

PROCEEDINGS OF SPIE

[SPIDigitalLibrary.org/conference-proceedings-of-spie](https://spiedigitallibrary.org/conference-proceedings-of-spie)

Front Matter: Volume 10615

, "Front Matter: Volume 10615," Proc. SPIE 10615, Ninth International Conference on Graphic and Image Processing (ICGIP 2017), 1061501 (10 April 2018); doi: 10.1117/12.2316542

SPIE.

Event: Ninth International Conference on Graphic and Image Processing, 2017, Qingdao, China

PROCEEDINGS OF SPIE

Ninth International Conference on Graphic and Image Processing (ICGIP 2017)

Hui Yu
Junyu Dong
Editors

14–16 October 2017
Qingdao, China

Sponsored by
Ocean University of China (China)
University of Portsmouth (United Kingdom)

Organized by
International Association of Computer Science and Information Technology (IACSIT)

Published by
SPIE

Volume 10615

Part One of Two Parts

Proceedings of SPIE 0277-786X, V. 10615

SPIE is an international society advancing an interdisciplinary approach to the science and application of light.

Ninth International Conference on Graphic and Image Processing (ICGIP 2017), edited by Hui Yu, Junyu Dong,
Proc. of SPIE Vol. 10615, 1061501 · © 2018 SPIE · CCC code: 0277-786X/18/\$18 · doi: 10.1117/12.2316542

Proc. of SPIE Vol. 10615 1061501-1

The papers in this volume were part of the technical conference cited on the cover and title page. Papers were selected and subject to review by the editors and conference program committee. Some conference presentations may not be available for publication. Additional papers and presentation recordings may be available online in the SPIE Digital Library at SPIDigitalLibrary.org.

The papers reflect the work and thoughts of the authors and are published herein as submitted. The publisher is not responsible for the validity of the information or for any outcomes resulting from reliance thereon.

Please use the following format to cite material from these proceedings:

Author(s), "Title of Paper," in *Ninth International Conference on Graphic and Image Processing (ICGIP 2017)*, edited by Hui Yu, Junyu Dong, Proceedings of SPIE Vol. 10615 (SPIE, Bellingham, WA, 2018) Seven-digit Article CID Number.

ISSN: 0277-786X
ISSN: 1996-756X (electronic)

ISBN: 9781510617414
ISBN: 9781510617421 (electronic)

Published by

SPIE

P.O. Box 10, Bellingham, Washington 98227-0010 USA
Telephone +1 360 676 3290 (Pacific Time) · Fax +1 360 647 1445
SPIE.org

Copyright © 2018, Society of Photo-Optical Instrumentation Engineers.

Copying of material in this book for internal or personal use, or for the internal or personal use of specific clients, beyond the fair use provisions granted by the U.S. Copyright Law is authorized by SPIE subject to payment of copying fees. The Transactional Reporting Service base fee for this volume is \$18.00 per article (or portion thereof), which should be paid directly to the Copyright Clearance Center (CCC), 222 Rosewood Drive, Danvers, MA 01923. Payment may also be made electronically through CCC Online at copyright.com. Other copying for republication, resale, advertising or promotion, or any form of systematic or multiple reproduction of any material in this book is prohibited except with permission in writing from the publisher. The CCC fee code is 0277-786X/18/\$18.00.

Printed in the United States of America.

Publication of record for individual papers is online in the SPIE Digital Library.

**SPIE. DIGITAL
LIBRARY**

SPIDigitalLibrary.org

Paper Numbering: *Proceedings of SPIE* follow an e-First publication model. A unique citation identifier (CID) number is assigned to each article at the time of publication. Utilization of CIDs allows articles to be fully citable as soon as they are published online, and connects the same identifier to all online and print versions of the publication. SPIE uses a seven-digit CID article numbering system structured as follows:

- The first five digits correspond to the SPIE volume number.
- The last two digits indicate publication order within the volume using a Base 36 numbering system employing both numerals and letters. These two-number sets start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B ... 0Z, followed by 10-1Z, 20-2Z, etc. The CID Number appears on each page of the manuscript.

Contents

xv	<i>Authors</i>
xxi	<i>Conference Committee</i>
xxiii	<i>Introduction</i>

Part One

TARGET DETECTION AND TRACKING

10615 02	Efficient airport detection using region-based fully convolutional neural networks [10615-108]
10615 03	Oriented regions grouping based candidate proposal for infrared pedestrian detection [10615-148]
10615 04	Long-term scale adaptive tracking with kernel correlation filters [10615-137]
10615 05	Vehicle tracking using fuzzy-based vehicle detection window with adaptive parameters [10615-53]
10615 06	A speeded-up saliency region-based contrast detection method for small targets [10615-17]
10615 07	Fabric defect detection based on visual saliency using deep feature and low-rank recovery [10615-198]
10615 08	Lane detection based on color probability model and fuzzy clustering [10615-103]
10615 09	Fast object detection algorithm based on HOG and CNN [10615-115]
10615 0A	Fabric defect detection based on faster R-CNN [10615-196]
10615 0B	Border-oriented post-processing refinement on detected vehicle bounding box for ADAS [10615-243]
10615 0C	Multi-target detection and positioning in crowds using multiple camera surveillance [10615-113]
10615 0D	Person detection, tracking and following using stereo camera [10615-51]
10615 0E	Kernelized correlation tracking with long-term motion cues [10615-47]
10615 0F	Salient object detection method based on multiple semantic features [10615-121]

- 10615 0G **Detecting text in natural scenes with multi-level MSER and SWT** [10615-147]
- 10615 0H **Object tracking algorithm based on the color histogram probability distribution** [10615-167]
- 10615 0I **Infrared small target detection based on multiscale center-surround contrast measure** [10615-218]
- 10615 0J **Small-size pedestrian detection in large scene based on fast R-CNN** [10615-251]
- 10615 0K **Defect detection and classification of galvanized stamping parts based on fully convolution neural network** [10615-188]

FACE RECOGNITION

- 10615 0L **Deep classification hashing for person re-identification** [10615-4]
- 10615 0M **Facial expression recognition under partial occlusion based on fusion of global and local features** [10615-150]
- 10615 0N **Face recognition via sparse representation of SIFT feature on hexagonal-sampling image** [10615-238]
- 10615 0O **Sub-pattern based multi-manifold discriminant analysis for face recognition** [10615-20]
- 10615 0P **In-the-wild facial expression recognition in extreme poses** [10615-48]
- 10615 0Q **Constrained dictionary learning and probabilistic hypergraph ranking for person re-identification** [10615-161]
- 10615 0R **Microcontroller based driver alertness detection systems to detect drowsiness** [10615-174]
- 10615 0S **Joint and collaborative representation with local Volterra kernels convolution feature for face recognition** [10615-138]
- 10615 0T **Dynamic facial expression recognition based on geometric and texture features** [10615-99]
- 10615 0U **The depth estimation of 3D face from single 2D picture based on manifold learning constraints** [10615-71]
- 10615 0V **Face recognition via Gabor and convolutional neural network** [10615-216]
- 10615 0W **Multi-task learning with group information for human action recognition** [10615-163]
- 10615 0X **Multi-pose facial correction based on Gaussian process with combined kernel function** [10615-136]

PATTERN RECOGNITION

- 10615 0Y **Low-contrast underwater living fish recognition using PCANet** [10615-63]

- 10615 0Z **Partial fingerprint identification algorithm based on the modified generalized Hough transform on mobile device** [10615-36]
- 10615 10 **Vehicle license plate recognition in dense fog based on improved atmospheric scattering model** [10615-7]
- 10615 11 **Pigments identification of paintings using subspace distance unmixing algorithm** [10615-90]
- 10615 12 **A new pattern associative memory model for image recognition based on Hebb rules and dot product** [10615-13]
- 10615 13 **Vehicle logo recognition using multi-level fusion model** [10615-183]
- 10615 14 **Scene recognition based on integrating active learning with dictionary learning** [10615-16]
- 10615 15 **Multi-channel feature dictionaries for RGB-D object recognition** [10615-160]
- 10615 16 **Identification of serial number on bank card using recurrent neural network** [10615-133]
- 10615 17 **Object recognition in images via a factor graph model** [10615-146]
- 10615 18 **An effective method for cirrhosis recognition based on multi-feature fusion** [10615-227]

FEATURE SELECTION AND EXTRACTION

- 10615 19 **Mutual information based feature selection for medical image retrieval** [10615-55]
- 10615 1A **A novel local descriptor based on accumulated ranking and averaged bin across multiple scales** [10615-38]
- 10615 1B **Image segmentation-based robust feature extraction for color image watermarking** [10615-111]
- 10615 1C **Multi-dimension feature fusion for action recognition** [10615-15]
- 10615 1D **Generating description with multi-feature fusion and saliency maps of image** [10615-237]
- 10615 1E **Feature-fused SSD: fast detection for small objects** [10615-236]
- 10615 1F **A robust probabilistic collaborative representation based classification for multimodal biometrics** [10615-69]
- 10615 1G **LSAH: a fast and efficient local surface feature for point cloud registration** [10615-197]
- 10615 1H **Text extraction from images in the wild using the Viola-Jones algorithm** [10615-180]
- 10615 1I **Offline signature verification using convolution Siamese network** [10615-135]
- 10615 1J **Steganalysis based on reducing the differences of image statistical characteristics** [10615-214]

IMAGE TRANSFORMATION AND ALGORITHM

- 10615 1K **Adaptive bit plane quadtree-based block truncation coding for image compression** [10615-101]
- 10615 1L **Document image binarization using "multi-scale" predefined filters** [10615-190]
- 10615 1M **A difference tracking algorithm based on discrete sine transform** [10615-75]
- 10615 1N **Accurately estimating PSF with straight lines detected by Hough transform** [10615-66]
- 10615 1O **An improved TV caption image binarization method** [10615-244]
- 10615 1P **The parallel algorithm for the 2D discrete wavelet transform** [10615-87]
- 10615 1Q **Robust non-rigid registration algorithm based on local affine registration** [10615-52]
- 10615 1R **Contour sensitive saliency and depth application in image retargeting** [10615-181]
- 10615 1S **An adaptive clustering algorithm for image matching based on corner feature** [10615-204]
- 10615 1T **New development of the image matching algorithm** [10615-246]

IMAGE SEGMENTATION

- 10615 1U **Augmented lazy snapping: how does pre-segmentation help lazy snapping framework?** [10615-122]
- 10615 1V **A robust and fast active contour model for image segmentation with intensity inhomogeneity** [10615-100]
- 10615 1W **Detecting wood surface defects with fusion algorithm of visual saliency and local threshold segmentation** [10615-105]
- 10615 1X **Label fusion based brain MR image segmentation via a latent selective model** [10615-76]
- 10615 1Y **Weakly supervised image semantic segmentation based on clustering superpixels** [10615-9]
- 10615 1Z **A robust fuzzy local Information c-means clustering algorithm with noise detection** [10615-6]
- 10615 20 **Image edge tracking via ant colony optimization** [10615-157]
- 10615 21 **A lane line segmentation algorithm based on adaptive threshold and connected domain theory** [10615-8]
- 10615 22 **Epidermis area detection for immunofluorescence microscopy** [10615-37]
- 10615 23 **A fusion network for semantic segmentation using RGB-D data** [10615-201]

- 10615 24 **A fast and robust image segmentation method based on superpixels** [10615-217]
- 10615 25 **An image segmentation method based on fuzzy C-means clustering and Cuckoo search algorithm** [10615-93]
- 10615 26 **Adaptive block online learning target tracking based on super pixel segmentation** [10615-98]
- 10615 27 **Multi scales based sparse matrix spectral clustering image segmentation** [10615-84]
- 10615 28 **A novel sub-shot segmentation method for user-generated video** [10615-18]
- 10615 29 **An unsupervised video foreground co-localization and segmentation process by incorporating motion cues and frame features** [10615-151]
- 10615 2A **A new region-edge based level set model with applications to image segmentation** [10615-205]
- 10615 2B **A Gaussian-based rank approximation for subspace clustering** [10615-28]
- 10615 2C **Blood vessels segmentation of hatching eggs based on fully convolutional networks** [10615-145]
- 10615 2D **A kind of color image segmentation algorithm based on super-pixel and PCNN** [10615-128]

IMAGE DENOISING AND RESTORATION

- 10615 2E **A multichannel total variational Retinex model based on nonlocal differential operators** [10615-169]
- 10615 2F **Image deblurring based on nonlocal regularization with a non-convex sparsity constraint** [10615-19]
- 10615 2G **Background suppression of infrared small target image based on inter-frame registration** [10615-26]
- 10615 2H **Logarithmic profile mapping multi-scale Retinex for restoration of low illumination images** [10615-57]
- 10615 2I **Fast image dehazing based on non-local saturation** [10615-248]
- 10615 2J **Removing flicker based on sparse color correspondences in old film restoration** [10615-223]
- 10615 2K **An improved artifact removal in exposure fusion with local linear constraints** [10615-166]
- 10615 2L **Spatially adapted second-order total generalized variational image deblurring model under impulse noise** [10615-143]

- 10615 2M **Total generalized variation-regularized variational model for single image dehazing**
[10615-102]
- 10615 2N **Grayscale inhomogeneity correction method for multiple mosaicked electron microscope images** [10615-178]

IMAGE ENHANCEMENT

- 10615 2O **Enhancement method for rendered images of home decoration based on SLIC superpixels**
[10615-132]
- 10615 2P **An optimization model for infrared image enhancement method based on p-q norm constrained by saliency value** [10615-211]
- 10615 2Q **Half-unit weighted bilinear algorithm for image contrast enhancement in capsule endoscopy** [10615-140]
- 10615 2R **Single-scale center-surround Retinex based restoration of low-illumination images with edge enhancement** [10615-45]
- 10615 2S **A review on brightness preserving contrast enhancement methods for digital image**
[10615-46]

Part Two

- 10615 2T **PMSR model for low illumination image enhancement** [10615-129]
- 10615 2U **Naturalness preservation image contrast enhancement via histogram modification**
[10615-109]

IMAGE CLASSIFICATION AND FUSION

- 10615 2V **SAR image classification based on CNN in real and simulation datasets** [10615-156]
- 10615 2W **Traffic sign classification with dataset augmentation and convolutional neural network**
[10615-222]
- 10615 2X **Hyperspectral image classification based on local binary patterns and PCANet** [10615-74]
- 10615 2Y **Adaptive multi-view clustering based on nonnegative matrix factorization and pairwise co-regularization** [10615-235]
- 10615 2Z **Deep multi-scale convolutional neural network for hyperspectral image classification**
[10615-239]
- 10615 30 **Different approaches for the texture classification of a remote sensing image bank**
[10615-24]

- 10615 31 **Comparison and evaluation of fusion methods used for GF-2 satellite image in coastal mangrove area** [10615-200]
- 10615 32 **Multimodal medical image fusion by combining gradient minimization smoothing filter and non-subsampled directional filter bank** [10615-192]
- 10615 33 **Multi-focus image fusion based on area-based standard deviation in dual tree contourlet transform domain** [10615-247]
- 10615 34 **Image fusion based on Bandelet and sparse representation** [10615-80]
- 10615 35 **Adaptive structured dictionary learning for image fusion based on group-sparse-representation** [10615-215]
- 10615 36 **An efficient method for the fusion of light field refocused images** [10615-61]
- 10615 37 **An acceleration system for Laplacian image fusion based on SoC** [10615-162]

THREE-DIMENSIONAL RECONSTRUCTION

- 10615 38 **Estimating 3D topographic map of optic nerve head from a single fundus image** [10615-27]
- 10615 39 **Photometric stereo via random sampling and tensor robust principal component analysis** [10615-1]
- 10615 3A **An interactive display system for large-scale 3D models** [10615-49]
- 10615 3B **Surface reconstruction and deformation monitoring of stratospheric airship based on laser scanning technology** [10615-123]
- 10615 3C **3D reconstruction based on light field images** [10615-202]
- 10615 3D **Fast total variation-based image restoration using blockwise accelerated proximal gradient approach** [10615-240]
- 10615 3E **A curvature-based weighted fuzzy c-means algorithm for point clouds de-noising** [10615-139]
- 10615 3F **Efficient structure from motion on large scenes using UAV with position and pose information** [10615-233]

IMAGING SYSTEM AND MODELING

- 10615 3G **An embedded multi-core parallel model for real-time stereo imaging** [10615-220]
- 10615 3H **Information retrieval based on single-pixel optical imaging with quick-response code** [10615-40]
- 10615 3I **Fisheye camera around view monitoring system** [10615-96]

- 10615 3J **Rapid generation of full view image based on multi-camera** [10615-152]
- 10615 3K **Automatic digital surface model (DSM) generation from aerial imagery data** [10615-144]
- 10615 3L **Inverse synthetic aperture radar imaging based on varying-parameter method** [10615-34]
- 10615 3M **Study on super-resolution three-dimensional range-gated imaging technology** [10615-245]
- 10615 3N **Semantic attributes based texture generation** [10615-72]
- 10615 3O **The adaptive parallel UKF inversion method for the shape of space objects based on the ground-based photometric data** [10615-131]
- 10615 3P **A handheld optical device for skin profile measurement** [10615-29]
- 10615 3Q **Three dimensional shape measurement of wear particle by iterative volume intersection** [10615-212]

MACHINE VISION AND VISUALIZATION

- 10615 3R **Visual texture perception via graph-based semi-supervised learning** [10615-60]
- 10615 3S **Multiple feature fusion via covariance matrix for visual tracking** [10615-193]
- 10615 3T **The application of machine vision in fire protection system** [10615-171]
- 10615 3U **DVS image noise removal using K-SVD method** [10615-241]
- 10615 3V **Visual question answering using hierarchical dynamic memory networks** [10615-14]
- 10615 3W **Cross-domain latent space projection for person re-identification** [10615-159]
- 10615 3X **Robust visual tracking via multiple discriminative models with object proposals** [10615-92]
- 10615 3Y **Cross-media color reproduction using the frequency-based spatial gamut mapping algorithm based on human color vision** [10615-95]
- 10615 3Z **Using infrared HOG-based pedestrian detection for outdoor autonomous searching UAV with embedded system** [10615-210]
- 10615 40 **Proper use of colour schemes for image data visualization** [10615-118]
- 10615 41 **Saliency detection by conditional generative adversarial network** [10615-253]
- 10615 42 **Constrained motion estimation-based error resilient coding for HEVC** [10615-189]
- 10615 43 **A novel parallel pipeline structure of VP9 decoder** [10615-221]
- 10615 44 **An efficient CU partition algorithm for HEVC based on improved Sobel operator** [10615-91]

COMPUTER GRAPHICS AND REMOTE SENSING TECHNOLOGY

- 10615 45 **Loose fusion based on SLAM and IMU for indoor environment** [10615-97]
- 10615 46 **Quadratic polynomial interpolation on triangular domain** [10615-110]
- 10615 47 **A fast and accurate dihedral interpolation loop subdivision scheme** [10615-120]
- 10615 48 **Change detection for synthetic aperture radar images based on pattern and intensity distinctiveness analysis** [10615-249]
- 10615 49 **Filtering method of star control points for geometric correction of remote sensing image based on RANSAC algorithm** [10615-209]
- 10615 4A **Pseudo-color coding method for high-dynamic single-polarization SAR images** [10615-59]
- 10615 4B **A change detection method for remote sensing image based on LBP and SURF feature** [10615-39]
- 10615 4C **Land surface temperature downscaling using random forest regression: primary result and sensitivity analysis** [10615-22]
- 10615 4D **An improvement of vehicle detection under shadow regions in satellite imagery** [10615-164]

IMAGE PROCESSING TECHNIQUES AND METHODS

- 10615 4E **Study on the generation technology of Li brocade pattern mutant genes based on the AI and Java technology** [10615-179]
- 10615 4F **A novel method of the image processing on irregular triangular meshes** [10615-114]
- 10615 4G **Patch-based frame interpolation for old films via the guidance of motion paths** [10615-116]
- 10615 4H **Robust and unobtrusive algorithm based on position independence for step detection** [10615-126]
- 10615 4I **Slot angle detecting method for fiber fixed chip** [10615-208]
- 10615 4J **Automatic extraction of via in the CT image of PCB** [10615-3]
- 10615 4K **The frequency hopping pattern design for random hopping frequency signal based on stationary phase principle** [10615-125]
- 10615 4L **Color image guided depth image super resolution using fusion filter** [10615-25]
- 10615 4M **A novel scene management technology for complex virtual battlefield environment** [10615-30]

- 10615 4N **Research on tactical information display technology for interactive virtual cockpit** [10615-82]
- 10615 4O **Research on sparse feature matching of improved RANSAC algorithm** [10615-67]
- 10615 4P **Super-pixel extraction based on multi-channel pulse coupled neural network** [10615-127]
- 10615 4Q **A deep learning method for early screening of lung cancer** [10615-168]
- 10615 4R **Super-resolution using a light inception layer in convolutional neural network** [10615-35]
- 10615 4S **Adjacent bin stability evaluating for feature description** [10615-41]

IMAGE QUALITY ASSESSMENT AND INFORMATION SECURITY

- 10615 4T **FBC: a flat binary code scheme for fast Manhattan hash retrieval** [10615-124]
- 10615 4U **Robust digital image watermarking using distortion-compensated dither modulation** [10615-112]
- 10615 4V **An efficient cloud detection method for high resolution remote sensing panchromatic imagery** [10615-81]
- 10615 4W **Natural texture retrieval based on perceptual similarity measurement** [10615-229]
- 10615 4X **The fast iris image clarity evaluation based on Tenengrad and ROI selection** [10615-31]
- 10615 4Y **Image sharpness assessment based on wavelet energy of edge area** [10615-117]
- 10615 4Z **Metal surface corrosion grade estimation from single image** [10615-77]
- 10615 50 **Synthesized view comparison method for no-reference 3D image quality assessment** [10615-88]
- 10615 51 **Research on quality metrics of wireless adaptive video streaming** [10615-21]

SIGNAL ANALYSIS AND PROCESSING

- 10615 52 **Shadowed non-local image guided filter** [10615-50]
- 10615 53 **Towards accurate localization: long- and short-term correlation filters for tracking** [10615-106]
- 10615 54 **Direct position determination for digital modulation signals based on improved particle swarm optimization algorithm** [10615-54]
- 10615 55 **A MIMO radar quadrature and multi-channel amplitude-phase error combined correction method based on cross-correlation** [10615-32]

- 10615 56 **A KST framework for correlation network construction from time series signals** [10615-186]
- 10615 57 **An approach of point cloud denoising based on improved bilateral filtering** [10615-191]
- 10615 58 **Study on time-frequency analysis method of very fast transient overvoltage** [10615-219]
- 10615 59 **Hilbert-Huang transform analysis of long-term solar magnetic activity** [10615-226]
- 10615 5A **Robust adaptive multichannel SAR processing based on covariance matrix reconstruction** [10615-199]
- 10615 5B **LSTM for diagnosis of neurodegenerative diseases using gait data** [10615-242]
- 10615 5C **Feature extraction inspired by V1 in visual cortex** [10615-107]
- 10615 5D **An improved method based on wavelet coefficient correlation to filter noise in Doppler ultrasound blood flow signals** [10615-44]

COMPUTER INFORMATION ENGINEERING AND WEATHER FORECASTING

- 10615 5E **Strong convective storm nowcasting using a hybrid approach of convolutional neural network and hidden Markov model** [10615-62]
- 10615 5F **A deep belief network approach using VDRAS data for nowcasting** [10615-158]
- 10615 5G **Research on Chinese characters display of airborne MFD based on GL studio** [10615-142]
- 10615 5H **Visual analysis of tropical cyclone trajectory prediction** [10615-83]
- 10615 5I **A similarity based agglomerative clustering algorithm in networks** [10615-89]
- 10615 5J **A rule-based smart automated fertilization and irrigation systems** [10615-177]
- 10615 5K **Process mining techniques: an application to time management** [10615-187]
- 10615 5L **A study of factors affecting the adoption of server virtualization technology** [10615-141]
- 10615 5M **An improved multi-domain convolution tracking algorithm** [10615-213]

Authors

Numbers in the index correspond to the last two digits of the seven-digit citation identifier (CID) article numbering system used in Proceedings of SPIE. The first five digits reflect the volume number. Base 36 numbering is employed for the last two digits and indicates the order of articles within the volume. Numbers start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B...0Z, followed by 10-1Z, 20-2Z, etc.

Adenin, Hasibah, 0R
Ali, Saad, 4D
An, Wei, 0I, 36
An, Yalei, 47
Asif, Muhammad Rizwan, 4D
Bai, Jiaojiao, 06
Barina, David, 1P
Bi, Duyan, 1Q, 3X
Brunet, Gerard, 30
Cai, Xiaoxu, 41
Cao, Chen, 4C
Cao, Guimei, 1E
Cao, Shixiang, 3K
Chang, Zhiyuan, 3Z
Chen, C. L. Philip, 52
Chen, Chunkai, 10
Chen, Long, 52
Chen, Maolin, 25
Chen, Minghui, 1O
Chen, Wen, 3H
Chen, Wu, 43
Chen, Xi, 0S
Chen, Xi, 2N
Chen, Xiaodong, 44
Chen, Xinyuan, 0B
Chen, Yameng, 18
Chen, Yijun, 4Z
Chen, Zhicai, 27
Cheng, Fei, 0E
Cheng, Jianghua, 1O
Cheng, Xu, 4X
Cheng, Yue, 26
Cheng, Zhang, 32
Chi, Huifang, 3N
Chiang, Chang-Heng, 5L
Chitsobhuk, Orachat, 05
Cho, Chien-An, 5L
Chong, Mina, 15
Chu, Hongyu, 3Z
Cohen, Laurent D., 2U
Cong, Lin, 0O
Cui, Jia, 1R
Cui, Xin, 3E
Cui, Yipeng, 5G
Dai, Jiangyan, 0O
Dai, Jie, 5F
Dai, Xiaobing, 2P
Dai, Yutong, 2O
Deng, Limiao, 12
Deng, Linhua, 59
Deng, Xinpu, 49, 4V
Deng, Zeyu, 1B
Ding, Derui, 1F
Ding, Keyan, 1V
Ding, Wenshan, 3X
Ding, Youdong, 2J, 4G
Ding, Yuxuan, 1D
Dong, Chenghui, 33
Dong, Jiwen, 0S
Dong, Junyu, 0J, 0Y, 1C, 23, 2X, 39, 3N, 3R, 48, 4W, 4Z, 5B, 5G, 5H
Dong, Liquan, 2V
Dong, Min, 1S, 33
Dong, Pei, 1C
Dong, Qinghao, 11
Dong, Yan, 07
Dong, Yancheng, 10
Dovganich, Andrey, 22
Du, Huiqian, 32
Du, Jiang, 3U
Du, Jian-Ping, 54
Du, Mengyuan, 55
Du, Peng, 37
Du, Shaoyi, 1Q
Du, Xiaoping, 3O
Duan, Lianghua, 0J
Duan, Zhikui, 3V
Durand, Philippe, 30
Fan, Chunxiao, 1N
Fan, Fan, 2P
Fan, Hao, 39, 4Z
Fan, Youchen, 3M
Fan, Zunlin, 3X
Fang, Ting, 1Q
Feng, Cong, 3I
Feng, Guang, 0S
Feng, Hanlei, 5F
Feng, Hui, 21
Feng, Zhao, 1T
Feng, Zicheng, 4A
Fu, Chuanshun, 58
Fu, Dongmei, 3C
Fu, Hao, 0I
Fu, Yuanbin, 1R
Fu, YunXia, 2D, 4P
Gan, Yanhai, 3N
Gao, Feng, 2X, 48
Gao, Jianbo, 4Q

Gao, Lifa, 4T
 Gao, Liwen, 37
 Gao, Mingyue, 12
 Gao, Shuqin, 4X
 Gao, Xianjun, 25
 Gao, Xinbo, 2Y
 Gao, Ying, 4W
 Geng, Lei, 0K, 2C
 Ghafar, Khairuddin, 5J
 Ghorbanzadeh, Dariush, 30
 Glomglome, Sorayut, 05
 Gong, Chengrong, 14
 Gu, Quan, 56
 Gu, Xiaodong, 50
 Guo, Changlu, 0O
 Guo, Huichao, 3M
 Guo, Jiajia, 2T
 Guo, Jun, 4R
 Guo, Kai, 3B
 Guo, Li, 52
 Guo, Miao, 33
 Guo, Tiande, 0Z
 Guo, Weihai, 42
 Guo, Xiantang, 1X
 Guo, Zhao-Kun, 3J
 Han, Congying, 0Z
 Han, Hua, 2N
 Han, Lei, 5E, 5F
 Han, Min, 4X
 Han, Yi, 21
 He, Feng, 5A
 He, Guoping, 2B
 He, Hongyan, 3K
 He, Jin, 4L
 He, Lei, 4Y
 He, Wenjing, 3G
 He, Xiaoting, 2I
 He, Xinhua, 3E
 He, Ying, 4L
 He, Yong, 17
 He, You, 0Q
 He, Yuxuan, 3Z
 Hou, Guojia, 2E
 Hou, Yingkun, 2I
 Hou, Zhiqiang, 3S
 Hu, Guichun, 3Y
 Hu, Jian, 3G
 Hu, Jiemin, 4K
 Hu, Lei, 4B
 Hu, Min, 0M
 Hu, Song, 4P
 Hu, Wenjin, 27
 Hu, Wenting, 5G
 Hu, Xiaoping, 0D
 Hu, Yunhong, 2B
 Hu, Yuwei, 4J
 Huang, Baoxiang, 2E
 Huang, Jiahu, 0C
 Huang, Junwei, 1Z, 24, 3V
 Huang, Linlin, 16
 Huang, Qiyan, 58
 Huang, Xi, 2J, 4G
 Hui, Mei, 2V
 Jahan, Mahmuda Rawnak, 2S
 Jaupi, Luan, 30
 Ji, Ruirui, 0X
 Jia, Songmin, 57
 Jiang, Huiqin, 4Q
 Jiang, Libing, 4M
 Jiang, Ling, 5E
 Jiang, Mengdi, 1O
 Jiang, Xiaotong, 2O
 Jin, Zefenfen, 3S
 Jo, Kang-Hyun, 08, 2W
 Ju, Hongbo, 31
 Ju, Yakun, 39
 Karim, Shahid, 4D
 Kasemsiri, Watjanapong, 05
 Khowaja, Ali Raza, 5K
 Kleparnik, Petr, 1P
 Kong, Xiangsi, 4O
 Kong, Yan, 4T
 Kong, Yanzi, 1G
 Krylov, Andrey, 22
 Ku, Tao, 3X
 Ku, Xishu, 1O
 Kula, Michal, 1P
 Kurniangggoro, Laksono, 2W
 Kwok, Ngai Ming, 20, 2H, 2R, 2S, 3Q
 Lan, Rushi, 47
 Lan, Xiaodong, 15
 Lapamonpinyo, Pipatphon, 05
 Lei, BangJun, 2D, 4P
 Lei, HeBing, 1M
 Lei, Yiming, 18
 Lei, Zhuo, 28
 Leng, Yanyi, 0K
 Li, Bicao, 07, 0A
 Li, Bin, 11
 Li, Bo, 42
 Li, Chaowei, 4V
 Li, Chuanrong, 3G
 Li, Chunlei, 07, 0A
 Li, Dongsheng, 0B
 Li, Hengjian, 0S
 Li, Huaijiang, 03
 Li, Huanyu, 3X
 Li, Jianzeng, 26
 Li, Jie, 1C, 5B
 Li, Jin, 4B
 Li, Jin, 4Y
 Li, Jingwen, 3L
 Li, Jun, 15
 Li, Lian, 2F
 Li, Lu, 0N
 Li, MengYang, 4H
 Li, Mianjie, 1B, 4U
 Li, Ming, 0T
 Li, Minglangjun, 53
 Li, Minne, 0B

Li, Ning, 0H
 Li, Qiming, 15
 Li, Ruowei, 20, 2H, 2R, 2S, 3Q
 Li, Shenda, 1K
 Li, Shipeng, 3E
 Li, Shiren, 1Z, 24, 3V
 Li, Shuai, 02, 5C
 Li, Shuai, 58
 Li, Wang, 3U
 Li, Wei, 3J
 Li, Xia, 0U
 Li, Xiaolong, 4C
 Li, Xiaozhou, 3Y
 Li, Xiuzhi, 57
 Li, Xuefei, 51
 Li, Xuzhi, 34
 Li, Yan, 19
 Li, Yang, 0L
 Li, Ying, 46
 Li, Yong, 1N
 Li, Yong, 2T
 Li, Yuanmiao, 3M
 Li, Yuanyuan, 3I
 Li, Yunfei, 3B
 Li, Zhanming, 27
 Li, Zhengjie, 06
 Liang, Bin, 4L
 Liang, Gangming, 2T
 Liao, Hengxu, 1X
 Liao, Quan, 1E
 Liao, Zhikun, 4K
 Lim, Tiong Hoo, 0R, 5J
 Lin, Chaoyi, 50
 Lin, Ching-Feng, 2H
 Lin, Jun, 10
 Lin, Peng-Chun, 5L
 Lin, Zaiping, 4V
 Ling, Chengxing, 3I
 Liu, Cheng-Lin, 1I
 Liu, Gang, 1X
 Liu, Guangyu, 3G
 Liu, Hao, 3O
 Liu, HaoPeng, 1M
 Liu, Hua, 3I
 Liu, Huanxi, 1F
 Liu, Huayong, 0N
 Liu, Jun, 4W
 Liu, Kai, 0E
 Liu, Kun, 1Q
 Liu, Li, 16
 Liu, Liman, 3A
 Liu, Lisha, 1D
 Liu, Lu, 0J
 Liu, Ming, 2V
 Liu, Renjun, 0G
 Liu, Rui, 1R
 Liu, Ryan Wen, 2L, 2M
 Liu, San Chi, 20, 2S, 3Q
 Liu, Shan, 3D
 Liu, Shilong, 20, 2H, 2R, 2S, 3Q
 Liu, Shiming, 58
 Liu, Wan, 3U
 Liu, Wanquan, 2E
 Liu, Xianghui, 0A
 Liu, Xiaohua, 1Y
 Liu, Xiaohua, 2V
 Liu, Xiaojin, 3P
 Liu, Xiaolin, 4A
 Liu, Xifeng, 4J
 Liu, Yang, 2I
 Liu, Yunluo, 3C
 Liu, Yunpeng, 1W
 Liu, Yunxia, 0U
 Liu, Zhiyuan, 5I
 Liu, Zhongmin, 27
 Liu, Zhoufeng, 07, 0A
 Liu, Zijian, 3A
 Long, Yunli, 0I
 Lou, Jianwen, 4W
 Lu, Dawei, 4K
 Lu, Hongju, 1R
 Lu, Hsin-Ke, 5L
 Lu, Liang, 39
 Lu, Rongrong, 1G
 Lu, Tao, 0V
 Lu, Tongwei, 09, 0G, 0H, 0V
 Luo, Chengwei, 35
 Luo, Fangzhou, 50
 Luo, Jing, 3F
 Luo, Xiaonan, 47
 Luo, YiHan, 4H
 Lv, Chao, 02, 5C
 Lv, Weigang, 3D
 Lv, Yunqiu, 0E
 Lyu, Shuqiang, 1I
 Ma, Guangxiao, 5H
 Ma, Hongqiang, 5C
 Ma, Ling, 4Q
 Ma, Qinyong, 1A, 4S
 Ma, Shiping, 02, 5C
 Ma, Xiaojun, 50
 Ma, Xinjun, 3I
 Ma, Yinghong, 5I
 Ma, Yong, 2P
 Madessa, Amanuel Hirpa, 3N
 Makhneva, Natalia, 22
 Mei, Wenbo, 32
 Mei, Xiaoguang, 2P
 Mei, Yanying, 3Z
 Miao, Zhuang, 0L
 Ming, Wei, 13
 Mou, Qinyang, 4R
 Mu, Xiaomin, 1S, 33
 Najman, Pavel, 1P
 Nam, Tran Hoang, 1U
 Nasonov, Andrey, 22
 Nie, Dongdong, 1A, 4S
 Niu, Jingyu, 3G
 Niu, Shaozhang, 1J
 Niu, Shijun, 3Y

Pan, Huizhu, 2E
 Pan, Xin, 4C
 Pei, Bingzhi, 4A
 Pekhterev, Vitaliy, 4F
 Peng, Chong, 2B
 Peng, Lijiang, 2V
 Peng, Yeping, 2R
 Peng, Zhongxiao, 3Q
 Ping, Xijian, 1J
 Pu, Nan, 0Q, 0W, 3W
 Qi, Jin-Peng, 56
 Qi, Lin, 1C, 23, 39, 3N, 4W, 4Z, 5B
 Qi, Qiang, 48
 Qian, Li, 0Q, 0W, 3W
 Qin, Huabiao, 43
 Qin, Jin, 0Z
 Qiu, Guoping, 0P, 28, 29
 Qiu, KeCheng, 4H
 Qiu, Ling, 2C
 Qu, Xiujie, 37
 Rahman, Md Arifur, 20, 2R, 2S, 3Q
 Ren, Fuji, 0M
 Rong, Jiang, 3T
 Rukundo, Olivier, 2Q
 Saabni, Raid M., 1H, 1L
 Seo, Dong-sun, 1U
 Shan, Liangliang, 4C
 Shang, Jiayu, 1Z, 24, 3V
 Shang, Yang, 3F
 Shao, Lin, 5D
 Shao, Yanhua, 3Z
 Shen, Hong-Bin, 2A
 Sheng, Changchong, 4M
 Shi, Guangming, 1E, 3U
 Shi, Haiyan, 2H, 2R
 Shi, Shuyan, 0X
 Shi, Yanjiao, 0O
 Shi, Zhuo, 47
 Shu, Qiao-Ling, 2L, 2M
 Sokolova, Elizaveta, 4F
 Song, Jian, 15
 Song, Meiping, 0F
 Su, Feng, 4N
 Su, Zhenming, 2F
 Sun, Bin, 35
 Sun, Bing, 3L
 Sun, Gang, 44
 Sun, Gengxin, 18
 Sun, Hua, 31
 Sun, Huayan, 3M
 Sun, Hui, 3S
 Sun, Huyuan, 4Z
 Sun, Jiucui, 38, 3P
 Sun, Kun, 3A
 Sun, Mingui, 04, 4Y
 Sun, Rong, 2N
 Sun, Xin, 0Y
 Sun, Xin, 5M
 Sun, Xuebin, 44
 Sun, Zhongyun, 4N
 Tan, Xiangli, 49
 Tan, Yunfei, 43
 Tan, Zhen-ya, 5A
 Tang, Bo, 4M
 Tang, Chunming, 10
 Tang, Qing, 2W
 Tang, Siqu, 0Z
 Tang, Xiaolan, 4M
 Tao, Gang, 0L
 Tao, Wenbing, 3A
 Teng, Xichao, 3F
 Tian, Chunna, 1D, 53
 Tian, Qi-Chong, 2U
 Tian, Tao, 4N
 Tu, Trung Hieu, 1U
 Vishnyakov, Sergey, 4F
 Vondrakova, Alena, 40
 Vozenilek, Vit, 40
 Wan, Renzhi, 5D
 Wan, Youchuan, 25
 Wang, Baorui, 07, 0A
 Wang, Changgang, 0Y
 Wang, Chengxi, 14
 Wang, Chunyang, 0F
 Wang, Dandan, 09
 Wang, Ding, 54
 Wang, Duo, 0D
 Wang, Feng, 3L
 Wang, Gang, 3F
 Wang, Haiying, 5M
 Wang, Jiabao, 0L
 Wang, Jiangtao, 03
 Wang, Jiliang, 4I
 Wang, Jin, 1K
 Wang, Junping, 2T
 Wang, Linlin, 2I
 Wang, Long, 17
 Wang, Mingwei, 25
 Wang, Peipei, 38
 Wang, Ran, 1J
 Wang, Ruichen, 1N
 Wang, Shengke, 0J
 Wang, Shuai, 3M
 Wang, Song, 1S
 Wang, Xiao, 48
 Wang, Xiaofeng, 0D
 Wang, Xiaohua, 0M
 Wang, Xin, 3S
 Wang, Xinhua, 0Y
 Wang, Xiujian, 5I
 Wang, Xiumei, 2Y
 Wang, Xuejing, 45
 Wang, Xuejuan, 1W
 Wang, Yan, 3L
 Wang, Yang, 3O
 Wang, Yanjiang, 12
 Wang, YaWen, 2D
 Wang, Yingqian, 36
 Wang, Yueren, 04
 Wang, Yulei, 0F

Wang, Zengfu, 0T
 Wang, Zexian, 32
 Wang, Zhe, 1S, 33
 Wang, Zhicheng, 45
 Wang, Zhile, 5G
 Wang, Zhongshuai, 47
 Wei, Tianbo, 37
 Wei, Xiongyi, 24
 Weng, Guirong, 1V
 Wong, Chin Yeow, 2H
 Wu, Chenchen, 3I
 Wu, Chuan-Sheng, 2L, 2M
 Wu, Chunhong, 3C
 Wu, Dongpeng, 1Q
 Wu, Fuzhang, 4T
 Wu, Guangyuan, 3Y
 Wu, HaoKun, 1M
 Wu, Hongkun, 20, 2H, 2R, 2S, 3Q
 Wu, Jinjian, 1E
 Wu, Jun, 2C
 Wu, Liyang, 1Q
 Wu, Menglu, 0V
 Wu, Min, 3X
 Wu, Qingxiao, 1G
 Wu, Shuhang, 1W
 Wu, Song, 0Q, 0W, 3W
 Wu, Yanjun, 4T
 Wu, Yi-Chao, 1I
 Wu, Yuzhong, 35
 Wu, Zhaolin, 17
 Xi, Jiangtao, 0K
 Xia, Chen, 0M
 Xia, Tianran, 2J, 4G
 Xia, Yifan, 23
 Xiao, Chao, 36
 Xiao, Gang, 3D
 Xiao, Guoqiang, 0Q, 0W, 3W
 Xiao, Jianli, 13, 1F
 Xiao, Yin, 3H
 Xiao, Zhitao, 0K, 2C
 Xie, Cui, 5H
 Xie, Xuemei, 1E, 3U
 Xie, Yongjie, 3B
 Xin, Peng, 02, 5C
 Xing, Kun, 3K
 Xing, Yufeng, 0C
 Xing, Zi-Jian, 1I
 Xiong, Hailiang, 0U
 Xiong, Lei, 1Q
 Xu, Fei, 2B
 Xu, GuangZhu, 2D, 4P
 Xu, Guo-sheng, 2I
 Xu, Liangpeng, 1N
 Xu, Limei, 35
 Xu, Shulin, 0W
 Xu, Yong, 44
 Xu, Yuelei, 02, 5C
 Xue, Bindang, 2G
 Xue, Jian, 16
 Yan, Xiong, 1Y
 Yan, Xiutian, 3E
 Yan, Zifei, 3D
 Yang, Deyun, 2I
 Yang, Fei, 0P
 Yang, Hao, 4B
 Yang, Hao, 5H
 Yang, Huiru, 0S
 Yang, Huizhen, 2X
 Yang, Jiajie, 35
 Yang, Jianping, 0Y
 Yang, Jianxiu, 3U
 Yang, Jun, 4L
 Yang, Jungang, 36, 49
 Yang, Lin, 14
 Yang, Na, 0J
 Yang, Wenzhe, 1E
 Yang, Xia, 2Z
 Yang, Xiaopeng, 4Q
 Yang, Yang, 0U
 Yang, Yang, 2X
 Yang, Yi, 2F
 Yang, Yifan, 04, 4Y
 Yang, Yingbao, 4C
 Yang, Yunsheng, 44
 Yao, Yong, 1M
 Ye, Hu, 3B
 Ye, Xiubo, 2G
 Ye, Zhiwei, 25
 Yi, Huan, 43
 Yi, Sijun, 43
 Yi, Yugen, 0O, 14
 Yin, Fei, 1I
 Yin, Xueyan, 14
 Yousif, Musab El-Rashid, 5J
 Yu, Bing, 2J, 4G
 Yu, Chunyan, 0F
 Yu, Hong-yi, 54
 Yu, Hui, 41, 5B
 Yu, Ke, 47
 Yu, Mali, 2K
 Yu, Qian, 46
 Yu, Qifeng, 3F
 Yu, Wangsheng, 3S
 Yu, Wan-Ting, 54
 Yu, Yang, 08
 Yuan, Bo, 1D
 Yuan, Jiahui, 23
 Yuan, Xiaochen, 1B, 4U
 Yue, Chunyu, 3K
 Yue, Pengfei, 1R
 Yun, Lingtong, 55
 Zahari, Rahimi, 0R, 5J
 Zemcik, Pavel, 1P
 Zeng, Wen-Xian, 3J
 Zeng, Yingsen, 5M
 Zha, Yufei, 3X
 Zhan, Huayi, 3Z
 Zhang, Changjiang, 5F
 Zhang, Chao, 29
 Zhang, Congcong, 46

Zhang, Dafeng, 11
 Zhang, Daming, 0N
 Zhang, Fan, 0X
 Zhang, Feng-zhe, 2Z
 Zhang, Guoliang, 57
 Zhang, Hai, 2K
 Zhang, Haisu, 17
 Zhang, Haiying, 06
 Zhang, Hong, 04, 4Y
 Zhang, Huaiqing, 31
 Zhang, Jiaquan, 4I
 Zhang, Jing, 1F
 Zhang, Jingai, 03
 Zhang, Jinpeng, 18
 Zhang, Jiuxing, 34
 Zhang, Jun, 4K
 Zhang, Kun, 23
 Zhang, Kunpeng, 4Q
 Zhang, Lei, 04, 4Y
 Zhang, Lilian, 0D
 Zhang, Liu, 2D, 4P
 Zhang, Ping, 56
 Zhang, Qi, 4E
 Zhang, Qian, 0P, 28, 29
 Zhang, Qian, 2I
 Zhang, Qin, 3R
 Zhang, Shaomin, 19
 Zhang, Song, 3B
 Zhang, Tao, 1J
 Zhang, Tianzhen, 2Y
 Zhang, Wei, 34
 Zhang, Wei, 5E, 5F
 Zhang, Xiancai, 0L
 Zhang, Xiangyin, 57
 Zhang, Xiaoqiang, 1T
 Zhang, Xueyong, 0N
 Zhang, Xulei, 02, 5C
 Zhang, Yanduo, 09, 0H
 Zhang, Ye, 4D
 Zhang, Yongfei, 42
 Zhang, Yuanqiang, 3X
 Zhang, Yun, 4B
 Zhang, Zhaoning, 0B
 Zhao, Aite, 5B
 Zhao, Hongtu, 37
 Zhao, Hongzhong, 55
 Zhao, JingJing, 2D, 4P
 Zhao, Ruixue, 2E
 Zhao, Xian, 4O
 Zhao, Yanhui, 1R
 Zhao, Yuejin, 2V
 Zheng, Caixia, 14
 Zheng, Chi, 0P, 28, 29
 Zheng, Huihuang, 06
 Zheng, Shixiu, 2E
 Zheng, Yuanjie, 1R
 Zheng, Zeling, 57
 Zhi, Lijia, 19
 Zhi, Xuhao, 2A
 Zhong, Guoqiang, 3R
 Zhong, Qiu-Xiang, 2L, 2M
 Zhong, Si, 47
 Zhou, Chaochao, 4I
 Zhou, Fangxu, 2N
 Zhou, Jinglin, 45
 Zhou, Nan, 3K
 Zhou, Wei, 0O
 Zhou, Yuping, 4E
 Zhou, Zhongjun, 06
 Zhu, Dong, 3C
 Zhu, Feng, 1G
 Zhu, Haijiang, 45
 Zhu, Kai, 1X
 Zhu, Mingning, 5C
 Zhu, Qing, 1K
 Zhu, Qiuyu, 0C
 Zhu, Ran, 0I
 Zhu, Simiao, 2F
 Zhu, Xi, 4C
 Zhu, Ying, 56
 Zingboim, Eran, 1H
 Zu, Yunxiao, 5D

Conference Committee

Advisory Committee

Xuelong Li, Chinese Academy of Sciences (China)
Godfried T. Toussaint, New York University Abu Dhabi
(United Arab Emirates)
Patrick Wang, Northeastern University (United States)
Rung Ching Chen, Chaoyang University of Technology
(Taiwan, China)

Conference Chairs

Hui Yu, University of Portsmouth (United Kingdom)
Junyu Dong, Ocean University of China (China)
Tuan D. Pham, Linkoping University (Sweden)

Program Chairs

Jiwen Lu, Tsinghua University (China)
Kanghyun Jo, University of Ulsan (Korea, Republic of)
Hiroshi Fujita, Gifu University (Japan)

Session Chairs

- 1 Feature Selection and Extraction
Yunxiao Zu, Beijing University of Posts and Telecommunications
(China)
- 2 Target Detection and Tracking
Matsumoto Mitsuharu, University of Electro-Communications (Japan)
- 3 Face Recognition
Hui Yu, University of Portsmouth (United Kingdom)
- 4 Filter Design and Signal Processing
Guoqiang Zhong, Ocean University of China (China)
- 5 Computer Information Engineering and Weather Forecasting
Jiwei Sun, Shanghai University of Medicine and Health Sciences
(China)
- 6 Image Segmentation
Yong Zhao, Ocean University of China (China)

- 7 Image Fusion and Classification
Lei Huang, Ocean University of China (China)
- 8 Three-dimensional Reconstruction
Lin Qi, Ocean University of China (China)
- 9 Image Photography and Remote Sensing Technology
Feng Gao, Ocean University of China (China)
- 10 Computer Photography and Graphics
Cui Xie, Ocean University of China (China)
- 11 Pattern Recognition
Muwei Jian, Shandong University of Finance and Economics (China)
- 12 Image Transformation and Enhancement
Linhua Deng, Yunnan Observatories, Chinese Academy of Science (China)
- 13 Image Denoising and Restoration
Xin Sun, Ocean University of China (China)
- 14 Image Processing Techniques and Methods
Qian Zhang, Taishan University (China)
- 15 Image Segmentation
Andrey Nasonov, M.V. Lomonosov Moscow State University (Russian Federation)
- 16 Machine Vision and Visualization
Shengke Wang, Ocean University of China (China)
- 17 Evaluation and Calculation of Image Quality
Vit Vozenilek, Palacky University (Czech Republic)

Introduction

It was a great pleasure for us to organize the 9th International Conference on Graphic and Image Processing (ICGIP 2017), 14–16 October 2017, in Qingdao, China

This conference was hosted at Academic Exchange Center, Ocean University of China and supported by Ocean University of China, China.

The ICGIP conference has become a popular annual event particularly attracting young researchers. It has established itself as a world-class conference in which participants from academia and industry interact through formal presentations and informal discussions, accompanied by keynotes.

The purpose of ICGIP 2017 is to share an opportunity for researchers to introduce recent issues related to graphic and image processing. It covers a broad range of topics in the field, such as target detection and tracking, face recognition, pattern recognition, image transformation and algorithms, image segmentation, etc. We thank the members of the ICGIP 2017 committee for managing the reviews of submissions. We believe these are the main driving factors that contribute to our success.

This year, 378 papers were submitted, and all the submitted papers in the proceeding were peer reviewed by the reviewers drawn from the scientific committee, external reviewers and editorial board, depending on the subject matter of the paper. Reviewing and initial selection were undertaken electronically. After the rigorous peer-review process, the submitted papers were selected on the basis of originality, significance, and clarity for the purpose of the conference. We want to thank all the authors for submitting their innovative and sound work to ICGIP 2017.

Apart from technical paper presentations, there were also keynote lectures. We are grateful to the keynote speakers for accepting our invitation. They are Prof. Peter Eisert, Humboldt University Berlin (Germany), Prof. Godfried T. Toussaint, New York University (Abu Dhabi, United Arab Emirates), Prof. Patrick Wang, Northeastern University (United States), Prof. Vit Vozenilek, Palacky University (Czech Republic), Prof. Junyu Dong, Ocean University of China (China), Prof. Jianhao Tan, Hunan University (China), Assoc. Prof. Matsumoto Mitsuharu, University of Electro-Communications (Japan) and Assoc. Prof. Linhua Deng, Yunnan Observatories, Chinese Academy of Sciences (China).

We extend our gratitude to the partners and sponsors who made the conference possible. We truly hope the participants found the discussion fruitful, and enjoyed the opportunity for setting up future collaborations. It is our sincere hope that ICGIP will one day become the leading conference in this specific academic area.

Hui Yu
Junyu Dong