

IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS FOR VIDEO TECHNOLOGY

A PUBLICATION OF THE IEEE CIRCUITS AND SYSTEMS SOCIETY



WWW.IEEE-CAS.ORG

FEBRUARY 2020

VOLUME 30

NUMBER 2

ITCTEM

(ISSN 1051-8215)

PAPERS

Image/Video Processing

Multi-Scale Frequency Reconstruction for Guided Depth Map Super-Resolution via Deep Residual Network	<i>Y. Zuo, Q. Wu, Y. Fang, P. An, L. Huang, and Z. Chen</i>	297
Double Relaxed Regression for Image Classification	<i>N. Han, J. Wu, X. Fang, W. K. Wong, Y. Xu, J. Yang, and X. Li</i>	307
Color-Guided Depth Image Recovery With Adaptive Data Fidelity and Transferred Graph Laplacian Regularization	<i>Y. Zhang, Y. Feng, X. Liu, D. Zhai, X. Ji, H. Wang, and Q. Dai</i>	320
Statistical and Structural Information Backed Full-Reference Quality Measure of Compressed Sonar Images	<i>W. Chen, K. Gu, W. Lin, F. Yuan, and E. Cheng</i>	334
Multi-Matrices Low-Rank Decomposition with Structural Smoothness for Image Denoising	<i>H. Wang, Y. Li, Y. Cen, and Z. He</i>	349
Robust and Secure Image Fingerprinting Learned by Neural Network	<i>Y. Li, D. Wang, and L. Tang</i>	362
Diversity-Based Cascade Filters for JPEG Steganalysis	<i>G. Feng, X. Zhang, Y. Ren, Z. Qian, and S. Li</i>	376
Compressive Imaging Using RIP-Compliant CMOS Imager Architecture and Landweber Reconstruction	<i>M. Trevisi, A. Akbari, M. Trocan, Á. Rodríguez-Vázquez, and R. Carmona-Galán</i>	387
Learning-Based Low-Complexity Reverse Tone Mapping With Linear Mapping	<i>D.-E. Kim and M. Kim</i>	400
Entropy-Based Reweighted Tensor Completion Technique for Video Recovery	<i>G. M. P. D., B. Madathil, and S. N. George</i>	415
Non-Negative Matrix Factorization With Locality Constrained Adaptive Graph	<i>Y. Yi, J. Wang, W. Zhou, C. Zheng, J. Kong, and S. Qiao</i>	427
Topology Optimization Using Multiple-Possibility Fusion for Vasculature Extraction	<i>H. Fang, D. Ai, W. Cong, S. Yang, J. Zhu, Y. Huang, H. Song, Y. Wang, and J. Yang</i>	442

Image/Video Analysis and Computer Vision

Jointly Learning Visual Poses and Pose Lexicon for Semantic Action Recognition	<i>L. Zhou, W. Li, P. Ogunbona, and Z. Zhang</i>	457
--	--	-----

(Contents Continued on Back Cover)



Local Discriminant Direction Binary Pattern for Palmprint Representation and Recognition	<i>L. Fei, B. Zhang, Y. Xu, D. Huang, W. Jia, and J. Wen</i>	468
HeadNet: An End-to-End Adaptive Relational Network for Head Detection	<i>W. Li, H. Li, Q. Wu, F. Meng, L. Xu, and K. N. Ngan</i>	482
Illumination-Invariance Optical Flow Estimation Using Weighted Regularization Transform	<i>L. Mei, J. Lai, X. Xie, J. Zhu, and J. Chen</i>	495
When Correlation Filters Meet Siamese Networks for Real-Time Complementary Tracking	<i>D. Li, F. Porikli, G. Wen, and Y. Kuai</i>	509
Fine-Grained Visual-Textual Representation Learning	<i>X. He and Y. Peng</i>	520
A Joint Framework for Athlete Tracking and Action Recognition in Sports Videos	<i>L. Kong, D. Huang, J. Qin, and Y. Wang</i>	532
stagNet: An Attentive Semantic RNN for Group Activity and Individual Action Recognition	<i>M. Qi, Y. Wang, J. Qin, A. Li, J. Luo, and L. Van Gool</i>	549
Image/Video Coding and Compression		
Learning for Video Compression	<i>Z. Chen, T. He, X. Jin, and F. Wu</i>	566
Image/Video Storage and Retrieval		
A Novel Key-Frames Selection Framework for Comprehensive Video Summarization	<i>C. Huang and H. Wang</i>	577
Bilinear Supervised Hashing Based on 2D Image Features	<i>Y. Ding, W. K. Wong, Z. Lai, and Z. Zhang</i>	590
