

Contents

Digital Forensics

A Multi-purpose Image Counter-anti-forensic Method Using Convolutional Neural Networks	3
<i>Jingjing Yu, Yifeng Zhan, Jianhua Yang, and Xiangui Kang</i>	
Detection of Video-Based Face Spoofing Using LBP and Multiscale DCT . . .	16
<i>Ye Tian and Shijun Xiang</i>	
Source Cell-Phone Identification Using Spectral Features of Device Self-noise	29
<i>Chao Jin, Rangding Wang, Diqun Yan, Biao Li Tao, Yanan Chen, and Anshan Pei</i>	
Speech Authentication and Recovery Scheme in Encrypted Domain	46
<i>Qing Qian, Hongxia Wang, Sani M. Abdullahi, Huan Wang, and Canghong Shi</i>	
Detecting Double H.264 Compression Based on Analyzing Prediction Residual Distribution	61
<i>S. Chen, T.F. Sun, X.H. Jiang, P.S. He, S.L. Wang, and Y.Q. Shi</i>	
Identification of Electronic Disguised Voices in the Noisy Environment. . . .	75
<i>Wencheng Cao, Hongxia Wang, Hong Zhao, Qing Qian, and Sani M. Abdullahi</i>	
Using Benford's Law Divergence and Neural Networks for Classification and Source Identification of Biometric Images	88
<i>Aamo Iorliam, Anthony T.S. Ho, Adrian Waller, and Xi Zhao</i>	
Source Camera Identification Based on Guided Image Estimation and Block Weighted Average	106
<i>Le-Bing Zhang, Fei Peng, and Min Long</i>	
Recapture Image Forensics Based on Laplacian Convolutional Neural Networks	119
<i>Pengpeng Yang, Rongrong Ni, and Yao Zhao</i>	
Concealing Fingerprint-Biometric Data into Audio Signals for Identify Authentication	129
<i>Sani M. Abdullahi, Hongxia Wang, Qing Qian, and Wencheng Cao</i>	

A Novel Robust Image Forensics Algorithm Based on L1-Norm Estimation	145
<i>Xin He, Qingxiao Guan, Yanfei Tong, Xianfeng Zhao, and Haibo Yu</i>	
Detection of Copy-Move Forgery in Flat Region Based on Feature Enhancement.	159
<i>Weiwei Zhang, Zhenghong Yang, Shaozhang Niu, and Junbin Wang</i>	
A Local Derivative Pattern Based Image Forensic Framework for Seam Carving Detection	172
<i>Jingyu Ye and Yun-Qing Shi</i>	
Visual Cryptography	
Privacy Monitor	187
<i>Teng Guo, Feng Liu, Wen Wang, and BingTao Yu</i>	
Information Security Display Technology with Multi-view Effect	198
<i>Wen Wang, Feng Liu, Teng Guo, Yawei Ren, and Gang Shen</i>	
Random Grids-Based Threshold Visual Secret Sharing with Improved Visual Quality	209
<i>Xuehu Yan, Yuliang Lu, Lintao Liu, and Song Wan</i>	
Halftone Visual Cryptography with Complementary Cover Images	223
<i>Gang Shen, Feng Liu, Zhengxin Fu, Bin Yu, and Wen Wang</i>	
Collusive Attacks to Partition Authentication Visual Cryptography Scheme	238
<i>Yawei Ren, Feng Liu, and Wen Wang</i>	
On the Robustness of Visual Cryptographic Schemes	251
<i>Sabyasachi Dutta, Partha Sarathi Roy, Avishek Adhikari, and Kouichi Sakurai</i>	
Reversible Data Hiding	
Optimal Distortion Estimation for Prediction Error Expansion Based Reversible Watermarking	265
<i>Aniket Roy and Rajat Subhra Chakraborty</i>	
Blind 3D Mesh Watermarking Based on Sphere-Shape Template	280
<i>Hak-Yeol Choi, Jeongho Son, Han-Ul Jang, and Heung-Kyu Lee</i>	
Fragile Watermarking Based Proofs of Retrievability for Archival Cloud Data.	296
<i>Xin Tang, Yining Qi, and Yongfeng Huang</i>	

Multiple Watermarking Using Multilevel Quantization Index Modulation.	312
<i>Bingwen Feng, Jian Weng, Wei Lu, and Bei Pei</i>	
Increasing Secret Data Hiding Capacity in QR Code Using 3×3 Subcells. . .	327
<i>Wisdarmanto Erlangga and Ari Moesriami Barmawi</i>	
Databases Traceability by Means of Watermarking with Optimized Detection	343
<i>Javier Franco-Contreras and Gouenou Coatrieux</i>	
A New Card Authentication Scheme Based on Image Watermarking and Encryption	358
<i>Xinxin Peng, Jianfeng Lu, Li Li, Chin-Chen Chang, and Qili Zhou</i>	
Copyright Protection for 3D Printing by Embedding Information Inside 3D-Printed Objects	370
<i>Kazutake Uehira, Masahiro Suzuki, Piyyarat Silapasuphakornwong, Hideyuki Torii, and Youichi Takashima</i>	
Watermarking with Fixed Decoder for Aesthetic 2D Barcode	379
<i>Minoru Kuribayashi, Ee-Chien Chang, and Nobuo Funabiki</i>	
Two-Dimensional Histogram Modification for Reversible Data Hiding in Partially Encrypted H.264/AVC Videos	393
<i>Dawen Xu, Yani Zhu, Rangding Wang, Jianjing Fu, and Kai Chen</i>	
Second Order Predicting-Error Sorting for Reversible Data Hiding	407
<i>Jiajia Xu, Hang Zhou, Weiming Zhang, Ruiqi Jiang, Guoli Ma, and Nenghai Yu</i>	
Reversible Data Hiding for Texture Videos and Depth Maps Coding with Quality Scalability	421
<i>Yuanzhi Yao, Weiming Zhang, and Nenghai Yu</i>	
Reversible Data Hiding in Encrypted AMBTC Compressed Images.	436
<i>Xuejing Niu, Zhaoxia Yin, Xinpeng Zhang, Jin Tang, and Bin Luo</i>	
Reversible 3D Image Data Hiding with Quality Enhancement.	446
<i>Wengai Liu, Rongrong Ni, and Yao Zhao</i>	
An Adaptive Reversible Data Hiding Scheme for JPEG Images	456
<i>Jiaxin Yin, Rui Wang, Yuanfang Guo, and Feng Liu</i>	
Separable Multiple Bits Reversible Data Hiding in Encrypted Domain.	470
<i>Yan Ke, Mingqing Zhang, and Jia Liu</i>	

Steganography and Steganalysis

Distortion Function for Spatial Image Steganography Based on the Polarity of Embedding Change	487
<i>Zichi Wang, Jinpeng Lv, Qingde Wei, and Xinpeng Zhang</i>	
Embedding Strategy for Batch Adaptive Steganography	494
<i>Zengzhen Zhao, Qingxiao Guan, Xianfeng Zhao, Haibo Yu, and Changjun Liu</i>	
Adaptive Steganography Using 2D Gabor Filters and Ensemble Classifiers . . .	506
<i>Yuan Bian, Guangming Tang, Shuo Wang, Zhanzhan Gao, and Shiyuan Chen</i>	
An Adaptive Video Steganography Based on Intra-prediction Mode and Cost Assignment.	518
<i>Lingyu Zhang and Xianfeng Zhao</i>	
Segmentation Based Steganalysis of Spatial Images Using Local Linear Transform	533
<i>Ran Wang, Xijian Ping, Shaozhang Niu, and Tao Zhang</i>	
Reliable Pooled Steganalysis Using Fine-Grained Parameter Estimation and Hypothesis Testing	550
<i>Wei Huang and Xianfeng Zhao</i>	
Deep Learning on Spatial Rich Model for Steganalysis	564
<i>Xiaoyu Xu, Yifeng Sun, Guangming Tang, Shiyuan Chen, and Jian Zhao</i>	
A High Embedding Capacity Data Hiding Scheme Based upon Permutation Vectors	578
<i>Chin-Chen Chang, Jen-Chun Chang, Yun-Hong Chou, and Hsin-Lung Wu</i>	
Data Hiding in H.264/AVC Video Files Using the Coded Block Pattern	588
<i>Hong Zhang, Yun Cao, Xianfeng Zhao, Haibo Yu, and Changjun Liu</i>	
A Study of the Two-Way Effects of Cover Source Mismatch and Texture Complexity in Steganalysis	601
<i>Donghui Hu, Zhongjin Ma, Yuqi Fan, and Lina Wang</i>	
Erratum to: Speech Authentication and Recovery Scheme in Encrypted Domain.	E1
<i>Qing Qian, Hongxia Wang, Sani M. Abdullahi, Huan Wang, and Canghong Shi</i>	
Author Index	617

Digital Forensics and Watermarking

15th International Workshop, IWDW 2016, Beijing,
China, September 17-19, 2016, Revised Selected
Papers

Shi, Y.Q.; Kim, H.J.; Perez-Gonzalez, F.; Liu, F. (Eds.)

2017, XIV, 618 p. 269 illus., Softcover

ISBN: 978-3-319-53464-0