

## Regular Session Papers

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

Jingyu Ye (jy58@njit.edu), Yuxi Shi, Guanshuo Xu and Yun-Qing Shi (shi@njit.edu)  
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2. A Deep Residual Multi-Scale Convolutional Network For Spatial Steganalysis

Shiyang Zhang, Hong Zhang (zhanghong@iie.ac.cn), Xianfeng Zhao and Haibo Yu  
*Chinese Academy of Sciences*

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

Yi Dong, Tanfeng Sun and Xinghao Jiang (aa44, tfsun, xhjiang@sjtu.edu.cn)  
*Shanghai Jiao Tong University*

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

Bin Ma<sup>1</sup>, Xiaoyu Wang<sup>1</sup>, Bing Li<sup>1</sup> and Yunqing Shi<sup>2</sup>

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

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

Akira Nishimura (akira@rsch.tuis.ac.jp)  
*Tokyo University of Information Sciences*

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

Yinyin Peng and Zhaoxia Yin (yinzhaoxia@ahu.edu.cn)  
*Anhui University*

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

Theo Taburet<sup>1</sup>, Louis Filstroff<sup>2</sup>, Patrick Bas<sup>1</sup> (Patrick.Bas@ec-lille.fr)  
and Wadih Sawaya<sup>3</sup>

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

Huilin Zheng<sup>1</sup>, Xuan Li<sup>1</sup> (353166851@qq.com), Danyang Ruan<sup>1</sup>, Xiangui Kang<sup>1</sup>  
(isskxg@mail.sysu.edu.cn)  
and Yunqing Shi<sup>2</sup>

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

Shijun Zhou, Weixuan Tang, Shunquan Tan and Bin Li (libin@szu.edu.cn)  
*Shenzhen University*

10. Convolutional Neural Network for Larger JPEG Images Steganalysis

Qian Zhang (zhangqian2@iie.ac.cn), Xianfeng Zhao and Changjun Liu

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

Wei Zhao, Pengpeng Yang, Rongrong Ni (rrni@bjtu.edu.cn), Yao Zhao and Wenjie Li

*Beijing Jiaotong University*

12. DWT and QR code based watermarking for document DRM

Nicolò Cardamone and Fabrizio D'Amore (damore@dis.uniroma1.it)

*Sapienza University of Rome*

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

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

Yiming Xue<sup>1</sup> (xueym@cau.edu.cn), Kai Mu<sup>1</sup>, Yan Li<sup>1</sup>, Juan Wen<sup>1</sup>, Ping Zhong<sup>1</sup> and Shaozhang Niu<sup>2</sup>

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15. Improving the Embedding Strategy for Batch Adaptive Steganography

Xinzhi Yu, Kejiang Chen, Weiming Zhang (zhangwm@ustc.edu.cn), Yaofei Wang and Nenghai Yu

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16. Pitch Delay Based Adaptive Steganography for AMR Speech Stream

Chen Gong (gongchen@iie.ac.cn), Xiaowei Yi (yixiaowei@iie.ac.cn) and Xianfeng Zhao

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

Bo Ou<sup>1</sup> (oubo@hnu.edu.cn), Xiaolong Li<sup>2</sup>, Wei Li<sup>3</sup> and Yun-Qing Shi<sup>4</sup>

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

18. Provably Secure Generative Steganography based on Autoregressive Model

Kuan Yang, Kejiang Chen, Weiming Zhang (zhangwm@ustc.edu.cn) and Nenghai Yu

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

Song Chang<sup>1</sup> (songchangseu@163.com), Zhang Yifeng<sup>1</sup> and Lu Guojun<sup>2</sup>

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

Fan Chen, Yuan Yuan (ytuan yuan@qq.com), Yuyu Chen, Hongjie He (hjhe@swjtu.com) and Lingfeng Qu

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21. Spherical Panorama Image Watermarking Using Viewpoint Detection

Jihyeon Kang, Sangkeun Ji and Heungkyu Lee ({kangji, sangkeun.ji}@kaist.ac.kr, lheungksoc@gmail.com)

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22. Secure Multilayer Perceptron Based on Homomorphic Encryption

Reda Bellafqira<sup>1</sup> (reda.bellafqira@imt-atlantique.fr), Gouenou Coatrieux<sup>1</sup>, Emmanuelle Genin<sup>2</sup> and Michel Cozic<sup>3</sup>

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23. Surveillance Video Authentication Using Universal Image Quality Index of Temporal Average

Sondos Fadl (sondos.magdy@ci.menofia.edu.eg), Han Qi (qi.han@hit.edu.cn) and Li Qiong

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24. Traitor Tracing After Visible Watermark Removal

Hannes Mareen, Johan De Praeter, Glenn Van Wallendael and Peter Lambert ({hannes.mareen, johan.depraeter, glenn.vanwallendael, peter.lambert}@ugent.be)

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25. VPCID -- A VoIP Phone Call Identification Database

Yuankun Huang, Shunquan Tan, Bin Li (ibin@szu.edu.cn) and Jiwu Huang

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## Special Session Papers

26. Reconstruction of fingerprints from minutiae using conditional adversarial networks

Hakil Kim (hikim@inha.ac.kr), Xuenan Cui, Man-Gyu Kim and Thi Hai Binh Nguyen (binhnh12@gmail.com)

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27. Towards Robust Neural Networks with Lipschitz Continuity

Muhammad Usama and Dong Eui Chang ({usama, dechang}@kaist.ac.kr)

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

Hyoungwoo Park (hyoungwoo.park@kaist.ac.kr), Minjeong Ju, Sangkeun Moon and Chang D. Yoo

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