

WORKSHOP: REGULAR SESSION 1

Mon (10.22) 15:00~15:50 (Hall Jade)

Deep Neural Networks for Digital Forensics

R11. 15:00~15:15

A Convolutional Neural Network Based Seam Carving Detection Scheme for Uncompressed Digital Images

Jingyu Ye, Yuxi Shi, Guanshuo Xu and Yun-Qing Shi
New Jersey Institute of Technology

R12. 15:15~15:30

Convolutional Neural Network for Larger JPEG Images Steganalysis

Qian Zhang, Xianfeng Zhao and Changjun Liu
Chinese Academy of Sciences

R13. 15:30~15:50

Comparison of DCT and Gabor Filters in Residual Extraction of CNN Based JPEG Steganalysis

Huilin Zheng¹, Xuan Li¹, Danyang Ruan¹, Xiangui Kang¹ and Yunqing Shi²
1. Sun Yat-sen University 2. New Jersey Institute of Technology

WORKSHOP: REGULAR SESSION 2

Tue (10.23) 09:00~10:30 (Hall Jade)

Steganalysis and Identification

R21. 09:00~09:20

A Deep Residual Multi-Scale Convolutional Network For Spatial Steganalysis

Shiyang Zhang, Hong Zhang, Xianfeng Zhao and Haibo Yu
Chinese Academy of Sciences

R22. 09:20~09:40

Provably Secure Generative Steganography based on Autoregressive Model

Kuan Yang, Kejiang Chen, Weiming Zhang and Nenghai Yu
University of Science and Technology of China

R23. 09:40~10:00

A novel steganalysis of Steghide focused on high-frequency region of audio waveform

Akira Nishimura
Tokyo University of Information Sciences

R24. 10:00~10:15

Cycle GAN-Based Attack on Recaptured Images to Fool Both Human and Machine

Wei Zhao, Pengpeng Yang, Rongrong Ni, Yao Zhao and Wenjie Li
Beijing Jiaotong University

R25. 10:15~10:30

Source Identification of 3D Printed Objects Based on Inherent Equipment Distortion

Fei Peng¹, Jing Yang¹, Zi-Xing Lin¹ and Min Long²

1. Hunan University 2. Changsha University of Science and Technology

WORKSHOP: REGULAR SESSION 3

Tue (10.23) 10:45~12:00 (Hall Jade)

Watermarking

R31. 10:45~11:00

Spherical Panorama Image Watermarking Using Viewpoint Detection

Jihyeon Kang, Sangkeun Ji and Heungkyu Lee

Korea Advanced Institute of Science and Technology

R32. 11:00~11:15

Traitor Tracing After Visible Watermark Removal

Hannes Mareen, Johan De Praeter, Glenn Van Wallendael and Peter Lambert

Ghent University

R33. 11:15~11:30

Improved High Capacity Spread Spectrum-Based Audio Watermarking by Hadamard Matrices

Yiming Xue¹, Kai Mu, Yan Li¹, Juan Wen¹, Ping Zhong¹ and Shaozhang Niu²

1. China Agricultural University 2. Beijing University of Posts and Telecommunication

R34. 11:30~11:45

DWT and QR code based watermarking for document DRM

Nicolò Cardamone and Fabrizio D'Amore

Sapienza University of Rome

R35. 11:45~12:00

Dynamic Watermarking-Based Integrity Protection of Homomorphically Encrypted Databases – Application to Outsourced Genetic Data

David Niyitegeka¹, Gouenou Coatrieux¹, Reda Bellafqira¹, Emmanuelle Genin² and Javier Franco-Contreras³

1. IMT Atlantique 2. INSERM 3. WaToo

WORKSHOP: REGULAR SESSION 4

Tue (10.23) 16:00~17:30 (Hall Jade)

Reversible Data Hiding

R41. 16:00~16:20

Pixel-value-ordering based reversible data hiding with adaptive texture classification and modification

Bo Ou¹, Xiaolong Li², Wei Li³ and Yun-Qing Shi⁴

1. Hunan University 2. Beijing Jiaotong University 3. Capital Normal University 4. New Jersey Institute of Technology

R42. 16:20~16:40

Reversible Data Hiding in Encrypted Images Based on Image Partition and Spatial Correlation

Song Chang¹, Zhang Yifeng¹ and Lu Guojun²

1. Southeast university (China) 2. Federation University Australia

R43. 16:40~17:00

A Multiple Linear Regression Based High-Accuracy Error Prediction algorithm for Reversible Data Hiding

Bin Ma¹, Xiaoyu Wang¹, Bing Li¹ and Yunqing Shi²

1. Qilu University of Technology (Shandong Academic of Science) 2. New Jersey Institute of Technology

R44. 17:00~17:15

A Strategy of Distinguishing Texture Feature for Reversible Data Hiding based on Histogram Shifting

Yinyin Peng and Zhaoxia Yin

Anhui University

R45. 17:15~17:30

Reversible Data Hiding Scheme in Encrypted-Image Based on Prediction and Compression Coding

Fan Chen, Yuan Yuan, Yuyu Chen, Hongjie He and Lingfeng Qu

Southwest Jiaotong University

WORKSHOP: REGULAR SESSION 5

Wed (10.24) 09:00~10:30 (Hall Jade)

Steganographic Algorithms

R51. 09:00~09:20

A High Capacity HEVC Steganographic Algorithm Using Intra Prediction Modes in Multi-sized Prediction Blocks

Yi Dong, Tanfeng Sun and Xinghao Jiang

Shanghai Jiao Tong University

R52. 09:20~09:40

Improving the Embedding Strategy for Batch Adaptive Steganography

Xinzhi Yu, Kejiang Chen, Weiming Zhang, Yaofei Wang and Nenghai Yu

University of Science and Technology of China

R53. 09:40~10:00

Content-adaptive Steganalysis via Augmented Utilization of Selection-channel Information

Shijun Zhou, Weixuan Tang, Shunquan Tan and Bin Li

Shenzhen University

R54. 10:00~10:15

Pitch Delay Based Adaptive Steganography for AMR Speech Stream

Chen Gong, Xiaowei Yi and Xianfeng Zhao
Chinese Academy of Sciences

R55. 10:15~10:30

An Empirical Study of Steganography and Steganalysis of Color Images in the JPEG Domain

Theo Taburet¹, Louis Filstroff², Patrick Bas¹ and Wadih Sawaya³
1. CNRS 2. Université de Toulouse 3. IMT-Lille Douais

WORKSHOP: REGULAR SESSION 6

Wed (10.24) 10:45~12:00 (Hall Jade)

Identification and Security

R61.10:45~11:00

VPCID -- A VoIP Phone Call Identification Database

Yuankun Huang, Shunquan Tan, Bin Li and Jiwu Huang
Shenzhen University

R62. 11:00~11:15

Image Content Location Privacy Preserving in Social Network Travel Image Sharing

Xiang Wang, Rundong Zhang and Qingqi Pei
Xidian University

R63. 11:15~11:30

Secure Multilayer Perceptron Based on Homomorphic Encryption

Reda Bellafqira¹, Gouenou Coatrieux¹, Emmanuelle Genin² and Michel Cozic³
1. IMT Atlantique 2. INSERM 3. Medecom

R64. 11:30~11:45

Surveillance Video Authentication Using Universal Image Quality Index of Temporal Average

Sondos Fadl, Han Qi and Li Qiong
Harbin Institute of Technology

R65. 11:45~12:00

Multi-version Android Forensics on Mobile Devices

Musaab Hasan¹, Zayed Balbahaith¹, Farkhund Iqbal¹, Thar Shamsa², Aine MacDermott², Asad Khattak¹, Babar Shah¹ and Patrick Hung³
1. Zayed University 2. Liverpool John Moores University 3. University of Ontario Institute of Technology

WORKSHOP: SPECIAL SESSION

Tue (10.23) 14:30~16:00 (Hall Jade)

Deep Generative Models for Forgery and Its Detection

S1. 14:30~14:45

Reconstruction of fingerprints from minutiae using conditional adversarial networks

Hakil Kim, Xuenan Cui, Man-Gyu Kim and Thi Hai Binh Nguyen
Inha University

S2. 14:45~15:00

The Experiments to Distinguish Synthetic Face Images of Various GANs Using Deep Learning

Giseok Kim, Linh Doan, Hanh Nguyen and Junhyeok Lee
Korea Service Platform Technology

S3. 15:00~15:20

Unsupervised Domain Adaptation for Object Detection using Distribution Matching in Various Feature Level

Hyoungwoo Park, Minjeong Ju, Sangkeun Moon and Chang D. Yoo
Korea Advanced Institute of Science and Technology

S4. 15:20~15:40

Unsupervised synthesizing of a new image by combining image's attribute

Donggyu Joo, Doyeon Kim and Junmo Kim
Korea Advanced Institute of Science and Technology

S5. 15:40~16:00

Towards Robust Neural Networks with Lipschitz Continuity

Muhammad Usama and Dong Eui Chang
Korea Advanced Institute of Science and Technology