr. Pei-Wei Tsai, Fujian University of Technology, China

Dr. Sheng-Hui Meng, Fujian University of Technology, China

Prof. Hai-Han Lu, National Taipei University of Technology, Taiwan

Prof. Zhi-yuan Su, Chia Nan University of Pharmacy and Science, Taiwan

Dr. I-Hsien Liu, National Cheng Kung University, Taiwan

IIH-MSP-2016-IS11-01

Management of Energy Saving for Wireless Sensor Network Node *Xu-Hong Huang*

IIH-MSP-2016-IS11-02

Ultrasonic Ranging-based Vehicle Collision Avoidance System S.H. Meng, A.C. Huang, T.J. Huang, Z.M. Cai, Q.Z. Ye, and F.M. Zou

IIH-MSP-2016-IS11-03

Defending Cloud Computing Environment Against the Challenge of DDoS Attacks Based on Software Defined Network

Shuen-Chih Tsai, I-Hsien Liu, Chien-Tung Lu, Chan-Hua Chang, and Jung-Shian Li

IIH-MSP-2016-0181

An Automatic Decoding Method for Morse Signal based on Clustering Algorithm *Yaqi Wang, Zhonghua Sun, and Kebin Jia*

IIH-MSP-2016-0224

A Novel Digital Rights Management Mechanism on Peer-to-Peer Streaming System Jin Zhang, Jinwen Cai, Zhengshun Zhang

IIH-MSP-2016-0185

Automotive Air-conditioning Systems Performance Prediction Using Fuzzy Neural Networks

Rong Hu and Ye Xia

Session C02: Smart Distribution Systems and Applications

Session Chairs:

Dr. Ming-Yuan Cho, National Kaohsiung University of Applied Sciences, Taiwan

Dr. Yen-Ming Tseng, Fujian University of Technology, China

IIH-MSP-2016-IS14-01

Model-based Vehicle Make and Model Recognition from Roads *Li-Chih Chen*

IIH-MSP-2016-IS14-02

A Protective Device for a Motor Vehicle Battery

Rong-Ching Wu, Yen-Ming Tseng, En-Chih Chang, and Jia-Yi Chen

IIH-MSP-2016-IS14-03

Feeder Losses Sensitivity Analysis by Real or Reactive Power Node Injection of Distributed Generators

Yen-Ming Tzeng, Rong-Ching Wu, Jeng-Shyang Pan, and Rui-Zhe Huang

IIH-MSP-2016-IS09-22

PCB Level SI Simulation Based on IBIS Model for FPGA System with DDR2 Memory Devices Application

Xiao-Yu Cheng and Wei-Min Zheng

IIH-MSP-2016-0111

Research on Frequency Automatically Switching Technology for China Highway Traffic Radio

Lei Cai, Zhong-Teng Yu, and Chun-Lei Meng

IIH-MSP-2016-0153

A Revisit to LSB Substitution Based Data Hiding for Embedding More Information *Yanjun Liu, Chin-Chen Chang, and Tzu-Yi Chien*