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# Table of Contents

Monday, July 16, 2012

<hr/> <b>Oral Session I - Image Processing</b> <hr/>	
<b>1</b>	<b>Local Histogram Modification Based Contrast Enhancement</b> Q Y Tian <sup>1</sup> , J Duan <sup>2</sup> <sup>1</sup> Stanford University, USA <sup>2</sup> Southwestern University of Finance and Economics, Chengdu, China
<b>7</b>	<b>Automatic Understanding of Road Signs in Vehicular Active Night Vision System</b> O Perry, Y Yitzhaky Ben-Gurion University of the Negev, Israel
<b>14</b>	<b>Real Shape Inner Iris Boundary Segmentation Using Active Contour without Edges</b> A. Hilal <sup>1</sup> , P. Beausery <sup>2</sup> , B. Daya <sup>2</sup> <sup>1</sup> Universit éde Technologie de Troyes, France <sup>2</sup> IUT, Universit éLibanaise, Saida, Liban
<b>20</b>	<b>Content Based Image Retrieval with Bin of Color Histogram</b> V H Vu <sup>1</sup> , Q N Huu <sup>2</sup> , H N T Thu <sup>2</sup> <sup>1</sup> Haiphong University, Hanoi, Vietnam <sup>2</sup> Electric Power University, Hanoi, Vietnam
<b>26</b>	<b>Scaling and Rotating Texture Classification Based on JSEG Algorithm</b> C C Yao, Y Y Yu Chaoyang University of Technology, Taichung, Taiwan
<b>33</b>	<b>High Performance 2-D IDCT for Image/Video Decoding Based on FPGA</b> J M Shan, C C Chen, E Y Yang Shanghai University, Shanghai, China
<b>39</b>	<b>Hardware Solution of Real-time Depth Estimation Based on Stereo Vision</b> H J Li <sup>1,2</sup> , G W Teng <sup>1,2</sup> , Z Y Zhang <sup>1,2</sup> , P An <sup>1,2</sup> , R Ma <sup>1,2</sup> , J W Wang <sup>1,2</sup> , F Q Wu <sup>1,2</sup> <sup>1</sup> Key Laboratory of Advanced Display and System Application Ministry of Education, Shanghai, China <sup>2</sup> Shanghai University, Shanghai, China
<b>45</b>	<b>Implementation of Efficient Line Detection with Oriented Hough Transform</b> D J Fan, H Bi, L D Wang National Computer Network Emergency Response Technical Team/Coordination Center of China
<b>49</b>	<b>Multiple Facade Images Matching for 3D Building Modeling</b> Y S Zhang, Z G Zou School of Geosciences and Info-Physics, Central South University, China
<b>55</b>	<b>Dangerous Object Recognition for Visual Surveillance</b> P Yao <sup>1,2</sup> , Y T Wang <sup>1</sup> , C Chen <sup>1</sup> , D D Weng <sup>1</sup> , Y Liu <sup>1</sup> <sup>1</sup> School of Optoelectronics, Beijing Institute of Technology, Beijing, China <sup>2</sup> Science and Technology on Complex Land Systems Simulation Laboratory, Beijing, China
<b>62</b>	<b>Integrated Monitoring System for Fall Detection in Elderly</b> S. Khawandi <sup>1</sup> , B. Daya <sup>2</sup> , P. Chauvet <sup>3</sup> <sup>1</sup> University of Angers, France <sup>2</sup> Lebanese University, Lebanon <sup>3</sup> Lunam University, France
<b>68</b>	<b>Automatic Object Detection and Matching Based on Proposed Signature</b> H. A. Elsalamony Helwan University, Cairo, Egypt

- 74 Image Compression Technique Utilizing Reference Points Coding with Threshold Values**  
Y F Tan, W N Tan  
*Multimedia University, Malaysia.*
- 78 Mutual Information Based Image Registration for MRI and CT SCAN Brain Images.**  
M.S.Holia<sup>1</sup>, V.K. Thakar<sup>2</sup>  
<sup>1</sup>*B.V.M Engineering College, Vallabh Vidyanaagar, India*  
<sup>2</sup>*A.D.Patel Institute of Technology, Vallabh Vidyanaagar, India.*
- 84 Digital Photo Album Compression based on Global Motion Compensation and Intra/Inter Prediction**  
O Au<sup>1,2</sup>, S J Li<sup>2</sup>, R B Zou<sup>2</sup>, W Dai<sup>2</sup>, L Sun<sup>2</sup>  
<sup>1</sup>*Tongji University, Shanghai, China*  
<sup>2</sup>*Hong Kong University of Science and Technology, Hong Kong*
- 91 An Adaptive Corner Detecting for Real-Time Applications**  
Y X Xing<sup>1,2</sup>, D Y Zhang<sup>1</sup>, J H Zhao<sup>1</sup>, F Liu<sup>1</sup>  
<sup>1</sup>*Wuhan University, Hubei, China,*  
<sup>2</sup>*Wuhan University of Science and Technology, China,*
- 96 Abnormal Behavior Analysis Using LDA**  
H X Lu, L Guo, S Gui, J S Xie  
*Department of Electronic Science and Technology, USTC, Hefei, China*
- 101 Point Correspondence by Matching Scaled Invariants**  
J Q Qu<sup>1</sup>, L G Gong<sup>2</sup>, C Huang<sup>3</sup>, R Y Fang<sup>3</sup>  
<sup>1</sup>*Jilin University, Jilin, China*  
<sup>2</sup>*Watson Research Center, IBM, USA*  
<sup>3</sup>*Shantou University, Shantou, China*
- 106 Accurate Face Detection by Combining Multiple Classifiers Using Locally Assembled Histograms of Oriented Gradients**  
B Han, Y P Luo  
*Tsinghua University, Beijing, China*
- 112 Navigation Image Matching Based On Two-level Keypoints**  
Y Wang<sup>1,2</sup>
- <sup>1</sup>*Tsinghua National Laboratory for Information Science and Technology, Beijing, China*  
<sup>2</sup>*Tsinghua University, Beijing, China*
- 117 An Improved Method for Color Images Enhancement Considering HVS**  
O C.Au<sup>1,2</sup>, L Sun<sup>2</sup>, R B Zou<sup>2</sup>, W Dai<sup>2</sup>, S J Li<sup>2</sup>  
<sup>1</sup>*Tongji University, Shanghai, China*  
<sup>2</sup>*Hong Kong University of Science and Technology, Hong Kong*
- 123 Improving Mobile Color 2D-Barcode JPEG Image Readability Using DCT Coefficient Distributions**  
A K T Tan<sup>1</sup>, D Chai<sup>2</sup>  
<sup>1</sup>*Knowledge Transfer Office Hong Kong Baptist University Kowloon Tong, Hong Kong*  
<sup>2</sup>*School of Engineering Edith Cowan University Joondalup, Australia*
- 129 Novel Weight Allocation Technique For Image Retrieval Based On Higher Order Colour Moments and CCM Texture Features.**  
D Jadhav, G Phadke, S Devane  
*Ramrao Adik Institute of Technology, Mumba, India*
- 134 An Overview of Night Vision Colorization Techniques Using Multispectral Images: From Color Fusion to Color Mapping**  
Y F Zheng  
*Alcorn State University, Lorman, MS, USA*
- 144 Super-resolution Reconstruction of Sequence Image Implemented on OMAP3530 Platform**  
J Li<sup>1</sup>, B H Su<sup>1,2</sup>, G Y Xu<sup>1</sup>, R M Lin<sup>1</sup>  
<sup>1</sup>*Ministry of Education of China, Beijing Institute of Technology, China*  
<sup>2</sup>*Zhuhai Campus, Beijing Institute of Technology, Zhuhai, China*
- 149 Secure Group Identity Authentication Based on Non-perfect Secret Sharing Scheme**  
J Wan<sup>1</sup>, Z Y Bai<sup>1</sup>, X Bai<sup>2</sup>  
<sup>1</sup>*Yunnan University, Beijing, China*  
<sup>2</sup>*Beihang University, Beijing, China*

- 155 **Sensor Pattern Noise in JPEG Compressed Images**  
C Y Shi, Y T Su, J Zhang, J Y Xu  
*Tianjin University, Tianjing, China*
- 160 **Detection of Video Transcoding for Digital Forensics**  
J Y Xu, Y T Su, X G You  
*Tianjin University, Tianjing, China*
- 165 **Reversible Image Watermarking by Rhombus Prediction and Histogram Modification.**  
H T Wu<sup>1</sup>, J W Huang<sup>1</sup>, Y Zhang<sup>2</sup>, J You<sup>3</sup>  
<sup>1</sup>*Sun Yat-Sen University, Guangzhou, China*  
<sup>2</sup>*Harbin Institute of Technology, Harbin, China*  
<sup>3</sup>*Hong Kong Polytechnic University, Hong Kong*
- 170 **Research and Realization of Perspective Correction Technology for Document Image**  
S L Liu, Y M Li, Y P Gao, K Yang  
*Wenzhou University, China*
- 
- Oral Session II -  
Audio and Music Processing**
- 
- 175 **A New Digital Audio System Design to Cope with High Audio Scene (HAS) Encoding Technology for All Round Applications**  
I R W.L.<sup>1</sup>, I P W.H.<sup>2</sup>  
<sup>1</sup>*The University of Hong Kong, Hong Kong*  
<sup>2</sup>*Technology Innovation Ltd. Cable TV Tower, Hong Kong*
- 182 **Phase Compensation for Multichannel Low-Frequency Response Using Minimax Approximation**  
C S Lin, Y H Chen  
*National Taiwan University of Science and Technology, Taiwan*
- 189 **Circuit Design and Performance Evaluation of High-Voltage Power Amplifier for Flexible Paper Speaker Applications**  
Y C Chang, C Y Yang, C H Li  
*National Taiwan University of Science and Technology, Taiwan*
- 194 **An Image Mosaic Algorithm Based on Characteristic Point Matching**  
J Xu<sup>1</sup>, X H Yang<sup>2</sup>, X X Shao<sup>3</sup>, X Y Meng<sup>3</sup>  
<sup>1</sup>*First Hospital of Jilin University, Jilin, China*  
<sup>2</sup>*Aviation University of Air Force, Jilin, China*  
<sup>3</sup>*ChangChun University of Technology, Jilin, China*
- 198 **Design of Efficient Decompression Algorithm in Helicopter Flight**  
Y S Bian<sup>1</sup>, L D Wu<sup>1</sup>, T Y Qu<sup>2</sup>, Y Zhang<sup>1</sup>  
<sup>1</sup>*The Academy of Equipment, Beijing, China*  
<sup>2</sup>*No.65547 Troops, Liaoning, China*
- 201 **An Adaptive Early Termination Algorithm of Fast Mode Decision for Multi-View Video Coding**  
P Tao<sup>1</sup>, G Jiang<sup>1</sup>, W Li<sup>2</sup>  
<sup>1</sup>*Xidian University, Xi'an, China*  
<sup>2</sup>*Xi'an Flight Automatic Control Research Institute, Xi'an, China*
- 206 **Score-Informed Pitch-Wise Alignment Using Score-Driven Non-Negative Matrix Factorization**  
T M Wang, P Y Tsai, A W.Y. Su  
*National Cheng-Kung University, Taiwan*
- 212 **A New Method for Calibration Depth and Color Camera Pair Based on Kinect**  
W H Liu, Y Y Fan, Z Zhong, T Lei  
*Northwestern Polytechnical University, Xi'an, China*
- 218 **A Finite-State Entropy-Constrained Vector Quantizer for Audio MDCT Coefficients Coding**  
S X Jiang, R D Yin, P L Liu  
*Shanghai Jiao Tong University, Shanghai, China*
- 224 **Comprehensive Comparison of the Least Mean Square Algorithm and the Fast Deconvolution Algorithm for Crosstalk Cancellation**  
D Li, Z H Fu, L Xie, Y N Zhang  
*Northwestern Polytechnical University,*

- Xi'an, China*
- 230 Reverberation time estimation based on Multidelay Acoustic echo cancellation**  
C X Ma, G J Shi  
*DTS Inc.100 Enterprise Way, Suite C-120, Scotts Valley, CA, USA*
- 235 Time-Dependent Recursive Regularization for Sound Source Separation**  
T M Wang, T C Chen, Y L Chen, A W.Y. Su  
*National Cheng-Kung University, Taiwan*
- 241 Multi-theme Analysis of Music Emotion Similarity for Jukebox Application**  
C Y Lin, S Cheng  
*National Chiao Tung University, Hsinchu, Taiwan*
- 247 A Module-Integrated Isolated Solar Micro-inverter Without Electrolytic Capacitors**  
C H Li<sup>1</sup>, C Y Yang<sup>1</sup>, Y C Chang<sup>1</sup>, H J Chiu<sup>1</sup>, Y K Lo<sup>1</sup>, C C Chuang<sup>1</sup>, S J Cheng<sup>1</sup>, M C Kuo<sup>2</sup>, Y M Huang<sup>2</sup>, Y B Jean<sup>2</sup>, Y C Huang<sup>2</sup>  
<sup>1</sup>*National Taiwan University of Science and Technology, Taiwan*  
<sup>2</sup>*Central Taiwan Science Park, Taichung, Taiwan*
- 254 Improved Loudspeaker--Room Equalization for Stereo Systems Regarding Channel Similarity**  
A Bahne, L J Br ännmark and A Ahl én  
*Uppsala University, Sweden*
- 260 Audio Feature Extraction for Classification Using Relative Transformation**  
G H Wen<sup>1,2</sup>, J Tuo<sup>1</sup>, L J Jiang<sup>1</sup>, J Wei<sup>1</sup>  
<sup>1</sup>*South China University of Technology, Guangzhou, China*  
<sup>2</sup>*State Key Laboratory of Brain and Cognitive Science, Beijing, China*
- 266 Adaptive Algorithm for Time Delay Estimation in the Indoor Reverberant Environment**  
Y Z Fang, Z Y Xu, H Gu  
*Nanjing University of Science and Technology, Nanjing, China*
- 270 PCA Based on Mutual Information for Acoustic Environment Classification**  
X L Fan, H H Feng, M Yuan  
*Shanghai Acoustics Laboratory, Chinese Academy of Sciences, Shanghai, China*
- 276 HHT Based Long Term Feature Extracting Method for Speech Emotion Classification**  
Z L Wang, H F Li, L Ma  
*School of Computer Science and Technology, Harbin Institute of Technology, China*
- 282 Radon Transform and DWT based Audio Watermarking Algorithm against DA/AD Conversion**  
C R Li<sup>1,2</sup>, R M Hu<sup>2</sup>, W Zeng<sup>3</sup>  
<sup>1</sup>*Hubei University, Hubei, China*  
<sup>2</sup>*Wuhan University, China*  
<sup>3</sup>*Jiangxi Electric Power Research Institute, Nanchang, China*
- 287 Comparing Arabic Rhythm Metrics among Other Languages**  
S A Selouani<sup>1</sup>, Y A. Alotaibi<sup>2</sup>, L Pan<sup>2</sup>  
<sup>1</sup>*Universit é de Moncton 218 bvd. J.-D.-Gauthier, Shippagan, Canada*  
<sup>2</sup>*Sciences, King Saud University, Saudi Arabia*
- 292 Tracking Articulator Movements Using Orientation Measurements**  
A Ji, M T. Johnson, J Berry  
*Marquette University, Milwaukee, USA*
- 297 Effect of Arabic Emphaticness on Voice Onset Time(VOT)**  
Y A Alotaibi, S S. AlDahri  
*King Saud University, Riyadh, Saudi Arabia*
- 303 Automatic Assessment of Easiness of Japanese for Writing Aid of "Easy Japanese"**  
M Zhang, A Ito, K Sato  
*Tohoku University, Hirosaki University, Japan*
- 308 On an Emotional Node: Modeling Sentiment in Graphs of Action Verbs**  
M K Petersen, L K Hansen

- Technical University of Denmark, Denmark*
- 314 Confidence Measure by Substring Comparison for Automatic Speech Recognition**  
B Ziólko, T Jadczyk, D Skurzok, M Ziólko  
*AGH University of Science and Technology, Poland*
- 319 Joint N-gram Chinese Language Modeling with an Application to Chinese Word Segmentation**  
X He, Z J Ou, J S Sun  
*Tsinghua University, Beijing, China*
- 324 Subjective and Objective Quality Assessment of Re-sampling Audio**  
L M Hou, W Q Wu, S Yang, T Yang, X P Zhang  
*Shanghai University, Shanghai, China*
- 328 A Hierarchy-based Constraint Dependency Grammar Parsing for Chinese**  
P Li, L J Liao, X Li  
*Beijing Institute of Technology, Beijing, China*
- 333 Distinguishing Infant Cry from Adult Voice Based on Spectrum Analysis**  
X Wei, Y X Li, L Zhong, J B Liang  
*South China University of Technology, Guangzhou, China*
- 
- Poster Session I - Image Processing and Multimedia SOC Design**
- 
- 337 Segmentation Algorithm of High Resolution Remote Sensing Images Based on LBP and Statistical Region Merging**  
B Luo, J Cheng  
*University of Electronic Science and Technology of China, Sichuan, China*
- 342 Texture Synthesis Based on Wavelet Transform**  
W Xiong, X Z Wang\*, L C Gao  
*Shanghai University, Shanghai, China*  
*Institute of Smart City, Shanghai University, China*  
*Shanghai HanPan Information S&T Ltd, Shanghai, China*
- Shanghai, China*
- 346 An Improved Subdivision Algorithm Using for Heart Model**  
J H Li, X L Ma \*, F Zhou, J B Li  
*Shanghai University, China;*  
*Institute of Smart City, Shanghai University, China;*  
*Shanghai HanPan Information S&T Ltd, Shanghai, China*
- 351 Unequal Error Protection Transmission Scheme for 3D Meshes Based on EWF**  
L F Li, R Wang\*, W G Wan, S Yu, L F Du, J Hu  
*Shanghai University, Shanghai, China;*  
*Institute of Smart City, Shanghai University, Shanghai, China;*  
*Shanghai HanPan Information S&T Ltd, Shanghai, China*
- 356 Local Subdivision on Triangle Mesh**  
Y Y Jia, X Z Wang\*, X L Ma, J B Li, X L Zhou  
*Shanghai University, Shanghai, China*  
*Institute of Smart City, Shanghai University, Shanghai, China*  
*Shanghai HanPan Information S&T Ltd, Shanghai, China*
- 360 Filtered Back Projection Reconstruction Research Based on Gaussian in PET Images**  
M Yang, P M Yan, H Huang, J F Li  
*Shanghai University, Shanghai, China*
- 365 Image Segmentation by Sparse Representation**  
Y Wang, X Y Wang, C Gan, C K Wan  
*Shanghai University, Shanghai, China*  
*Institute of Smart City, Shanghai University, Shanghai, China*  
*Shanghai HanPan Information S&T Ltd, Shanghai, China*
- 370 Scanning Text Image Radial Calibration Technology Research**  
K Yang, Y M Li, Y P Gao, S L Liu  
*Wenzhou University(south), China*
- 375 A Contourlet-based Image Super-resolution Approach**  
T Zhang<sup>1</sup>, X Y Yu<sup>2</sup>  
<sup>1</sup>*Guiyang University, Guiyang, China*

<sup>2</sup>South China University of Technology,  
Guangzhou, China

**379 Human Motion Segmentation by RPCA  
with Augmented Lagrange Multiplier**

C Gan, X Y Wang\*, Y Wang  
Shanghai University, Shanghai, China  
Institute of Smart City, Shanghai  
University, Shanghai, China  
Shanghai HanPan Information S&T Ltd,  
Shanghai, China

**384 Model Optimization by Loop and  
Linear Subdivision**

Y Y Jia, X Z Wang\*, X L Ma, J B Li, X L  
Zhou  
Shanghai University, Shanghai, China  
Institute of Smart City, Shanghai  
University, Shanghai, China  
Shanghai HanPan Information S&T Ltd,  
Shanghai, China

**388 The Research of Security Algorithms  
for RF Tag**

W L Yu, S H Weng, Q L Ke  
School of Information Science And  
Technology, Beijing Institute of  
Technology, China

**392 Design of Test Platform for 3D Graphics  
Pipeline Based on Microblaze**

F Guo<sup>1,2,3,4</sup>, W G Wan<sup>1,3</sup>, X M Zhang<sup>1,3,4</sup>,  
X L Zhou<sup>1,3,4</sup>

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<sup>2</sup> Linyi University, Linyi, China

<sup>3</sup> Institute of Smart City, Shanghai  
University, China

<sup>4</sup> Shanghai HanPan Information S&T Ltd,  
Shanghai, China

**397 High Efficient Logarithm Converter for  
Graphics Physics Simulation**

L C Gao, M Y Zhu, J W He and W Xiong  
Shanghai University, Shanghai, China;  
Institute of Smart City, Shanghai  
University, Shanghai, China;  
Shanghai HanPan Information S&T Ltd,  
Shanghai, China

**403 The 3D Holographic Projection  
Technology Based on  
Three-dimensional Computer Graphics**

W Y Li  
Shanghai JianQiao College, Shanghai,  
China

## Tuesday, July 17, 2012

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### Oral Session III - Language and Speech Processing Image Processing

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- 407 **Spectral Local Harmonicity Feature for Voice Activity Detection** Pham Chau Khoa, Chng Eng Siong  
P C Khoa, C E Siong  
*Nanyang Technological University, Singapore*
- 414 **SVM Speaker Verification Based on NAP Sequence Kernels**  
H J Li, Y J Xing, P Tan  
*Gansu Lianhe University, Lanzhou, China*
- 419 **Detecting Offensive User Video Blogs: An Adaptive Keyword Spotting Approach**  
M. S. Barakat, C. H. Ritz, D. A. Stirling  
*University of Wollongong, NSW, Australia*
- 426 **The Effect of Arabic Emphaticness on Voice Time Onset (VOT)**  
S. S. AlDahri  
*King Abdulaziz City for Science and Technology, Riyadh, Saudi Arabia*
- 432 **GMM-UBM for Text-Dependent Speaker Recognition**  
W L Chen<sup>1</sup>, Q Y Hong<sup>2</sup>, X M Li<sup>1</sup>  
<sup>1</sup>*Xiamen University, China,*  
<sup>2</sup>*Fujian Key Laboratory of the Brain-like Intelligent Systems (Xiamen University), China*
- 436 **Syllable Category Based Short Utterance Speaker Recognition**  
N Fatima, T F Zheng  
*Tsinghua University, Beijing, China*
- 442 **Generating Emphasis from Neutral Speech Using Hierarchical Perturbation Model by Decision Tree and Support Vector Machine**  
F B Meng<sup>1</sup>, Z Y Wu<sup>1,2,3</sup>, H L Meng<sup>2,3</sup>, J Jia<sup>1,3</sup>, L H Cai<sup>1,3</sup>  
<sup>1</sup>*Tsinghua University, Beijing, China*  
<sup>2</sup>*The Chinese University of Hong Kong,*
- China*  
<sup>3</sup>*Graduate School at Shenzhen, Tsinghua University, China*
- 449 **Adapted Language Modeling for Recognition of Retelling Story in Language Learning**  
M Chen, Y Song, L Wang  
*Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, Shenzhen, China*  
*The Chinese University of Hong Kong, Hong Kong*
- 454 **Straight Model for Voice Conversion Based on Acoustical Universal Structure**  
G Xu, Q Zhou, D Zhao, D Huang  
*Electrical & Electronic Engineering School, NCEPU, China*
- 459 **Mel Domain Objective Speech Quality Evaluation Measure Performance**  
W L Zhan, Z L Shen  
*Hunan International Economics University, Changsha, China*
- 465 **A New Image Denoising Algorithm Based on Nonsampled Contourlet Transform**  
H H Song, J Gu  
*The MPS Quality Supervision and Testing Center of Security Products for Computer Information System, Shanghai, China*
- 469 **Combination of Curvelet Threshold with Bilateral Filtering for Image Denoising**  
G J Liu, W T Ma<sup>1b</sup>, Y M Ma  
*Ningxia University, Yinchuan, China*
- 475 **Image Fusion Using Adaptive Dual-Tree Discrete Wavelet Packets Based on the Noise Distribution Estimation**  
F Liu<sup>1</sup>, B Yang<sup>2</sup>, K G Li<sup>1</sup>  
<sup>1</sup>*Beijing university of technology, Beijing, China,*  
<sup>2</sup>*North China University of Technology, Beijing, China*



- 480 A Color Interpolation Scheme Based on Improved Bilinear Scheme for Bayer CFA Digital Cameras**  
H Ren<sup>1</sup>, L Xie<sup>1,2</sup>, H F Chen<sup>1,2</sup>  
<sup>1</sup>Zhejiang University, Zhejiang, China  
<sup>2</sup>Zhejiang Provincial Key Laboratory of Information, China
- 485 A Blind Image Restoration Algorithm Based on Nonlocal Means and EM Algorithm**  
C Dong, M H Xie  
National University of Defense Technology, Hunan, China
- 490 A Super Resolution Reconstruction Scheme for Mixed Spatio-Temporal Stereo Video**  
B Y Zhang<sup>1</sup>, J Liu<sup>1</sup>, J Ge<sup>1</sup>, C B Chen<sup>1</sup>, H Yuan<sup>1</sup>, W Liu<sup>2</sup>  
<sup>1</sup>Shandong University, Jinan, China  
<sup>2</sup>Hisense State Key Laboratory of Digital Multi-Media Technology Corp., Ltd., Qingdao, China
- 497 A New Image Deblurring Method Based on Fractional Differential**  
W Wang, P Z Lu  
Fudan University, Shanghai, China
- 502 Bayesian Nonlocal Means Image Denoising Based on Principal Neighborhood Dictionaries**  
H H Lu  
Xidian University, Xi'an, China.
- 508 Removing Illumination from Image Pair for Stereo Matching**  
Y W Han, G X Xuan, C Y Li, D Y Li, H Han  
Chongqing Communication Institute, Chongqing, China
- 513 Alleviating Blocking Artifacts via Curve-Fitting**  
C Y Xu<sup>1,2</sup>, R J He<sup>1,2</sup>, S H Mei<sup>1,2</sup>, M Y He<sup>1,2</sup>  
<sup>1</sup>Shaanxi Provincial Key Laboratory of Information Acquisition and Processing, China  
<sup>2</sup>Northwestern Polytechnical University, Xi'an, China
- 519 Video Abnormal Target Description Based on CRF Model**  
L Zhao, L Guo, J S Xie, H Liu  
University of Science and Technology of China, Hefei, China
- 525 Three-dimensional Reconstruction of Slice Image Based on Range-gated Active Laser Imaging Technique**  
L Du, Y C Li, H C Guo, Y C Fan  
The Academy of Equipment, Beijing, China
- 531 An Automatic Image and Video Colorization Algorithm based on Pattern Continuity**  
Z Zhong, Y Gui, L Z Ma  
Shanghai Jiao Tong University, Shanghai, China
- 537 A Method of Extracting Skeleton based on FMM**  
X Q Pan  
Zhejiang Industry & Trade Vocational College, Wenzhou, China
- 541 A Novel 2D-to-3D Conversion Method Based on Blocks World**  
P Ji<sup>1,2</sup>, L H Wang<sup>1,2</sup>, D X Li<sup>1,2</sup>, M Zhang<sup>1,2</sup>  
<sup>1</sup>Zhejiang University, Hangzhou, China  
<sup>2</sup>Zhejiang Provincial Key Laboratory of Information Network Technology, China
- 546 An Automatic 2D to 3D Conversion Algorithm Using Multi-depth Cues**  
P Ji<sup>1,2</sup>, L H Wang<sup>1,2</sup>, D X Li<sup>1,2</sup>, M Zhang<sup>1,2</sup>  
<sup>1</sup>Zhejiang University, Hangzhou, China  
<sup>2</sup>Zhejiang Provincial Key Laboratory of Information Network Technology, China
- 551 Image Classification by Exploiting the Spatial Context Information**  
Y Song<sup>1</sup>, L R Dai<sup>1</sup>, L Yu<sup>2</sup>  
<sup>1</sup>University of Science and Technology of China, China  
<sup>2</sup>Hefei TV Station, Hefei, China
- 557 Hybrid Stereo Matching by Dynamic Programming with Enhanced Cost Entry for Real-time Depth Generation**  
Q Q Yang<sup>1,2</sup>, L H Wang<sup>1,2</sup>, D X Li<sup>1,2</sup>, M Zhang<sup>1,2</sup>

- <sup>1</sup>Zhejiang University, Zhejiang, China  
<sup>2</sup>Zhejiang Provincial Key Laboratory of Information Network Technology, China
- 564 Abnormal Object Representation Based on Surprise Model**  
 J S Xie, L Guo, L Zhao, S Gui  
 University of Science and Technology of China, Hefei, China
- 569 Contour Detection Based on Semi-Ellipticity-Ring Surround Suppression**  
 Y Dou, Y Yu  
 Yanshan University, Qinhuangdao, China
- 574 Comparative Analysis and Evaluation of Geometric Transformations on Distortions for Image Rectification**  
 L H Liew<sup>1</sup>, Y C Wang<sup>1</sup>, W S Cheah<sup>2</sup>  
<sup>1</sup>Universiti Teknologi MARA, Malaysia  
<sup>2</sup>Universiti Malaysia Sarawak, Malaysia
- 580 Digital Outcrop Modeling and Geology Information Extraction based on ground-based Lidar**  
 Q H Zeng, X Xie, Y Y Zhang, Y Ye, Y Hu, S Liu  
 Research Institute of Petroleum Exploration and Development, PetroChina, Beijing, China
- 584 Localization in NLOS Environment Using TOA/DOA/DOD**  
 L P Du, L L Kang, Y Lv  
 University of Science and Technology Beijing, China
- 588 DOA Estimation for Wideband Signals via the Homotopy Approach**  
 N Hu<sup>1,2</sup>, Z F Ye<sup>1,2</sup>, X Xu<sup>1,2</sup>  
<sup>1</sup>University of Science and Technology of China, China  
<sup>2</sup>National Engineering Laboratory for Speech and Language Information Processing, China
- 594 Accuracy Improvement Method of Forest Height Estimation for PolInSAR Image**  
 N P Minh, B Zou  
 Harbin Institute of Technology, China
- 599 Integrating Segmentation and Classification Accuracy for Accuracy Assessment in Object-based Image Analysis**  
 N Li, H Huo, T Fang  
 Shanghai Jiao Tong University, Shanghai, China  
 Key Laboratory of System Control and Information Processing, Ministry of Education, Shanghai, China
- 605 On Hyperspectral Remotely Sensed Image Classification Based on MNF and AdaBoosting**  
 Y M Xu<sup>1</sup>, P Yu<sup>2</sup>, B F Guo<sup>1</sup>, X J Gao<sup>1</sup>, Y F Guo<sup>1</sup>  
<sup>1</sup>Hangzhou Dianzi University, China  
<sup>2</sup>Chinese Academy of Sciences, Changchun, China
- 610 Unsupervised Hyperspectral Image Classification Algorithm by Integrating Spatial-Spectral Information**  
 B Baassou<sup>1,2</sup>, M Y He<sup>1,2</sup>, S H Mei<sup>1,2</sup>, Y F Zhang<sup>1,2</sup>  
<sup>1</sup>Shaanxi Provincial Key Laboratory of Information Acquisition and Processing (IAP), China  
<sup>2</sup>Northwestern Polytechnical University, Xi'an, China
- 616 Experimental Study on Rationality of 'Hilbert Envelope' Based on Empirical Mode Decomposition**  
 Q L Meng<sup>1,2</sup>, M Yuan<sup>1</sup>, J P Zhao<sup>1,2</sup>, H H Feng<sup>1</sup>  
<sup>1</sup>Shanghai Acoustics Laboratory, Chinese Academy of Sciences, Shanghai, China  
<sup>2</sup>Graduate University of Chinese Academy of Sciences, China
- 621 Real-Time 3DTV System for Autostereoscopic Displays**  
 S J Yao<sup>1,2</sup>, P F Jin<sup>1,2</sup>, H Fu<sup>1,2</sup>, L H Wang<sup>1,2</sup>, D X Li<sup>1,2</sup>, M Zhang<sup>1,2</sup>  
<sup>1</sup>Zhejiang University, Zhejiang, China  
<sup>2</sup>Zhejiang Provincial Key Laboratory of Information Network Technology, China

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**Oral Session IV- Remote Sensing and GIS and Bio-informatics**

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- 627 Design and Evaluation of an Electrolarynx with Mandarin Tone-Control Function**  
C Y Wan, E Q Wang, L Wu, S P Wang  
*Xi'an Jiaotong University, Xi'an, China*
- 632 The Study of Image Processing for Retinal Prosthesis Based on Android**  
Z Su<sup>1,2</sup>, S P Mai<sup>1</sup>, C Zhang<sup>2</sup>  
<sup>1</sup>*Graduate School at Shenzhen, Tsinghua University Shenzhen, Guangdong, China*  
<sup>2</sup>*Institute of Microelectronics, Tsinghua University, Beijing, China*
- 636 EEG Signal Processing Based on Proper Orthogonal Decomposition**  
T Zhou, H Jiang  
*Fuzhou University, Fujian, China*
- 641 A Combined Destruction-Monitoring Strategy: Rapid Microbubble Destruction within a Focal Region on a Diagnostic Ultrasound Scanner**  
S S Xu, H J Jiang, Z A Xu  
*The Key Laboratory of Biomedical Information Engineering of Ministry of Education, School of Life Science and Technology, Xi'an Jiaotong University, China*
- 647 Time Delay Estimation for Low SNR Signals with Impulsive Noises Using Fractional Low Order Covariation Sequences**  
W H Liu  
*Shanghai Dianji University, Shanghai, China*
- 651 Extraction for Finger Vein Pattern based on PDE**  
F C Zhang<sup>1</sup>, J Y Guo<sup>2</sup>, S X Guo<sup>1</sup>  
<sup>1</sup>*Jilin University, Changchun, China*  
<sup>2</sup>*Tsinghua University, Beijing China*
- 657 Undersampled MRI Reconstruction Comparison of TGV and TV**  
Y Fei, J H Luo  
*Shanghai Jiao Tong University, Shanghai, China*
- 661 Accelerating Volume Ray Casting by Empty Space Skipping Used for Computer-Aided Therapy**  
Y N Wang<sup>1</sup>, W B Dou<sup>1</sup>, J.M. Constans<sup>2</sup>  
<sup>1</sup>*Tsinghua University, Beijing, China*  
<sup>2</sup>*Unité d'IRM, CHU de Caen, France*
- 668 A Real-Time Leg Motion Recognition System by Using Mahalanobis Distance and LS\_SVM**  
L Chen<sup>1,2</sup>, Q S Ai<sup>1,2</sup>, Y He<sup>1</sup>, Q Liu<sup>1,2</sup>, W Meng<sup>1,2</sup>  
<sup>1</sup>*Wuhan University of Technology, China,*  
<sup>2</sup>*Key Lab. of Fiber Optic Sensing Technology and Information Processing, Wuhan University of Technology, China*
- 674 3D Model Reconstruction and Animation from Single View Face Image**  
N. M Patel<sup>1</sup>, M. Zaveri<sup>2</sup>  
<sup>1</sup>*B.V.M Engineering College, Vallabh Vidyanagar, India*  
<sup>2</sup>*Computer Engineering Department, SVNIT, Surat, India*
- 683 Despeckling Medical Ultrasound Image based on Spatially Adaptive Maximum-Likelihood Estimation**  
J H Yu, T Hou, Y Guo, Y Y Wang  
*State Key Laboratory of ASIC & System, Fudan University, Shanghai, China*  
*National Laboratory of Pattern Recognition, Chinese Academy of Sciences, Beijing, China*
- 690 Motion Vector Recovery Method Based on Kernel Regression**  
X F Zhan  
*Jiangxi Normal University, Nanchang, China*
- 694 Research of Pattern Recognition Based on the Local Structure Topological Relationship Modeling**  
Y X Qin, L Ma, H F Li, Q H Wei  
*Harbin Institute of Technology, China*
- 698 An Improved Two-View Convergent-Style-Based Disparity Estimation Algorithm**  
X W Song<sup>1</sup>, L Yang<sup>1,2</sup>, Z Liu<sup>1</sup>  
<sup>1</sup>*Zhongyuan University of Technology, Zhengzhou, China*  
<sup>2</sup>*Tianjin University, Tianjin, China*

- 705 Multi-polarimetric SAR Image Compression Based on Sparse Representation and Super-Resolution**  
Y Chen, R Zhang, D Yin  
*University of Science and Technology of China, Hefei, China*
- 710 Example-based Image Upscaling Using Parallel Texture Synthesis**  
R G Zheng, B Sheng, L Z Ma  
*Department of Computer Science and Engineering, SJTU, China*
- 716 An Effective Algorithm for Salt-and-Pepper Noise Removal in Color Images**  
J J Zhang  
*Shanghai University, Shanghai, China*
- 722 Local Color Transfer via Color Classification**  
X Yang<sup>1,2</sup>, Z Su<sup>1,2</sup>, D Wang<sup>3</sup>  
<sup>1</sup>*School of Information Science & Technology, Sun Yat-sen University, Guangdong, China*  
<sup>2</sup>*Research Institute of Sun Yat-sen University in Shenzhen, Guangdong, China*  
<sup>3</sup>*South China Agricultural University, China*
- 728 A GPU Accelerated Algorithm for Compressive Sensing based Video Super-resolution**  
X F Wu, H Xiang  
*Shandong University, Jinan, China*
- 735 Image Contrast Enhancement by Contourlet Transform and PCNN**  
W T Zheng, T Pu, J Cheng, H Zheng  
*University of Electronic Science and Technology of China, Sichuan, China*
- 745 Study of Depth of Field Based on GPU Post-Processing**  
W Xiong<sup>1,2,3</sup>, X Z Wang<sup>1,4</sup>, F Guo<sup>1,2,3,4</sup>  
<sup>1</sup>*Shanghai University, Shanghai, China*  
<sup>2</sup>*Institute of Smart City, China*  
<sup>3</sup>*Shanghai HanPan Information S&T Ltd, Shanghai, China*  
<sup>4</sup>*Linyi University, Linyi, China*
- 750 Threat Substances Explosion and Polluted Building Surfaces Detection Research in 3D Virtual City Based on ArcGIS**  
L Li, W G Wang, X X Li, R Wang, X M Zhang, X Q Yu  
*Shanghai University, Shanghai, China*  
*Institute of Smart City, Shanghai University, Shanghai, China*  
*Shanghai HanPan Information S&T Ltd, Shanghai, China*
- 756 The Telematic Learning Environment: Experiences and Outcomes Teaching via Network Audio**  
D Chester  
*New York University Abu Dhabi, USA*
- 763 Robust Audio Fingerprint Extraction Algorithm Based on 2-D Chroma**  
H X Wang, X Q Yu, W G Wang, R Swaminathan  
*Shanghai University, Shanghai, China*  
*Institute of Smart City, Shanghai University, Shanghai, China*  
*Shanghai HanPan Information S&T Ltd, Shanghai, China*
- 768 Noise Reduction Based on Nearest Neighbor Estimation for Audio Feature Extraction**  
J H Shi, X Q Yu, Y H Wang, W G Wan, R Swaminathan  
*Shanghai University, Shanghai, China*  
*Institute of Smart City, Shanghai University, Shanghai, China*  
*Shanghai HanPan Information S&T Ltd, Shanghai, China*
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- Poster Session II - Audio and Music Processing Remote Sensing and GIS**
- 
- 740 Rendering of Large-Scale 3D Terrain Point Cloud Based on Out-of-Core**  
L Liu, X Q Yu\*, W G Wan, H F Yu, R Liu

- 772 Audio Fingerprinting Based on Dynamic Subband Locating and Normalized SSC**  
W Xiong, X Q Yu, W G Wang, W G Wan, R Swaminathan  
*Shanghai University, Shanghai, China*  
*Institute of Smart City, Shanghai University, Shanghai, China*  
*Shanghai HanPan Information S&T Ltd, Shanghai, China*
- 777 On Objective Assessment of Audio Quality-A Review**  
J Zheng, M Y Zhu, Y Song  
*Shanghai University, Shanghai, China*  
*Shanghai HanPan Information S&T Ltd, Shanghai, China*
- 783 Analysis on Greedy Reconstruction Algorithms Based on Compressed Sensing**  
L F Du, R Wang, W G Wan, X Q Yu, S Yu  
*Shanghai University, Shanghai, China*  
*Institute of Smart City, Shanghai University, Shanghai, China*  
*Shanghai HanPan Information S&T Ltd, Shanghai, China*
- 790 An Improved Spectral Subtraction Method**  
H H Liu, X Q Yu, W G Wan, R Swaminathan  
*Shanghai University, Shanghai, China*  
*Institute of Smart City, Shanghai University, Shanghai, China*  
*Shanghai HanPan Information S&T Ltd, Shanghai, China*
- 794 A Method of Fast Rebuilding and Displaying Lujiazui Area Based on ArcGlobe**  
L Li, W G Wan, X X Li, X M Zhang, W Xiong, X Q Yu  
*Shanghai University, Shanghai, China*  
*Institute of Smart City, Shanghai University, Shanghai, China*  
*Shanghai HanPan Information S&T Ltd, Shanghai, China*
- 799 Random Routing Algorithm for Rhombic-deployed Sensor Networks Based on Compressed Sensing**  
R Wang, S Yu, W G Wan, Y Y Gao, L F Du  
*Shanghai University, Shanghai, China*
- 805 A Study of the Unification of Multisensor Data**  
R Y Wang<sup>1</sup>, Z H Wang<sup>2</sup>, D J Lian<sup>2</sup>  
<sup>1</sup>*Dalian University of Technology, Dalian, China*  
<sup>2</sup>*Suzhou University of Science and Technology, Suzhou, China*

## Wednesday, July 18, 2012

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### Oral Session V - Image Processing

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- 811 Stereo Matching Using Aggregated Likelihood and Multi-scale Prior**  
L Wang<sup>1,2</sup>, T L Liu<sup>1,2</sup>, X C Zhu<sup>1,2</sup>  
<sup>1</sup> Jiangsu Provincial Key Lab of Image Processing and Image Communication, China  
<sup>2</sup> Nanjing University of Posts and Telecommunications, Nanjing, China
- 817 Application of Hough Transform in Lateral Multi-lens Video Logging Image Segmentation**  
H T Hu<sup>1</sup>, Z L Li<sup>2</sup>  
<sup>1</sup> Xi'an ShiYou University, Xi'an, China  
<sup>2</sup> Xi'an ShiYou University, Xi'an, China
- 822 Beyond Dominant Plane Assumption: Moving Objects Detection in Severe Dynamic Scenes with Multi-Classes RANSAC**  
X Zhang, S J Wang, X Q Ding  
Tsinghua University, Beijing, China
- 828 Handwritten and Machine Printed Text Discrimination Using an Edge Co-occurrence Matrix**  
X F Zhang<sup>1,2</sup>, Y Lu<sup>1</sup>  
<sup>1</sup> East China Normal University, Shanghai, China  
<sup>2</sup> Nantong University, Nantong, China
- 832 The Bi-Group Evolutionary Programming for Image Processing**  
F Liu<sup>1</sup>, B Yang<sup>2</sup>, K G Li<sup>1</sup>  
<sup>1</sup> Beijing University of Technology, China  
<sup>2</sup> North China University of Technology, Beijing, China
- 837 Seal Imprint Segmentation Based on Color Feature Classifier**  
W Q Pan<sup>1</sup>, J Y Hu<sup>2</sup>, M L Liu<sup>2</sup>, X Qi<sup>2</sup>, H T Lang<sup>2</sup>  
<sup>1</sup> Zhejiang Science and Technology University, Zhejiang, China  
<sup>2</sup> Beijing University of Chemical Technology, Beijing, China
- 841 ROI Perspective Transform Based Road Marking Detection and Recognition**  
Z Q Liu, S J Wang, X Q Ding  
Tsinghua University, Beijing, China
- 847 A New Method to Detect Surface Defects of Fruits**  
H Y Deng, R H Wang  
Tsinghua University, Beijing, China
- 854 Cerebrovascular Segmentation Based on Region Growing and Level Set Algorithm**  
L Z Xie<sup>1</sup>, M Q Zhou<sup>2</sup>, Y Tian<sup>2</sup>, R F Cao<sup>2</sup>  
<sup>1</sup> Beijing Normal University, China  
<sup>2</sup> Beijing Normal University, China
- 860 A Variational Model of Image Restoration Based on First and Second Order Derivatives and Its Split Bregman Algorithm**  
S X Zheng, Z K Pan, G D Wang, X Yan  
Qingdao University, Qingdao, China
- 866 Principal Object Detection Towards Product Image Search**  
X Wu, L L Liang, W J Wang, Q Peng  
Southwest Jiaotong University, China
- 872 A Fast Algorithm of 4-point Floating DCT in Image/Video Compression**  
K Tong<sup>1</sup>, Y K Gu<sup>2</sup>, G L Li<sup>1</sup>, X Xie<sup>2</sup>, S H Liu, K Zhao, Z H Wang  
<sup>1</sup> Tsinghua University, Beijing, China
- 876 Semantic Classification Based Clothing Image Retrieval**  
Z Y Lu, L Shen, Y L Yuan, Y Zhao  
Peking University Shenzhen Graduate School, Shenzhen, China
- 884 A Sample of Correction for the Model Used Predicating Digital Television Signals in Urban Area**  
Y X Li<sup>1,2</sup>, Q Zhang<sup>1</sup>, L Gao<sup>2</sup>  
<sup>1</sup> The College of Information and Engineering Communication University of China (CUC), China

- <sup>2</sup>Academy of Broadcasting Planning, China
- 889 Fast Template Matching with Partial Skipping Using Sub-template**  
Q Zhang<sup>1</sup>, H J Gao<sup>1</sup>, Z Kang<sup>2</sup>  
<sup>1</sup>Huazhong Univ. of Sci. & Tech, Wuhan, China  
<sup>2</sup>Wuhan Polytechnic University, Wuhan, China
- 893 Fast Ground Target Detection Method in Infrared Image Sequences**  
H Zhu, L Z Deng, G H Wang, G Zhou, X D Bai  
Huazhong University of Science and Technology, Wuhan, China
- 898 Target Recognition Method based on Template Matching in Downward-looking Infrared Image**  
H Zhu, L Z Deng, G Zhou, X D Bai, G H Wang  
Huazhong University of Science and Technology, Wuhan, China
- 903 Design of M-Channel Uniform Linear-Phase Filter Banks with Near-Perfect-Reconstruction Property**  
W Zhong<sup>1,2</sup>, X M Xie<sup>2</sup>, G M Shi<sup>2</sup>, B Peng<sup>2</sup>, Q Zhang<sup>1</sup>  
<sup>1</sup>Communication University of China, Beijing, China  
<sup>2</sup>Xidian University, Xi'an, China
- 909 A DCT-domain Compressed Images Registration Approach**  
X Y Yu<sup>1</sup>, H Y Zhao<sup>2</sup>, T Zhang<sup>3</sup>  
<sup>1</sup>School of Electronic and Information Engineering, South China University of Technology, China  
<sup>2</sup>School of Journalism and Communication, South China University of Technology, China  
<sup>3</sup>Department of Physics & Electronic Information Science Guiyang University, China
- 914 Image Retrieval Using Accurate Approximated Inverse Document Frequency of Geometry-Preserving Visual Phrases**  
F Y Wang<sup>1,2</sup>, S W Zhang<sup>1</sup>
- <sup>1</sup>High-Tech Innovation Center, Institute of Automation, Chinese Academy of Sciences, China  
<sup>2</sup>WaSu Media Group Co.Ltd, Hangzhou, China
- 919 Moving Target Tracking based on Adaptive Background Subtraction and Improved Camshift Algorithm**  
G Xu, D Zhao, Q Zhou, D Huang  
North China Electric Power University, China
- 925 Research on LED Screen Brightness Detection Algorithm**  
Y F Xu, Y Zhang  
Hebei University of Science and Technology, ShiJiaZhuang, China
- 930 Separation and Extracting the Interference Structures of Moving Acoustic Sources with A Single Vector Hydrophone**  
W S Lin, G L Liang, J Fu, G P Zhang  
Science and Technology on Underwater Acoustic Laboratory, Harbin Engineering University, China
- 936 Human Motion Segmentation Based on Low-Rank Representation**  
X Y Wang<sup>1,2,3</sup>, C Gan<sup>1,2,3</sup>, Y Wang<sup>1,2,3</sup>  
Shanghai University, Shanghai, China  
Institute of Smart City, Shanghai University, Shanghai, China  
Shanghai HanPan Information S&T Ltd, Shanghai, China
- 942 Noise Removal of Audio Clips for Fingerprint Matching**  
Y H Wang<sup>1,2,3</sup>, X Q Yu<sup>1,2,3</sup>, W G Wang<sup>1,2,3</sup>, W G Wan<sup>1,2,3</sup>, R Swaminathan<sup>1,2,3</sup>  
Shanghai University, Shanghai, China  
Institute of Smart City, Shanghai University, Shanghai, China  
Shanghai HanPan Information S&T Ltd, Shanghai, China
- 947 Compressed Sensing in Audio Signals and It's Reconstruction Algorithm**  
S Yu, R Wang, W G Wan, L F Du, X Q Yu  
Shanghai University, Shanghai, China
- 953 3D Reconstruction and Interaction for Smart City based on World Wind**

R Wang, L B Jin, R Xiao, S L Guo, S Y Li  
*Shanghai University, Shanghai, China*

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**Oral Session VI - Language and Speech  
Processing**

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- 957 Temporal Alignment Algorithm for Electropalatographic and Acoustic Signals in Long Utterances**  
Y H Li<sup>1</sup>, X S Pan<sup>2</sup>  
<sup>1</sup>*Yanbian University, Yanji, China*  
<sup>2</sup>*Shanghai Normal University, Shanghai, China*
- 961 Selection of Negative Pool for PR-SVM in Language Recognition**  
W W Liu, W Q Zhang, J Liu  
*Tsinghua University, Beijing, China*
- 966 Label Transform Based Cross-Language Speaker Adaptation in Bilingual (Mandarin-English) TTS**  
Y J So, J Jia, Y X Wang, L H Cai  
*Tsinghua University, Beijing, China*
- 971 A Dynamic Gap Dimension Reduction Approach For High Order N-gram Phonotactic Language Recognition**  
W W Liu, W Q Zhang, J Liu  
*Tsinghua University, Beijing China*
- 976 Speaking Rate Estimation for Multi-Speakers**  
Y Wu, Q H He, Y X Li  
*South China University of Technology, Guangzhou, China*
- 980 Fast Speech Enhancement Using A Novel Noise Constrained Least Square Estimation**  
Y S Xia  
*College of Mathematics and Computer Science Fuzhou University, Fuzhou, China*
- 986 Fast Multi-Channel Colored Noise Reduction Algorithm Using A Novel Statistical Data Fusion Estimation**  
Y S Xia  
*College of Mathematics and Computer Science Fuzhou University, Fuzhou, China*

- 991 Research on Voice Activity Detection in Burst and Partial Duration Noisy Environment**  
C Y Guo<sup>1</sup>, R Z Li<sup>2</sup>, M Fan<sup>1</sup>, K J Liu<sup>3</sup>  
<sup>1</sup>*Zhengzhou University, Henan, China*  
<sup>2</sup>*Zhengzhou University, China*  
<sup>3</sup>*Institute of Naval Equipment, Beijing, China*
- 996 Special Estimation algorithm of AR Model**  
H Y Wu<sup>1,2</sup>, X Q Zhao<sup>1,2</sup>, X L Han<sup>1,2</sup>  
<sup>1</sup>*School of Electronics and Information, Tongji University, Shanghai, China*  
<sup>2</sup>*Laboratory of Modern Acoustics of MOE (Nanjing University), Nanjing, China*
- 1001 Total Variability Factors Combination for Speaker Verification**  
J Li, W Guo, L R Dai  
*University of Science and Technology of China, China*
- 1005 Exploiting Language Cluster Information for Language Pair Identification**  
B Jiang, Y Song, L R Dai  
*University of Science and Technology of China, China*
- 1010 An Efficient Layer-Wised Beam Pruning Algorithm for Large Vocabulary Continuous Speech Recognition System**  
X Chen, Y X Shan, X Zhang, J Liu  
*Tsinghua University, Beijing, China*
- 1014 Dual-microphone Based Binary Mask Estimation for Robust Speaker Verification**  
Y L Zhao, Z H Fu, L Xie, J Zhang, Y N Zhang  
*Northwestern Polytechnical University, Xi'an, China*
- 1020 Integrated Tone Evaluation in Mandarin CALL Systems Using Competing Model Based Approach**  
Y Qu<sup>1</sup>, Y Lu<sup>1</sup>, P S P Wang<sup>1,2</sup>, X He<sup>3</sup>  
<sup>1</sup>*East China Normal University, China*  
<sup>2</sup>*Northeastern University, USA*  
<sup>3</sup>*Motorola China Research Center, Shanghai, China*



**1026 Improved Spoken Term Detection by Template-based Confidence Measure**  
S Su, W Guo, Y Xu, L R Dai  
*University of Science and Technology of China, China*

**1031 Spoken Term Detection for OOV Terms Based on Phone Fragment**  
Y Xu, W Guo, S Su, L R Dai  
*University of Science and Technology of China, China*

**1035 Ancient Chinese Musical Score Translation via Instance-based Learning**  
Y L Ding, R F Li, W X Li  
*Peking University, Beijing, China*

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**Oral Session VII - Computer Graphic and Virtual Reality**

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**1041 Design and Implementation of Lunar Surface Inspection Simulation and Validation System**  
Q S Shi<sup>1,2</sup>, Q Xu<sup>1</sup>, C Z Lan<sup>1</sup>, G J Gu<sup>3</sup>, K Ma<sup>4</sup>  
<sup>1</sup>*Zhengzhou Institute of Surveying and Mapping, Zhengzhou, China*  
<sup>2</sup>*Science and Technology on Aerospace Flight Dynamics Laboratory, Beijing, China*  
<sup>3</sup>*65015 Troops, Liaoning Dalian, China*  
<sup>4</sup>*69027 Troops, Urumqi Xinjiang, China*

**1046 Star Skeleton for Human Behavior Recognition**  
F Zhang, L Guo, H X Lu, S Gui, J K Li  
*University of Science and Technology of China, Hefei, China*

**1051 Ship Motion Modeling and Simulation in Ship Handling Simulator**  
X F Zhang, Y C Jin, Y Yin, H X Ren, X W Liu  
*Dalian Maritime University, Dalian, China*

**1057 Study on Spatial Interpolation Method and Its Application**  
H Xu<sup>1</sup>, Q Wu<sup>2</sup>, H Z Lei<sup>2</sup>, S Y Li<sup>2</sup>  
<sup>1</sup>*Beijing Institute of Petrochemical Technology, Beijing, China*

<sup>2</sup>*China University of Mining and Technology, Beijing, China*

**1062 Multi-view Stereoscopic Angle Model and It's Application**  
H Cheng, P An, H J Li, Z J Zhang, Z Y Zhang  
*Shanghai University, Shanghai, China*

**1067 A Dynamical Loading of Large Scale 3D City Based on OSG**  
X M Zhang<sup>1,2,3,4</sup>, W G Wan<sup>1,4</sup>, F Guo<sup>1,3,4</sup>, X L Zhou<sup>1,3,4</sup>, X Q Yu<sup>1</sup>  
<sup>1</sup>*Shanghai University, Shanghai, China*  
<sup>2</sup>*Department of Physics, Henan Institute of Education, Zhengzhou*  
<sup>3</sup>*Shanghai HanPan Information S&T Ltd*  
<sup>4</sup>*Institute of Smart City, Shanghai University*

**1072 Reconstructing Curve on the Surface with Extreme Learning Machines**  
Z H Zhou<sup>1</sup>, W G Wan<sup>1</sup>, X L Zhou<sup>1</sup>  
<sup>1</sup>*School of Communication and Information Engineering, Shanghai University, China*  
<sup>2</sup>*Department of information and mathematics Sciences, China Jiliang University, Hangzhou, China*

**1077 3D Visualization for Heart Model from Point Clouds**  
J B Li<sup>1,2,3</sup>, X L Ma<sup>1,2,3,4</sup>, Y Y Jia<sup>1,2,3,4</sup>, X L Zhou<sup>1,2,3,4</sup>  
<sup>1</sup>*School of Communication and Information Engineering, Shanghai University, China*  
<sup>2</sup>*Institute of Smart City, Shanghai University, China*  
<sup>3</sup>*Shanghai HanPan Information S&T Ltd, China*

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**Oral Session VIII - Audio and Music Processing and Multimedia SOC Design**

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**1082 Human Detection and Tracking Using Apparent Features under Multi-cameras with Non-overlapping**  
L Tian, S J Wang, X Q Ding  
*Tsinghua University, Department of Electronic Engineering, Beijing, China*

**1088 An Improved Adaptive Rood Pattern Search Algorithm Based on Temporal and Spatial Correlation**

C C Chen, J M Shan, E Y Yang  
*Shanghai University, Shanghai, China*

**1093 An Efficient Region-Adaptive Stereo Matching Algorithm**

L Chen, M G Chen, X Lin, L Z Ma  
*Shanghai Jiaotong University, Shanghai, China*

**1098 An Efficient Cutting Method for 3D Endocardial Geometric Model**

X L Zhou<sup>1,2,3,4</sup>, W G Wan<sup>1,4</sup>, Y N Wang<sup>1,3,4</sup>, J B Li<sup>1,3,4</sup>, Y Y Jia<sup>1,3,4</sup>  
<sup>1</sup>*Shanghai University, Shanghai, China*  
<sup>2</sup>*Changshu Institute of Technology, Changshu, China*  
<sup>3</sup>*Shanghai HanPan Information S&T Ltd, Shanghai, China*  
<sup>4</sup>*Institute of Smart City, Shanghai, China*

**1104 Audio Fingerprint Based on Spectral Flux for Audio Retrieval**

W G Wang<sup>1,2,3</sup>, X Q Yu<sup>1,2,3</sup>, Y H Wang<sup>1,2,3</sup>, R Swaminathan<sup>1,2,3</sup>  
<sup>1</sup>*Shanghai University, Shanghai, China*  
<sup>2</sup>*Institute of Smart City, Shanghai, China*  
<sup>3</sup>*Shanghai HanPan Information S&T Ltd, Shanghai, China*

**1108 A More Efficient Triangle Rasterization Algorithm Implemented in FPGA**

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**1114 Fast Frequent Itemsets Generation and Support Calculation with FPGAs**

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**1120 Research of Graphics Acceleration Based on Embedded System**

F Guo<sup>1,2,3,4</sup>, W G Wan<sup>1,4</sup>, W Z Zhang<sup>1,3,4</sup>, X Feng<sup>1,3,4</sup>  
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**1125 Automatic Instrument and Environmental Sound Recognition for Media Annotation of TV Content**

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**Poster Session III –Language and Speech Processing and Computer Graphic and Virtual Reality**

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**1131 A Hybrid Method to Segment Words**

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**1135 Syntactic Structure feature Analysis and Classification Method Research**

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**1141 Features for Phoneme Independent Speaker Identification**

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**1146 Multichannel Speech Recognition using Distributed Microphone Signal Fusion Strategies**

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**1151 Realization of Flood Simulation Visualization Based on OpenGL**

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**1155 Using OpenSceneGraph to Simulate the Dynamic Flooding Effect**

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**1159 A Pathfinding Algorithm in Real-time Strategy Game Based on Unity3D**

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**1163 A Segmentation Progressive Mesh Compression Method**

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**1167 Virtual Reality Platform for Smart City Based on Sensor Network and OSG Engine**

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**1172 The Management of Dual Threads in Large Scale City Roaming Based on OSG**

X M Zhang<sup>1,2,3,4</sup>, W G Wan<sup>1,4</sup>, F Guo<sup>1,3,4</sup>,  
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**1176 Virtual Campus Construction on the Web Services**

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