

IEEE TRANSACTIONS ON **MULTIMEDIA**

A PUBLICATION OF
THE IEEE CIRCUITS AND SYSTEMS SOCIETY
THE IEEE SIGNAL PROCESSING SOCIETY
THE IEEE COMMUNICATIONS SOCIETY
THE IEEE COMPUTER SOCIETY



<http://www.signalprocessingsociety.org/tmm/>

NOVEMBER 2018

VOLUME 20

NUMBER 11

ITMUF8

(ISSN 1520-9210)

REGULAR PAPERS

3-D Audio Signal Processing

Efficient Audio Rendering Using Angular Region-Wise Source Enhancement for 360° Video. *K. Niwa, Y. Hioka, and H. Uematsu* 2871

3-D Video Signal Processing

Variational Fusion of Time-of-Flight and Stereo Data for Depth Estimation Using Edge-Selective Joint Filtering *B. Chen, C. Jung, and Z. Zhang* 2882

Depth Assisted Adaptive Workload Balancing for Parallel View Synthesis *X. Jin, Z. Liu, Q. Li, and Q. Dai* 2891

Compression and Coding

Light Field Coding With Field-of-View Scalability and Exemplar-Based Interlayer Prediction. *C. Conti, L. D. Soares, and P. Nunes* 2905

Background Modeling and Referencing for Moving Cameras-Captured Surveillance Video Coding in HEVC *G. Wang, B. Li, Y. Zhang, and J. Yang* 2921

A Collaborative Scheduling-Based Parallel Solution for HEVC Encoding on Multicore Platforms *H. Wang, B. Xiao, J. Wu, S. Kwong, and C.-C. J. Kuo* 2935

Image/Video/Graphics Analysis and Synthesis

Robust Visual Tracking via Smooth Manifold Kernel Sparse Learning. *G. Liu* 2949

Aesthetics-Driven Stereoscopic 3-D Image Recomposition With Depth Adaptation *M. B. Islam, L.-K. Wong, K.-L. Low, and C.-O. Wong* 2964

Building Emotional Machines: Recognizing Image Emotions Through Deep Neural Networks *H.-R. Kim, Y.-S. Kim, S. J. Kim, and I.-K. Lee* 2980



Improving Video Saliency Detection via Localized Estimation and Spatiotemporal Refinement.	X. Zhou, Z. Liu, C. Gong, and W. Liu	2993
Superpixel-Based Single Nighttime Image Haze Removal	M. Yang, J. Liu, and Z. Li	3008
<i>Subjective and Objective Quality Assessment and User Experience</i>		
Blind Quality Index for Multiply Distorted Images Using Biorient Structure Degradation and Nonlocal Statistics	Y. Zhou, L. Li, J. Wu, K. Gu, W. Dong, and G. Shi	3019
<i>Virtual and Augmented Reality</i>		
Thin-Feature-Aware Transport-Velocity Formulation for SPH-Based Liquid Animation	W. Si, J. Qin, Z. Chen, X. Liao, Q. Wang, and P.-A. Heng	3033
<i>Big Data Support for Multimedia</i>		
Highly Accurate Image Reconstruction for Multimodal Noise Suppression Using Semisupervised Learning on Big Data	J.-L. Yin, B.-H. Chen, and Y. Li	3045
<i>Healthcare</i>		
A Multiview Multimodal System for Monitoring Patient Sleep	C. Torres, J. C. Fried, K. Rose, and B. S. Manjunath	3057
<i>Multimedia Content Delivery Networks</i>		
Optimal Transmission Topology Construction and Secure Linear Network Coding Design for Virtual-Source Multicast With Integral Link Rates	R. Zhao, J. Wang, K. Lu, X. Chang, J. Jia, and S. Zhang	3069
<i>Multimedia Streaming and Transport</i>		
Dynamic Resource Allocation by Batch Optimization for Value-Added Video Services Over SDN	K. T. Bagci and A. M. Tekalp	3084
<i>Wireless and Mobile Multimedia</i>		
Cost-Distortion Optimization and Resource Control in Pseudo-Analog Visual Communications	D. Liu, J. Wu, H. Cui, D. Zhang, C. Luo, and F. Wu	3097
<i>Deep Learning for Multimedia Analysis</i>		
Arbitrary-Oriented Scene Text Detection via Rotation Proposals	J. Ma, W. Shao, H. Ye, L. Wang, H. Wang, Y. Zheng, and X. Xue	3111
Coherent Deep-Net Fusion To Classify Shots In Concert Videos	J.-C. Lin, W.-L. Wei, T.-L. Liu, Y.-H. Yang, H.-M. Wang, H.-R. Tyan, and H.-Y. M. Liao	3123
Modeling Multimodal Clues in a Hybrid Deep Learning Framework for Video Classification	Y.-G. Jiang, Z. Wu, J. Tang, Z. Li, X. Xue, and S.-F. Chang	3137
Pedestrian Detection via Body Part Semantic and Contextual Information With DNN	S. Wang, J. Cheng, H. Liu, F. Wang, and H. Zhou	3148
<i>Multimedia Sentiment Analysis and Synthesis; Affective Media Processing</i>		
Learning From Hierarchical Spatiotemporal Descriptors for Micro-Expression Recognition.	Y. Zong, X. Huang, W. Zheng, Z. Cui, and G. Zhao	3160
<i>Speech, Language, and Audio in Video Analysis; Music in Multimedia</i>		
Music Popularity: Metrics, Characteristics, and Audio-Based Prediction	J. Lee and J.-S. Lee	3173
<hr/>		
Information for Authors		3184
