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Monday, September 12

MA.L1: Modern Shape from Shading and Beyond (Special Session)

Modern Shape From Shading and Beyond

Michael Breuss (Saarland University, Germany); Oliver Vogel (Saarland University, Germany); Ariel Tankus (Technion - Israel Institute of Technology, Israel)
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Numerical Schemes for Advanced Reflectance Models for Shape From Shading

Oliver Vogel (Saarland University, Germany); Emiliano Cristiani (SAPIENZA - Universita di Roma, Italy)
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Shape From Shading with Specular Highlights: Analysis of the Phong Model

Michael Breuss (Saarland University, Germany); Yong Chul Ju (Saarland University, Germany)
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Shape-from-shading Under Complex Natural Illumination

Rui Huang (University of York, United Kingdom); William Smith (University of York, United Kingdom)
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Reconstruction of non-Lambertian Surfaces by Fusion of Shape From Shading and Active Range Scanning

Steffen Herbot (Dortmund University of Technology, Germany); Arne Grumpe (Dortmund University of Technology, Germany); Christian Wöhler (Dortmund University of Technology, Germany)
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Jonathan Balzer (King Abdullah University of Science and Technology, Saudi Arabia)
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Raja Kumar (IRISA & INRIA Rennes, France); Ivan Laptev (INRIA Paris - Rocquencourt, France); Patrick Pérez (INRIA, France); Lionel Oisel (Thomson, France)
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Inferring 3D Body Pose Using Variational Semi-parametric Regression

Yan Tian (Hikvision Digital Technology Co. Ltd, P.R. China); Yonghua Jia (Hikvision Digital Technology Co. Ltd, P.R. China); Yuan Shi (Carnegie Mellon University, USA);

Yong Liu (Beijing University of Posts and Telecommunications, P.R. China); Ji Hao (Carnegie Mellon University, USA); Leonid Sigal (Disney Research Pittsburgh, USA)
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Umamahesh Srinivas (Pennsylvania State University, USA); Vishal Monga (Pennsylvania State University, USA); Raghu Raj (None, USA)
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A Belief Propagation Algorithm for Bias Field Estimation and Image Segmentation

Rui Huang (Huazhong University of Science and Technology, P.R. China); Nong Sang (Huazhong University of Science and Technology, P.R. China); Vladimir Pavlovic (Rutgers, USA); Dimitri Metaxas (Rutgers University, USA)
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Luca Giancardo (Oak Ridge National Laboratory & University of Burgundy, USA); Fabrice Meriaudeau (Uni Bourgogne, France); Thomas Karnowski (Oak Ridge National Laboratory, USA); Yaqin Li (U. Tennessee Health Sciences Center, USA); Kenneth W. Tobin (Oak Ridge National Laboratory, USA); Edward Chaum (U. Tennessee Health Sciences Center, USA)
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Guillaume Thibault (Centre de Morphologie Mathématique & MINES PARISTECH, France); Jesus Angulo (MINES Paristech, France); Fernand Meyer (Mines ParisTech, Ecole des Mines de Paris, France)
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Subrahmanyam Gorthi (EPFL & LTS5, Switzerland); Jean-Philippe Thiran (École Polytechnique Fédérale de Lausanne & Signal Processing Laboratory, Switzerland); Meritxell Bach Cuadra (Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland)

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MA.PF: Tracking (Poster)

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Yuan Shen (Beijing Jiaotong University, P.R. China); Zhenjiang Miao (Institute of Information Science, Beijing Jiaotong University, P.R. China); Zhifei Wang (Institute of Information Science, Beijing Jiaotong University, P.R. China)
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Wenhan Luo (National Lab of Pattern Recognition, Institute of Automation, CAS, P.R. China); Xi Li (University of Adelaide, Australia); Wei Li (National Lab of Pattern Recognition, Institute of Automation, CAS, P.R. China); Weiming Hu (CAS, P.R. China)
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Jian-Yi Lu (Evest Corp., Taiwan); Yi-Chun Wei (National Central University, Taiwan); Chih-Wei Tang (National Central University, Taiwan)
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Rodrigo Minetto (University of Campinas & University Pierre and Marie Curie, Brazil); Nicolas Thome (University Pierre et Marie Curie, France); Matthieu Cord (UPMC Paris 6, France); Neucimar Leite (State University of Campinas, Brazil); Jorge Stolfi (University of Campinas, Brazil)
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Zhongqian Sun (Harbin Institute of Technology, P.R. China); Hongxun Yao (Harbin Institute of Technology, P.R. China); Shengping Zhang (Harbin Institute of Technology, P.R. China); Xin Sun (Harbin Institute of Technology, P.R. China)
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Robust Visual Tracking Via Ranking SVM

Yancheng Bai (National Lab of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, P.R. China); Ming Tang (Chinese Academy of Sciences, P.R. China)
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Vanishing Point-Based Line Sampling for Efficient Axis-Based People Localization

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Matilde Gonzalez (Université Paul Sabatier, France); Christophe Collet (Université Paul Sabatier, France)

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Bian Yang (Gjøvik University College, Norway); Christoph Busch (Gjøvik University College, Norway)

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Multi-view Multi-stance Gait Identification

Maodi Hu (Beihang University, P.R. China); Yunhong Wang (Beihang University, P.R. China); Zhaoxiang Zhang (Beihang University, P.R. China); De Zhang (Beihang University, P.R. China)

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Speed-Invariant Gait Recognition Based on Procrustes Shape Analysis Using Higher-Order Shape Configuration

Worapan Kusakunniran (University of New South Wales & National ICT Australia, Australia); Qiang Wu (University of Technology, Sydney, Australia); Jian Zhang (The University of New South Wales & NICTA, Australia); Hongdong Li (Australian National University, Australia)

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Jing-Ming Guo (National Taiwan University of Science and Technology, Taiwan); Hoang-Son Nguyen (National Taiwan University of Science and Technology, Taiwan)

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Jindan Zhou (University of Miami, USA); Steven Cadavid (University of Miami, USA); Mohamed Abdel-Mottaleb (University of Miami, USA)

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Idaku Ishii (Hiroshima University, Japan); Hiroki Ichida (Hiroshima University, Japan); Takeshi Takaki (Hiroshima University, Japan)

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Richard Rojas-Bello (Universidad Autónoma de Madrid, Spain); Luis Lago-Fernández (Universidad Autónoma de Madrid, Spain); Gonzalo Martínez-Muñoz (Universidad Autónoma de Madrid, Spain); Manuel Sánchez-Montañés (Universidad Autónoma de Madrid, Spain)

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Yixiong Liang (Central South University, P.R. China); Lingbo Liu (Central South University, P.R. China); Ying Xu (Central South University, P.R. China); Yao Xiang (Central South University, P.R. China); Beiji Zou (Central South University, P.R. China)

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Boris Efraty (University of Houston, USA); Manos Papadakis (TLC2, USA); Adam Profitt (TLC2, USA); Shishir Shah (University of Houston, USA); Ioannis Kakadiaris (University of Houston, USA)
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Meltem Demirkus (McGill University, Canada); Boris N Oreshkin (McGill University, Canada); James Clark (McGill University, Canada); Tal Arbel (McGill, Canada)
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Newton Optimization Based Congealing for Facial Image Alignment

Weiyuan Ni (Grenoble University, France); Alice Caplier (Institut National Polytechnique de Grenoble, France)
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MP.L1: Compression of High-Dimensional Media Data for Interactive Navigation (Special Session)

Efficient Communication of Video Using Metadata

Aous T. Naman (University of New South Wales, Australia); Duncan Edwards (University of New South Wales, Australia); David Taubman (University of New South Wales, Australia)
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Mapping Data on a Rotated Grid in High-dimensions for Lossless Compression

Zihong Fan (University of Southern California, USA); Antonio Ortega (USC, USA)
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Interactive Multiview Video System with Low Decoding Complexity

Thomas Maugey (Ecole Polytechnique Fédérale de Lausanne, Switzerland); Pascal Frossard (Swiss Federal Institute of Technology - EPFL, Switzerland)
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Xiaoyu Xiu (Simon Fraser University, Canada); Gene Cheung (National Institute of Informatics, Japan); Jie Liang (Simon Fraser University, Canada)
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Using Distributed Source Coding and Depth Image Based Rendering to Improve Interactive Multiview Video Access

Giovanni Petrazzuoli (Télécom ParisTech, France); Marco Cagnazzo (TELECOM ParisTech, France); Frederic Dufaux (Telecom Paristech & CNRS, France); Beatrice Pesquet-Popescu (Télécom ParisTech, France)
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Andriy Gelman (Imperial College London, United Kingdom); Pier Luigi Dragotti (Imperial College London, United Kingdom); Vladan Velisavljević (University of Bedfordshire, United Kingdom)
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A Trellis-based Approach for Robust View Synthesis

Dong Tian (Mitsubishi Electric Research Labs, USA); Anthony Vetro (Mitsubishi Electric Research Laboratories, USA); Matthew Brand (MERL, USA)
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Adaptive pixel/patch-based Synthesis for Texture Compression

Fabien Racape (Technicolor Research & Innovation & Institut Electronique Telecommunications de Rennes, France); Simon Lefort (Technicolor Research & Innovation, France); Edouard Francois (Technicolor, France); Marie Babel (IETR / INSA Rennes, France); Olivier Deforges (IETR / INSA Rennes, France)
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MP.L2: Image & Video Sensing (Lecture)

Single Image Local Blur Identification

Pauline Trouvé (Onera & DGA, France); Frédéric Champagnat (ONERA, France); Guy Le Besnerais (ONERA, France); Jérôme Idier (IRCCyN, France)
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Lens Distortion Correction with a Calibration Harp

Rafael Grompone von Gioi (CMLA, ENS-Cachan, France); Pascal Monasse (IMAGINE, LIGM-Universite Paris Est, France); Jean-Michel Morel (CMLA, ENS-Cachan, France); Zhongwei Tang (CMLA, ENS-Cachan, France)
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Effective Autofocus Decision Using Reciprocal Focus Profile

Dong-Chen Tsai (National Taiwan University, Taiwan); Homer Chen (National Taiwan University, Taiwan)
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Automatic Video Deshearing for Skew Sequences Captured by Rolling Shutter Cameras

Dũng Trung Võ (Samsung Information Systems America (Samsung Electronics US R&D Center), USA); Surapong Lertrattanapanich (Digital Media Solutions Lab, Samsung Electronics US R&D Center, USA); Yeong-Taeg Kim (Samsung SISA, USA)
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Robust Video Stabilization Approach Based on a Voting Strategy

Giovanni Puglisi (University of Catania, Italy); Sebastiano Battiato (University of Catania, Italy)
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An Auto-Focus Sharpness Function for Stereo Image Pairs

Mohammad Rahman (University of Texas at Dallas, USA); Nasser Kehtarnavaz (University of Texas at Dallas, USA); Siamak Yousefi (University of Texas at Dallas, USA)

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Calibration of Central Catadioptric Camera with One-Dimensional Object Undertaking General Motions

Xiaoming Deng (Institute of Software, Chinese Academy of Sciences, P.R. China); Fuchao Wu (NLPR, P.R. China); Yihong Wu (Chinese Academy of Sciences, P.R. China); Liang Chang (Beijing Normal University, P.R. China); Wei Liu (ISCAS, P.R. China); Hongan Wang (Chinese Academy of Sciences, P.R. China)

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Paracatadioptric Camera Calibration Using Sphere Images

Huixian Duan (Chinese Academy of Sciences, P.R. China); Yihong Wu (Chinese Academy of Sciences, P.R. China)

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MP.L3: Saliency and Object Recognition (Lecture)

Visual Saliency Detection Based on Bayesian Model

Yulin Xie (Dalian University of Technology, P.R. China); Huchuan Lu (Dalian University of Technology, P.R. China)

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High Resolution Biologically Inspired Salient Region Detection

Yusuf Saber (Ryerson University, Canada); Matthew J Kyan (Ryerson University, Canada)

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Simultaneous Detection and Segmentation for Generic Objects

Albert Torrent (University of Girona, Spain); Xavier Lladó (University of Girona, Spain); Jordi Freixenet (University of Girona, USA); Antonio Torralba (Massachusetts Institute of Technology, USA)

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Sparse Representation Based Visual Element Analysis

Xue Li (Harbin Institute of Technology, P.R. China); Hongxun Yao (Harbin Institute of Technology, P.R. China); Xiaoshuai Sun (Harbin Institute of Technology, P.R. China); Rongrong Ji (Columbia University, P.R. China); Xianming Liu (Harbin Institute of Technology, P.R. China); Pengfei Xu (Harbin Institute of Technology, P.R. China)

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Spatial Coordinate Coding to Reduce Histogram Representations, Dominant Angle and Colour Pyramid Match

Piotr Koniusz (University of Surrey, United Kingdom); Krystian Mikolajczyk (University of Surrey, United Kingdom)

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Multivariate log-Gaussian Cox Models of Elementary Shapes for Recognizing Natural Scene Categories

Huu-Giao Nguyen (Institut Telecom / Telecom Bretagne / Labsticc, France)
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Improving Image Similarity with Vectors of Locally Aggregated Tensors

David Picard (ETIS - ENSEA, France); Philippe H Gosselin (CNRS, ENSEA, UniversityCergy-Pontoise, France)
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Recognizing 3D Objects in Cluttered Scenes Using Projection Images

Dimitrios Zarpalas (Informatics and Telematics Institute, Greece); Georgios Kordelas (Informatics and Telematics Institute, Greece); Petros Daras (Informatics & Telematics Institute, Greece)
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Stanley Chan (University of California, San Diego, USA); Truong Nguyen (University of California in San Diego, USA)
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Patch-based Image Deconvolution Via Joint Modeling of Sparse Priors

Chao Jia (The University of Texas at Austin, USA); Brian L Evans (The University of Texas at Austin, USA)
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Variational Image Restoration Based on Poisson Singular Integral and Curvelet-Type Decomposition Space Regularization

Lili Huang (Nanjing University of Science and Technology, P.R. China); Liang Xiao (Nanjing University of Science and Technology, P.R. China); Zhihui Wei (Nanjing University of Science and Technology, P.R. China); Zhengrong Zhang (Nanjing University of Science and Technology, P.R. China)
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Two Constrained Formulations for Deblurring Poisson Noisy Images

Mikael Carlván (INRIA, France); Laure Blanc-Féraud (CNRS, France)
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A Convex Minimization Model in Image Restoration Via One-Dimensional Sobolev Norm Profiles

Yunho Kim (University of California Irvine, USA); John Garnett (University of California Los Angeles, USA); Luminita Vese (University of California, Los Angeles, USA)
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Matthew A. Kitchener (University of Wollongong, Australia); Abdesselam Bouzerdoum (University of Wollongong, Australia); Son Lam Phung (University of Wollongong, Australia)
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A New Image Deblurring Algorithm with Less Ringing Artifacts Via Error Variance Estimation and Soft Decision

Ruiqin Xiong (Peking University, P.R. China)
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A Second-order Extension of TV Regularization for Image Deblurring

Zafer Dogan (Ecole Polytechnique Federale de Lausanne, Switzerland); Stamatios Lefkimmiatis (Ecole Polytechnique Federale de Lausanne, Switzerland); Aurélien Bourquard (Ecole Polytechnique Federale de Lausanne, Switzerland); Michael Unser (EPFL, Switzerland)
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MP.L6: Biomedical Image Shape Segmentation (Lecture)

Learning-Based Non-Rigid Image Registration Using Prior Joint Intensity Distributions with Graph-Cuts

Ronald W. K. So (Hong Kong University of Science and Technology, Hong Kong); Albert C. S. Chung (The Hong Kong University of Science and Technology, Hong Kong)
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A Probabilistic Framework for Automatic Prostate Segmentation with a Statistical Model of Shape and Appearance

Soumya Ghose (Université de Bourgogne & Universitat de Girona, France); Arnau Oliver (University of Girona, Spain); Robert Martí (University of Girona, Spain); Xavier Lladó (University of Girona, Spain); Jordi Freixenet (University of Girona, USA); Joan Vilanova (Clinica Girona, Spain); Fabrice Meriaudeau (University of Bourgogne, France)
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A New Shape Based Segmentation Framework Using Statistical and Variational Methods

Melih Aslan (CVIP Lab, University of Louisville, USA); Hossam Abdelmunim (Faculty of Engineering, Ain Shams University, ?); Aly Farag (University of Louisville, USA); Ben Arnold (Image Analysis, Inc., USA); Eslam Mostafa (University of Louisville, USA); Ping Xiang (Image Analysis, Inc., USA)
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Segmenting Human Knee Cartilage Automatically From Multi-contrast MR Images Using Support Vector Machines and Discriminative Random Fields

Kunlei Zhang (Nanyang Technological University, Singapore); Jun Deng (Nanyang Technological University, Singapore); Lu Wenmiao (Nanyang Technological University, Singapore)
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A Fuzzy Framework with Prior Information Unifying Registration, Segmentation, and Bias Field Correction of Brain MRI

Moumen El-Melegy (Assiut University, Egypt); Aly Farag (University of Louisville, USA)
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Elastic Shape Registration Using an Incremental Free Form Deformation Approach with the ICP Algorithm

Hossam Abdelmunim (Faculty of Engineering, Ain Shams University, ?); Aly Farag (University of Louisville, USA)
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MP.L7: Reduced-Complexity Video Coding (Lecture)

HEVC ALF Decode Complexity Analysis and Reduction

Madhukar Budagavi (Texas Instruments, USA); Vivienne Sze (Texas Instruments, USA); Minhua Zhou (Texas Instruments, USA)
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Low Complexity Deblocking Filter Perceptual Optimization for the HEVC Codec

Matteo Naccari (British Broadcasting Corporation - Research and Development, United Kingdom); Catarina Brites (IST - IT, Portugal); Joao Ascenso (ISEL & IT, Portugal); Fernando Pereira (IST-IT, Portugal)
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Complexity-Aware Adaptive Spatial Pre-Processing for Roi Scalable Video Coding with Dynamic Transition Region

Dan Grois (Ben-Gurion University of the Negev, Israel); Ofer Hadar (Ben-Gurion University of the Negev, Israel)
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Video Compression Complexity Reduction with Adaptive Down-Sampling

Diogo Garcia (Universidade de Brasília, Brazil); Tiago da Fonseca (Universidade de Brasília, Brazil); Ricardo L de Queiroz (University of Brasil, Brazil)
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A Multi-Level Dynamic Complexity Reduction Scheme for Multiview Video Coding

Bruno Zatt (Federal University of Rio Grande do Sul, Brazil); Muhammad Shafique (Karlsruhe Institute of Technology (KIT), Germany); Sergio Bampi (Federal University of Rio Grande do Sul & Microelectronics Group at UFRGS, Brazil); Jörg Henkel (Universität karlsruhe (TH), Germany)

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Reduced-complexity Entropy Coding of Transform Coefficient Levels Using Truncated Golomb-Rice Codes in Video Compression

Tung Nguyen (Fraunhofer HHI, Germany); Detlev Marpe (Fraunhofer Institute for Telecommunications - Heinrich Hertz Institute, Germany); Heiko Schwarz (Fraunhofer HHI, Germany); Thomas Wiegand (Fraunhofer Institute for Telecommunications - Heinrich-Hertz-Institute, Germany)

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Frame Buffer Compression for Low-power Video Coding

Zhan Ma (Samsung Telecommunications America, USA); Andrew Segall (Sharp Labs, USA)

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MP.L8: Face Recognition (Lecture)

Locality-constrained Group Sparse Representation for Robust Face Recognition

Yu-Wei Chao (Academia Sinica, Taiwan); Yi-Ren Yeh (Research Center for Information Technology Innovation, Academia Sinica, Taipei, Taiwan); Yu-Wen Chen (National Taiwan University, Taiwan); Yuh-Jye Lee (National Taiwan University of Science and Technology, Taiwan); Yu-Chiang Frank Wang (Academia Sinica, Taiwan)

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Face Recognition Using Multi-Scale Local Phase Quantisation and Linear Regression Classifier

Muhammad Atif Tahir (University of Surrey & University of Northumbria, United Kingdom); C. H. Chan (University of Surrey, United Kingdom); Josef Kittler (University of Surrey, United Kingdom); Ahmed Bouridane (Northumbria University, United Kingdom)

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MAP-MRF Based Lip Segmentation Without True Segment Number

Yiu-ming Cheung (Hong Kong Baptist University, Hong Kong); Meng Li (Hong Kong Baptist University, Hong Kong)

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3D Facial Expression Recognition Using Zernike Moments on Depth Images

Nicholas Vretos (Aristotle University of Thessaloniki, Greece); Nikos Nikolaidis (Aristotle University of Thessaloniki & Informatics and Telematics Institute, CERTH, Greece); Ioannis Pitas (Aristotle University of Thessaloniki, Greece)

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Illumination Robust Dictionary-based Face Recognition

Vishal Patel (University of Maryland, USA); Tao Wu (University of Maryland, USA); Soma Biswas (University of Notre Dame, USA); P. Jonathon Phillips (NIST, USA); Rama Chellappa (University of Maryland, USA)

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Face Tracking in Low Resolution Videos Under Illumination Variations

Wilman W.W. Zou (Hong Kong Baptist University, Hong Kong); Rama Chellappa (University of Maryland, USA); Pong C Yuen (Hong Kong Baptist University, Hong Kong)
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Color HOG-EBGM for Face Recognition

David Monzo (Universidad Politecnica de Valencia, Spain); Alberto Albiol (Universidad Politecnica de Valencia, Spain); Antonio Albiol (Universidad Politecnica Valencia, Spain); Jose M. Mossi (Polytechnic University of Valencia, Spain)
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Feature Selection Via Simultaneous Sparse Approximation for Person Specific Face Verification

Yixiong Liang (Central South University, P.R. China); Lei Wang (Central South University, P.R. China); Shenghui Liao (Central South University, P.R. China); Beiji Zou (Central South University, P.R. China)
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MP.PA: Geometry Texture and Object-based Representation (Poster)

Tensor-Directed Simulation of Strokes for Image Stylization with Hatching and Contours

David Tschumperlé (Laboratoire GREYC (CNRS UMR 6072) & Equipe Image, France)
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Pattern Recognition by Affine Legendre Moment Invariants

Hui Zhang (University of Windsor, Canada); Jonathan Wu (University of Windsor, Canada)
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Spatioqram Features to Characterize Pearls in Paintings

Ljiljana Platiša (Ghent University, Belgium); Bruno Cornelis (Vrije Universiteit Brussel, Belgium); Tijana Ružic (Ghent University, Belgium); Aleksandra Pižurica (Ghent University, Belgium); Ann Doods (Vrije Universiteit Brussel, Belgium); Maximiliaan Martens (Ghent University, Belgium); Marc De Mey (The Flemish Academic Centre for Science and the Arts, Belgium); Ingrid Daubechies (Princeton University, USA)
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MPL-Boosted Integrable Features Pool for Pedestrian Detection

Junqiang Wang (Beijing University of Posts and Telecommunications, P.R. China); Huadong Ma (Beijing University of Posts and Telecommunications, P.R. China)
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A Combined Texture-Shape Descriptor for Enhanced 3D Feature Matching

Federico Tombari (University of Bologna, Italy); Samuele Salti (University of Bologna, Italy); Luigi Di Stefano (Universita' di Bologna, Italy)
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Moving Object Selection Based on an Active Curve Approach

Marwen Nouri (University of Paris Descartes & Alcatel-Lucent Bell Labs France, France); Emmanuel Marilly (Alcatel Lucent Bell Labs France, France); Nicole Vincent (Université Paris 5, France)
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Image Analysis Using Separable Two-Dimensional Discrete Orthogonal Moments

Hongqing Zhu (East China University of Science and Technology, P.R. China)
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Ensemble of Furthest Subspace Pairs for Enhanced Image Set Matching

Mehrtash T. Harandi (NICTA & University of Queensland, Australia); Conrad Sanderson (NICTA, Australia); Abbas Bigdeli (National ICT Australia, Australia); Brian C Lovell (NICTA, Australia)
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From Universal Bag-of-Words to Adaptive Bag-of-Phrases for Mobile Scene Recognition

Tao Chen (Nanyang Technological University, Singapore); Kim Hui Yap (Nanyang Technological University, Singapore); Lap-Pui Chau (Nanyang Technological University, Singapore)
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Generic Polar Harmonic Transforms for Invariant Image Description

Thai V. Hoang (LORIA, Université Nancy 2, France); Salvatore Tabbone (University Nancy 2, France)
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Combining Sorted Random Features for Texture Classification

Li Liu (National University of Defense Technology, P.R. China); Paul Fieguth (University of Waterloo, Canada); Gangyao Kuang (National University of Defense Technology, P.R. China)
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LSP: Local Similarity Pattern, a New Approach for Rotation Invariant Noisy Texture Analysis

Hamid Reza Pourreza (Ferdowsi University of Mashad, Iran); Mina Masoudifar (Sabzevar Tarbiat Moallem University, Iran); MohammadMahdi ManafZade (Ferdowsi University, Iran)
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Local Binary Pattern Histogram Based Texton Learning for Texture Classification

Yonggang He (Huazhong University of Science and Technology, P.R. China); Nong Sang (Huazhong University of Science and Technology, P.R. China); Rui Huang (Huazhong University of Science and Technology, P.R. China)
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Fast Facial Landmark Detection Using Cascade Classifiers and a Simple 3D Model

Ang Liu (Peking University, P.R. China); Yangzhou Du (Intel China Research Center, P.R. China); Tao Wang (Intel China Research Center, P.R. China); Jianguo Li (Intel China Research Center, Beijing, P.R. China); Eric Li (Intel China Research Centre, Intel Corp., P.R. China); Yimin Zhang (Intel China Research Center, Canada); Yong Zhao (Peking University, P.R. China)
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Amir Said (Hewlett Packard Laboratories, USA)

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Carlos Ricolfe-Viala (Universidad Politecnica Valencia, Spain); Antonio-Jose Sanchez-Salmeron (Universidad Politecnica Valencia, Spain)

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Zhang's One-Dimensional Calibration Revisited with the Heteroscedastic Error-In-Variables Model

Liang Wang (Beijing University of Technology, P.R. China)

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Kambiz Rahbar (Young Researchers Club, Islamic Azad University, Tehran Center, Iran); Karim Faez (Amirkabir University of Technology, Iran)

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Semi-Automatic 2D to 3D Image Conversion Using Scale-Space Random Walks and a Graph Cuts Based Depth Prior

Raymond Phan (Ryerson University, Canada); Richard J Rzeszutek (Ryerson University, Canada); Dimitri Androustos (Ryerson University, Canada)

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Zhaoyin Jia (Cornell University, USA); Yao-Jen Chang (Cornell University, USA); Tzung-Han Lin (Industrial Technology Research Institute, Taiwan); Tsuhan Chen (Cornell University, USA)

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Sungho Suh (Seoul National University, Korea); Minsik Lee (Seoul National University, Korea); Chong-Ho Choi (Seoul National University, Korea)

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Yannick Verdié (INRIA, France); Florent Lafarge (INRIA, France); Josiane Zerubia (INRIA, Sophia Antipolis, France)

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Patch-Sweeping with Robust Prior for High Precision Depth Estimation in Real-Time Systems

Wolfgang Waizenegger (Fraunhofer Heinrich-Hertz-Institut, Germany); Nicole Atzpadin (Fraunhofer Heinrich-Hertz-Institut, Germany); Oliver Schreer (Fraunhofer Heinrich-Hertz-Institut, Germany); Ingo Feldmann (Fraunhofer Heinrich-Hertz-Institut, Germany)

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Marker-less Human Pose Estimation and Surface Reconstruction Using a Segmented Model

Weilan Luo (University of Tokyo, Japan); Toshihiko Yamasaki (The University of Tokyo, Japan); Kiyoharu Aizawa (University of Tokyo, Japan)
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A Dynamic Approach for Approximate Pairwise Alignment Based on 4-Points Congruence Sets of 3D Points

Juarez Silva Junior (University of Brasilia, Brazil); Dibio L Borges (University of Brasilia, Brazil); Flavio Vidal (University of Brasilia, Brazil)
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Implicit B-Spline Fitting Using the 3L Algorithm

Mohammad Rouhani (Computer Vision Center, Spain); Angel D. Sappa (Computer Vision Center, Spain)
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Norihiko Kawai (University of California at Berkeley, USA); Avideh Zakhor (University of California at Berkeley, USA); Tomokazu Sato (Nara Institute of Science and Technology, Japan); Naokazu Yokoya (Nara Institute of Science and Technology, Japan)
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Moritz Kaiser (Technical University of Munich, Germany); Nicolas H. Lehment (Technische Universität München, Germany); Gerhard Rigoll (Technische Universität München, Germany)
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Visual Pertinent 2D-to-3D Video Conversion by Multi-cue Fusion

Zhebin Zhang (Institute of Computing Technologies, Chinese Academy of Science, P.R. China); Yizhou Wang (Peking University, P.R. China); Tingting Jiang (Peking University, P.R. China); Wen Gao (Peking University, P.R. China)
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QoE-driven Resource Optimization for User Generated Video Content in Next Generation Mobile Networks

Ali El Essaili (Munich University of Technology, Germany); Eckehard Steinbach (Munich University of Technology, Germany); Daniele Munaretto (University of Padova, Italy); Srisakul Thakolsri (DoCoMo Euro-Labs, Germany); Wolfgang Kellerer (DOCOMO Communications Laboratories Europe, Germany)

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Secure Transcoding for Compressive Multimedia Sensing

Li-Wei Kang (Academia Sinica, Taiwan); Chih-Yang Lin (Asia University, Taiwan); Hung-Wei Chen (Academia Sinica, Taiwan); Chia-Mu Yu (Academia Sinica and National Taiwan University, Taiwan); Chun-Shien Lu (Institute of Information Science, Academia Sinica, Taiwan); Chao-yung Hsu (Academia Sinica, Taiwan); Soo-Chang Pei (National Taiwan University, Taiwan)

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Scalable Compressive Video

Vladimir Stankovic (University of Strathclyde, United Kingdom); Lina Stankovic (University of Strathclyde, United Kingdom); Samuel Cheng (University of Oklahoma, USA)

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Synchronization of Presentation Slides and Lecture Videos Using Bit Rate Sequences

Georg Schroth (Technische Universität München, Germany); Ngai-Man Cheung (Stanford University, USA); Eckehard Steinbach (Munich University of Technology, Germany); Bernd Girod (Stanford University, USA)

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Jin Young Lee (Samsung Electronics Co., Ltd., Korea); Jaejoon Lee (Samsung Electronics, Korea); Dusik Park (Advanced Media Lab, SAIT, Samsung Electronics, Korea)

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Capacity Improvement in eMBMS Using SVC and Layer-Aware Bearer Allocation

Cornelius Hellge (Fraunhofer Institute for Telecommunications - Heinrich-Hertz-Institute, Germany); Robert Skupin (Technische Universität Berlin & Fraunhofer Institute for Telecommunications, Heinrich-Hertz-Institut, Germany); Jaihyung Cho (ETRI, Korea); Thomas Schierl (Fraunhofer HHI, Germany); Thomas Wiegand (Fraunhofer Institute for Telecommunications - Heinrich-Hertz-Institute, Germany)

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Robust Video Transmission Using Pyramid Vector Quantisation

Syed Mohsin Matloob Bokhari (University of Bristol, United Kingdom); David Bull (University of Bristol, United Kingdom); Andrew Nix (University of Bristol, United Kingdom)

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An Improved Cross-layer Mapping Mechanism for Packet Video Delivery Over Wlan

Haidong Wang (Xi'an Jiaotong University, P.R. China); Guizhong Liu (Xi'an Jiaotong University, P.R. China); Qinli Wang (Xi'an Jiaotong University, P.R. China)

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Fairness and QoS Guaranteed User Scheduling for Multi-user MIMO Broadcasting Channel

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Performance of H.264 with Isolated Bit Error: Packet Decode or Discard?

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YouZhe Fan (The Hong Kong University of Science and Technology, Hong Kong); James She (University of Cambridge, United Kingdom); Cy Tsui (HKUST, Hong Kong)
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Ronaldo Husemann (UNIVATES, Brazil); Valter Roesler (Federal University of Rio Grande do Sul (UFRGS), Brazil); Altamiro A Susin (Federal University of Rio Grande do Sul, Brazil)
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Spatial Prediction Based on Self-Similarity Compensation for 3D Holoscopic Image and Video Coding

Caroline Conti (Instituto de Telecomunicacoes, Portugal); João Lino (Instituto de Telecomunicações, Portugal); Paulo Nunes (ISCTE-IUL / Instituto de Telecomunicações, Portugal); Luis Ducla Soares (I.S.C.T.E. / I.T. - Lisbon, Portugal); Paulo Lobato Correia (Instituto Superior Tecnico - Universidade Tecnica Lisboa & Instituto de Telecomunicacoes, Portugal)
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Robust Color Correction in Stereo Vision

Qi Wang (Chinese Academy of Sciences, P.R. China); Pingkun Yan (Chinese Academy of Sciences, P.R. China); Yuan Yuan (Chinese Academy of Sciences, P.R. China); Xuelong Li (Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences, P.R. China)
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Accurate Depth Estimation Using Structured Light and Passive Stereo Disparity Estimation

Qiang Li (UNSW@ADFA, Australia); Moyuresh Biswas (University of New South Wales & Australian Defence Force Academy, Australia); Mark Pickering (UNSW@adfa, Australia); Michael R Frater (The University of New South Wales, Australia)
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Cryo-Balloon Reconstruction From Two Views

Andreas Kleinoeder (Friedrich-Alexander-University Erlangen-Nuremberg, Germany); Alexander Brost (Pattern Recognition Lab, Germany); Felix Bourier (Klinik fuer Herzrhythmusstoerungen, Germany); Martin Koch (Pattern Recognition Lab, Germany); Klaus Kurzidim (Klinik fuer Herzrhythmusstoerungen, Germany); Joachim Hornegger (University of Erlangen-Nuremberg, Germany); Norbert Strobel (Siemens AG, Germany)
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Image Rectification for Single Camera Stereo System

Lingfeng Xu (HKUST, Hong Kong); Oscar C. Au (HKUST, Hong Kong); Wenxiu Sun (HKUST, Hong Kong); Yujun Li (Hong Kong University of Science and Technology, Hong Kong); Sung Him Chui (HKUST, Hong Kong); Chun Wing Kwok (HKUST, Hong Kong)

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Stereoscopic Vision Through Epipolarization Without Orientation Parameters

José Herraéz (Politecnico University of Valencia, Spain); José Luis Denia (Politecnico University of Valencia, Spain); Pablo Navarro (Politecnico University of Valencia, Spain); Jaime Rodriguez (University of Santiago de Compostela, Spain); María Teresa Martin (University of Santiago de Compostela, Spain)

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Assisting System of Visually Impaired in Touch Panel Operation Using Stereo Camera

Atsushi Yamashita (Shizuoka University, Japan); So Kuno (Shizuoka University, Japan); Toru Kaneko (Shizuoka University, Japan)

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Effect of Brightness on the Quality of Visual 3D Perception

Mahsa T. Pourazad (TELUS Communications Company, Canada); Zicong Mai (University of British Columbia, Canada); Panos Nasiopoulos (University of British Columbia, Canada); Konstantinos N Plataniotis (University of Toronto, Canada); Rabab Ward (University of British Columbia, Canada)

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Exploiting Spatial Consistency for Object Classification and Pose Estimation

Michael Hödlmoser (Vienna University of Technology, Austria); Branislav Micusik (AIT Austrian Institute of Technology, Austria); Martin Kampel (Vienna University of Technology, Austria)

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Joint Multi-view Foreground Segmentation and 3D Reconstruction with Tolerance Loop

Jaime Gallego (Technical University of Catalonia (UPC), Spain); Jordi Salvador (Technical University of Catalonia (UPC), Spain); Josep R. Casas (Technical University of Catalonia & UPC BarcelonaTech, Spain); Montse Pardàs (Universitat Politècnica de Catalunya (UPC), Spain)

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David S Monaghan (Dublin City University (DCU), Ireland); Philip T Kelly (Dublin City University, Ireland); Noel. E. O'Connor (Dublin City University, Ireland)

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Yujun Li (Hong Kong University of Science and Technology, Hong Kong); Oscar C. Au (HKUST, Hong Kong); Lingfeng Xu (HKUST, Hong Kong); Wenxiu Sun (HKUST, Hong Kong); Sung Him Chui (HKUST, Hong Kong); Chun Wing Kwok (HKUST, Hong Kong)

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Two-View Geometry Estimation Using the Rodrigues Rotation Formula

Lorenzo Sorigi (Via Maiorise & CIRA, Italy)

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A New Fast Motion Estimation and Mode Decision Algorithm for H.264 Depth Maps Encoding in Free Viewpoint TV

Gianluca Cernigliaro (Universidad Politécnica de Madrid, Spain); Matteo Naccari (British Broadcasting Corporation - Research and Development, United Kingdom); Fernando Jaureguizar (Universidad Politécnica de Madrid, Spain); Julián Cabrera

(Universidad Politécnica de Madrid, Spain); Fernando Pereira (IST-IT, Portugal);
Narciso García (Universidad Politécnica de Madrid, Spain)
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Shriprakash Sinha (Tu Delft, The Netherlands); Gert J. ter Horst (UMCG,
Neuroimaging Center, The Netherlands)
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A Fast Component-Tree Algorithm for High Dynamic-Range Images and Second Generation Connectivity

Michael H.F. Wilkinson (University of Groningen, The Netherlands)
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Corner Detection on Hexagonal Pixel Based Images

Si Jing Liu (Hong Kong University of Science and Technology, Hong Kong); Sonya A
Coleman (University of Ulster, United Kingdom); Dermot Kerr (University of Ulster,
United Kingdom); Bryan W. Scotney (University of Ulster, United Kingdom); Bryan
Gardiner (University of Ulster, United Kingdom)
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A Novel Region-Based Active Contour Approach Relying on Local and Global Information

Wassima Aitfares (LAAS-CNRS, Université Paul Sabatier, France); Ariane Herbulot
(LAAS-CNRS & University of Toulouse, France); Michel Devy (LAAS-CNRS, France);
Houssine Bouyakhf (Université Mohammed V Agdal, Morocco); Fakhita Regragui
(Mohammed V Agdal University, Morocco)
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A Novel Feature Descriptor Based on the Shearlet Transform

William Robson Schwartz (University of Campinas, Brazil); Ricardo Dutra da Silva
(University of Campinas, Brazil); Larry S Davis (University of Maryland, USA); Helio
Pedrini (Institute of Computing, University of Campinas, Brazil)
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A Robust Parametric Active Contour Based on Fourier Descriptors

Tao Li (INRIA Rennes-Bretagne Atlantique & EPI LAGADIC, France); Alexandre
Krupa (INRIA Rennes-Bretagne Atlantique, France); Christophe Collewet (INRIA
Rennes-Bretagne Atlantique, France)
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A DAISY-like Compass Operator

Xiaojin Gong (Zhejiang University, P.R. China); Jilin Liu (Zhejiang University, P.R.
China)
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Ellipse Detection Using Sampling Constraints

Yi Tang (University at Buffalo, The State University of New York & Center of
Excellence for Document Analysis and Recognition, USA); Sargur Srihari (Cedar
Buffalo, USA)
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A Shape Contour Descriptor Based on Saliency Points

Glauco Pedrosa (Federal University of Uberlândia, Brazil); Celia Barcelos (Federal University of Uberlândia, Brazil); Marcos Batista (Federal University of Goiás, Brazil)
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Boosting Global Scene Classification Accuracy by Discriminative Region Localization

Thanh Duc Ngo (The Graduate University for Advanced Studies, Japan); Duy-Dinh Le (National Institute of Informatics, Japan); Shin'ichi Satoh (National Institute of Informatics, Japan)
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Color-based Lips Extraction Applied to Voice Activity Detection

Carlos Lopes (UFRGS, Brazil); Andre Gonçalves (UFRGS, Brazil); Jacob Scharcanski (UFRGS, Brazil); Claudio R Jung (Universidade Federal do Rio Grande do Sul, Brazil)
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High-performance ASIC Architecture for Hysteresis Thresholding and Component Feature Extraction in Limited-Resource Applications

Mayssaa Al Najjar (University of Louisiana at Lafayette, USA); Swetha Karlapudi (University of Louisiana at Lafayette, USA); Magdy Bayoumi (University of Louisiana, USA)
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Application of Complex Networks for Automatic Classification of Damaging Agents in Soybean Leaflets

Thiago Souza (Universidade Federal de Ouro Preto, Brazil); Eduardo Mapa (Prefeitura Municipal de Ouro Preto, Brazil); Kayran Santos (Universidade Federal de Ouro Preto, Brazil); David Menotti (Universidade Federal de Ouro Preto, Brazil)
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Free-Form Anisotropy: A New Method for Crack Detection on Pavement Surface Images

Tien Sy Nguyen (Vectra, France); Stéphane Begot (University Orleans, France); Florent Duculty (PRISME, University of Orleans, France); Manuel Avila (University of Orleans & PRISME Laboratory, France)
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Efficient Quantization of Color Sift for Image Classification

Xiao Zhou (Hefei Normal University, P.R. China); Cai-Zhi Zhu (National Institute of Informatics, Japan); Shin'ichi Satoh (National Institute of Informatics, Japan)
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Time-Variant Modeling for General Surface Appearance

Yi-Lei Chen (National Tsing Hua University, Taiwan); Chiou-Ting Hsu (National Tsing Hua University, Taiwan)
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Feature-preserving Thumbnail Generation Based on Graph Cuts

Seong-Gyun Jeong (Korea University, Korea); Chang-Su Kim (Korea University, Korea)
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Synthesis of Two-Dimensional Fractional Brownian Motion Via Circulant Embedding

Donny Danudirdjo (The University of Tokyo, Japan); Akira Hirose (The University of Tokyo, Japan)
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Bi-layer Inpainting for Novel View Synthesis

Hwasup Lim (Samsung Advanced Institute of Technology, Korea); Yong Sun Kim (Samsung Advanced Institute of Technology, Korea); Seungkyu Lee (Samsung Advanced Institute of Technology, Korea); Ouk Choi (Samsung Advanced Institute of Technology, Korea); James D. K. Kim (Samsung Advanced Institute of Technology, Korea); Changyeong Kim (Samsung Advanced Institute of Technology, Korea)
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Augmented Reality Mirror for Virtual Facial Alterations

Vlado Kitanovski (Queen Mary, University of London & Multimedia and Vision Lab, United Kingdom); Ebroul Izquierdo (Queen Mary, University of London, United Kingdom)
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2D/3D Virtual Face Modeling

SoonKee Chung (Korea Advanced Institute of Science and Technology, USA); Jean-Charles Bazin (KAIST, Korea); In-So Kweon (Korea Advanced Institute of Science and Technology (KAIST), Korea)
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Synthesizing for Face Recognition

Yuelong Li (Peking University, P.R. China); Jufu Feng (Peking University, P.R. China)
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Efficient Rendering Distortion Estimation for Depth Map Compression

Qiuwen Zhang (Shanghai University & School of Communication and Information Engineering, P.R. China); Ping An (School of Communication and Information Engineering, Shanghai University, P.R. China)
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On the Use of Hemispherical Harmonics for Modeling Images of Objects Under Unknown Distant Illumination

Shireen Elhabian (University of Louisville, USA); Ham Rara (University of Louisville, USA); Aly Farag (University of Louisville, USA)
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Aesthetic Enhancement of Landscape Photographs as Informed by Paintings Across Depth Layers

Xiaoyan Zhang (Nanyang Technological University, Singapore); Martin Constable (Nanyang Technological University, Singapore); Kap Chan (NTU, Singapore)
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Virtual Ads Insertion in Street Building Views for Augmented Reality

Yu Huang (Huawei Technologies, USA); Qiang Hao (Western Virginia University, USA); Heather Yu (Huawei Technologies (USA), USA)

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Color Style Transfer by Constraint Locally Linear Embedding

Kun Zeng (Sun Yat-Sen University, P.R. China); Liang Lin (Sun Yat-Sen University, P.R. China)

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Face Sketch-Photo Synthesis Based on Support Vector Regression

Jiewei Zhang (Xidian University, P.R. China); Nannan Wang (Xidian University, P.R. China); Xinbo Gao (Xidian University, P.R. China); Dacheng Tao (University of Technology, Sydney, Singapore); Xuelong Li (Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences, P.R. China)

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Efficient Face Hallucination by Using Shape and Texture Dependency

Aydin Akyol (Istanbul Technical University, Turkey); Muhittin Gökmen (Istanbul Technical University & Faculty of Computer and Informatics, Turkey)

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Adaptive KPCA-Based Missing Texture Reconstruction Approach Including Classification Scheme Via Difference Subspaces

Takahiro Ogawa (Hokkaido University, Japan); Miki Haseyama (Hokkaido University, Japan)

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MP.PG: Interpolation, Resizing and Super-resolution (Poster)

Isotropic Huber MRFs for Structure Super-Resolution

Youngjin Park (Seoul National University, Korea); Suk Yoo (Seoul National University, Korea)

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Single Image Super Resolution with High Resolution Dictionary

Guangwu Mu (Xidian University, P.R. China); Xinbo Gao (Xidian University, P.R. China); Kaibing Zhang (Xidian University, P.R. China); Xuelong Li (Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences, P.R. China); Dacheng Tao (University of Technology, Sydney, Singapore)

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Super-Resolution Interpolation with a Quasi Blur-Hypothesis

Takahiro Saito (Kanagawa University, Japan); Ken-ichi Ishikawa (Kanagawa University, Japan); Takashi Komatsu (Kanagawa University, Japan)

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Adaptive Incremental Video Super-Resolution with Temporal Consistency

Heng Su (Tsinghua University, P.R. China); Ying Wu (Northwestern University, USA); Jie Zhou (Tsinghua University, P.R. China)

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Superfast Superresolution

Filip Šroubek (Institute of Information Theory and Automation, Czech Republic); Jan Kamenický (Institute of Information Theory and Automation, Czech Republic); Peyman Milanfar (University of California, Santa Cruz, USA)

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Video Coding with Wavelet Image Size Reduction and Wavelet Super Resolution Reconstruction

Yasutaka Matsuo (NHK (Japan Broadcasting Corporation), Japan); Toshie Misu (NHK (Japan Broadcasting Corporation), Japan); Shinichi Sakaida (NHK, Japan); Yoshiaki Shishikui (NHK, Japan)
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Single Image Super Resolution Via Texture Constrained Sparse Representation

Haitao Yin (Hunan University, P.R. China); Shutao Li (Hunan University, P.R. China); Jianwen Hu (Hunan University, P.R. China)
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Fast Edge-Filtered Image Upsampling

Shantanu H Joshi (UCLA & UCLA, USA); Antonio Marquina (University of Valencia, Spain); Stan Osher (University of California Los Angeles, USA); Ivo Dinov (UCLA, USA); Arthur Toga (UCLA, USA); John Van Horn (UCLA, USA)
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A Structure-guided Conditional Sampling Model for Video Resolution Enhancement

Ying Liu (University of Waterloo, Canada); Alexander Wong (University of Waterloo, Canada); Paul Fieguth (University of Waterloo, Canada)
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Bayesian Frame Interpolation by Fusing Multiple Motion-compensated Prediction Frames

Hongbin Liu (Harbin Institute of Technology, P.R. China); Ruiqin Xiong (Peking University, P.R. China)
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Similarity Modulated Block Estimation for Image Interpolation

Jie Ren (Peking University, P.R. China); Jiaying Liu (Peking University, P.R. China); Wei Bai (Peking University, P.R. China); Zongming Guo (Peking University, P.R. China)
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Springs-based Simulation for Image Retargeting

Roberto Gallea (Università degli Studi di Palermo, Italy); Edoardo Ardizzone (University of Palermo, Italy); Roberto Pirrone (University of Palermo, Italy)
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Fast and High Quality Learning-based Super-Resolution Utilizing TV Regularization Method

Tomio Goto (Nagoya Institute of Technology, Japan); Shotaro Suzuki (Nagoya Institute of Technology, Japan); Satoshi Hirano (Nagoya Institute of Technology, Japan); Masaru Sakurai (Nagoya Institute of Technology, Japan); Truong Nguyen (University of California in San Diego, USA)
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A Hidden Markov Model-based Methodology for Intra-field Video Deinterlacing

Amin Behnad (University of Toronto, Canada); Konstantinos N Plataniotis (University of Toronto, Canada); Xiaolin Wu (McMaster University, Canada)
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Transform Domain Semi-Super Resolution

Edson Hung (Universidade de Brasilia, Brazil); Diogo Garcia (Universidade de Brasilia, Brazil); Ricardo L de Queiroz (University of Brasil, Brazil)
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Efficient Super-Resolution Driven by Saliency Selectivity

Nabil Sadaka (Arizona State University, USA); Lina Karam (Arizona State University, USA)
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Tuesday, September 13

TA.L1: Advances in Motion Representation for Video Coding (Special Session)

A Block-adaptive Skip Mode for Inter Prediction Based on Parametric Motion Models

Alexander Glantz (Technische Universität Berlin, Germany); Michael Tok (Technische Universität Berlin, Germany); Andreas Krutz (Technische Universität Berlin, Germany); Thomas Sikora (Technische Universität Berlin, Germany)
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Fast Encoding Algorithms for Geometry-Adaptive Block Partitioning

Philippe Bordes (Technicolor, France); Edouard Francois (Technicolor, France); Dominique Thoreau (Technicolor, France)
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Efficient Coding of Video Sequences by Non-Local In-Loop Denoising of Reference Frames

Eugen Wige (University of Erlangen-Nuremberg, Germany); Gilbert Yamine (University of Erlangen-Nuremberg, Germany); Peter Amon (Siemens, Germany); Andreas Hutter (Siemens Corporate Technology, Germany); Andre Kaup (University of Erlangen-Nuremberg, Germany)
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Generalized Interpolation for Motion Compensated Prediction

Haricharan Lakshman (Fraunhofer HHI, Germany); Heiko Schwarz (Fraunhofer HHI, Germany); Thierry Blu (CUHK, Hong Kong); Thomas Wiegand (HHI/FhG, Germany)
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Picture-level Parametric Motion Representation for Efficient Motion Compensation

Jaewon Sung (LG Electronics, Korea); Seung-Wook Park (LG Electronics, Korea); Joonyoung Park (LG Electronics, Korea); Byeong-Moon Jeon (LG Electronics, Korea)
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Bi-prediction Combining Template and Block Motion Compensations

Chung-Lin Lee (National Chiao Tung University, Taiwan); Chun-Chi Chen (National Chiao Tung University, Taiwan); Yi-Wen Chen (National Chiao-Tung University,

Taiwan); Mu-Hsuan Wu (National Chiao Tung University, Taiwan); Chung-Hao Wu (National Chiao Tung University, Taiwan)
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TA.L2: Sparse Representation and Sparse Coding (Lecture)

Learning Complex Image Patterns with Scale and Shift Invariant Sparse Coding

Xiaobing Liu (Tsinghua University, P.R. China); Bo Zhang (Tsinghua University, P.R. China)

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On Sparse Representations of Color Images

Xiaolin Wu (McMaster University, Canada); Guangtao Zhai (McMasster University, Canada)

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Hyperspectral Image Classification Via Kernel Sparse Representation

Yi Chen (Johns Hopkins University, USA); Nasser Nasrabadi (US Army Research Laboratory, USA); Trac D. Tran (Johns Hopkins University, USA)

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Improved Sparse Coding Using Manifold Projections

Karthikeyan Natesan Ramamurthy (Arizona State University, USA); Jayaraman Thiagarajan (Arizona State University, USA); Andreas Spanias (ASU / SenSIP Center / School of ECEE, USA)

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Learning Invariant Color Features with Sparse Topographic Restricted Boltzmann Machines

Hanlin Goh (Institute for Infocomm Research & Université Pierre et Marie Curie, Singapore); Łukasz Kuśmierz (Institute for Infocomm Research, Singapore); Joo-Hwee Lim (Institute for Infocomm Research, Singapore); Nicolas Thome (University Pierre et Marie Curie, France); Matthieu Cord (UPMC Paris 6, France)

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Learning Dictionary Via Subspace Segmentation for Sparse Representation

Jianzhou Feng (Shanghai Jiao Tong University, P.R. China); Li Song (Shanghai Jiao Tong University, P.R. China); Xiaokang Yang (Shanghai Jiao Tong University, P.R. China); WenJun Zhang (Shanghai JiaoTong University, P.R. China)

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Lei Huang (Institute of Computing Technology, Chinese Academy of Sciences & Graduate University of Chinese Academy of Sciences, P.R. China); Tian Xia (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Yongdong Zhang (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Shou-Xun Lin (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China)
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Aymen Kammoun (I3S-CNRS-University of Nice Sophia Antipolis, France); Frédéric Payan (I3S-CNRS-University of Nice Sophia Antipolis, France); Marc Antonini (I3S-CNRS-University of Nice Sophia Antipolis, France)
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Sílvia Cristina Dias Pinto (University of Sao Paulo, Brazil); Jesús P. Mena-Chalco (University of Sao Paulo & Institute of Mathematics and Statistics, Brazil); Fabrício Martins Lopes (Federal University of Technology - Parana & UTFPR, Brazil); Luiz Velho (IMPA, Brazil); Roberto Cesar Junior (University of São Paulo, Brazil)
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Haichao Zhang (Northwestern Polytechnical University & University of Illinois at Urbana-Champaign, USA); Jianchao Yang (UIUC, USA); Yanning Zhang (Northwestern Polytechnical University, P.R. China); Thomas S Huang (University of Illinois at Urbana-Champaign, USA)

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Mohamed M. Fouad (Military Technical College, Egypt); Richard Dansereau (Carleton University, Canada); Anthony Whitehead (Carleton University, Canada)

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Mahmoud Ghoniem (Université de Caen Basse-Normandie, France); Abderrahim Elmoataz (Université de Caen Basse-Normandie, France); Olivier Lezoray (Université de Caen Basse-Normandie & Greyc UMR CNRS 6072, France)

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Sandrine Anthoine (Université Aix-Marseille, LATP, CNRS, France); Jean Francois Aujol (Université Bordeaux 1, IMB, France); Yannick Boursier (Aix Marseille University & CPPM, CNRS/IN2P3, France); Clothilde Mélot (Aix Marseille University, LATP / CNRS, France)

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Caifang Cai (Commissariat a Energie Atomique, France); Ali Mohammad-Djafari (Centre national de la recherche scientifique (CNRS), France); Samuel Legoupil

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Jun Feng (Sichuan University, Chengdu University of Technology, P.R. China); Jian-Zhou Zhang (Sichuan University, P.R. China)
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Elena Gil-Rodrigo (Consejo Superior de Investigaciones Científicas, Spain); Javier Portilla (Consejo Superior de Investigaciones Científicas, Spain); David Miraut (Universidad Rey Juan Carlos, Spain); Ricardo Suarez-Mesa (Universidad Rey Juan Carlos, Spain)
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Nejat Kamaci (Georgia Institute of Technology, USA); Ghassan AlRegib (Georgia Institute of Technology, USA)
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Jacinto C. Nascimento (Instituto de Sistemas e Robotica, Portugal); Jorge S. Marques (Instituto Superior Técnico & Instituto de Sistemas e Robotica, Portugal); João Lemos (Instituto Superior Técnico, Portugal)
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Xinting Gao (Institute for Infocomm Research, Singapore); Huiqi Li (Institute for Infocomm Research (I2R), Singapore); Joo-Hwee Lim (Institute for Infocomm Research, Singapore); Tien Yin Wong (Singapore Eye Research Centre, Singapore)
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Apostolos Axenopoulos (University of Thessaly, Department of Computer & Communication Engineering & Informatics & Telematics Institute, Greece); Petros Daras (Informatics & Telematics Institute, Greece); Georgios Papadopoulos (University of Thessaly - Department of Biochemistry & Biotechnology, Greece); Elias Houstis (University of Thessaly, Department of Computer & Communication Engineering, Greece)
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Ananda Chowdhury (Jadavpur University, India); Joseph Burns (University of California, Irvine, USA); Bhaskar Sen (Jadavpur University, India); Arka Mukherjee (Jadavpur University, India); Jianhua Yao (National Institutes of Health, USA); Ronald Summers (National Institutes of Health, USA)
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Maxine Tan (Vrije Universiteit Brussel, Belgium); Rudi Deklerck (VUB-ETRO, Belgium); An Tassenoy (Universitair Ziekenhuis Brussel (UZ Brussel), Belgium); Jan P.H. Cornelis (Vrije Universiteit Brussel, Belgium); Johan de Mey (Universitair Ziekenhuis Brussel (UZ Brussel), Belgium); Nico Buls (Universitair Ziekenhuis Brussel (UZ Brussel), Belgium)

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Anders Eklund (Linköping University, Sweden); Ola Friman (Fraunhofer MeVis, Germany); Mats Andersson (Linköping University, Sweden); Hans Knutsson (Linköping University, Sweden)

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Jan Veerman (Philips Research, The Netherlands); Octavian Soldea (Philips Research, The Netherlands); Pratik Sahindrakar (Philips Research, The Netherlands); Yijun Wan (Eindhoven University of Technology, The Netherlands); Radu Jasinschi (Philips Research, The Netherlands)

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Nikolay Metodiev Sirakov (Texas A&M University-Commerce, USA); Mutlu Mete (Texas A&M University-Commerce, USA); Nara Chakrader (Texas A&M University-Commerce, USA)

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Atsushi Yaguchi (Tokyo University of Science, Japan); Takumi Kobayashi (National Institute of Advanced Industrial Science and Technology, Japan); Kenji Watanabe (National Institute of Advanced Industrial Science and Technology, Japan); Kenji Iwata (National Institute of Advanced Industrial Science and Technology, Japan); Tadaaki Hosaka (Tokyo University of Science, Japan); Nobuyuki Otsu (National Institute of Advanced Industrial Science and Technology, Japan)

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Bálint Antal (University of Debrecen, Hungary); Andras Hajdu (University of Debrecen, Hungary)

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Livio Lima (University of Brescia, Italy); Massimo Mauro (University of Brescia, Italy); Tea Anselmo (STMicroelectronics, Italy); Daniele Alfonso (STMicroelectronics, Italy); Riccardo Leonardi (University of Brescia, Italy)

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Jiaying Liu (Peking University, P.R. China); Yongjin Cho (University of Southern California, USA); Zongming Guo (Peking University, P.R. China)
pp. 1641-1644

Intra-WZ Quantization Mismatch in Distributed Video Coding

Jürgen Slowack (Ghent University, Belgium); Jozef Skorupa (Ghent University - IBBT, Belgium); Peter Lambert (Ghent University - IBBT, Belgium); Rik Van de Walle (Ghent University - IBBT, Belgium); Nikos Deligiannis (Vrije Universiteit Brussel – IBBT, Belgium); Adrian Munteanu (Vrije Universiteit Brussel, Belgium)
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Segmentation-Based Motion Compensation for Enhanced Video Coding

Simone Milani (University of Padova, Italy); Giancarlo Calvagno (University of Padova, Italy)
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Visual Perception Based Lagrangian Rate Distortion Optimization for Video Coding

Xi Wang (Institute Of Computing Technology, Chinese Academy of Sciences, P.R. China); Li Su (Graduate School of Chinese Academy of Sciences, P.R. China); Qingming Huang (Graduate School of Chinese Academy of Sciences, P.R. China); Chunxi Liu (Graduate University of Chinese Academy of Sciences, CAS, P.R. China)
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SSIM-inspired Divisive Normalization for Perceptual Video Coding

Shiqi Wang (Institute of Digital Media, School of Electronic Engineering and Computer Science, Peking University & Department of Electrical and Computer Engineering, University of Waterloo, Canada); Abdul Rehman (University of Waterloo, Canada); Zhou Wang (University of Waterloo, Canada); Siwei Ma (University of Southern California, USA); Wen Gao (ICT-ISVISION Joint R&D Laboratory for Face Recognition, CAS, P.R. China)
pp. 1657-1660

Combining Open- and Closed-Loop Architectures for H.264/AVC-to-SVC Transcoding

Sebastiaan Van Leuven (Ghent University - IBBT, Belgium); Jan De Cock (Ghent University - IBBT, Belgium); Glenn Van Wallendael (Ghent University - IBBT, Belgium); Rik Van de Walle (Ghent University - IBBT, Belgium); Rosario Garrido-Cantos (University of Castilla-La Mancha, Spain); Jose Luis Martínez (Universidad Complutense de Madrid, Spain); Pedro Cuenca (University of Castill La Mancha, Spain)
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Adaptive Intra Modes Reduction by Clustering for H.264/AVC

Weijia Zhu (Beijing University of Technology, P.R. China); Wenpeng Ding (Beijing University of Technology, P.R. China); Yunhui Shi (Beijing University of Technology, P.R. China); Yanfeng Sun (Beijing University of Technology, P.R. China); Baocai Yin (Beijing University of Technology, P.R. China)
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Efficient P-frame Complexity Estimation for Frame Layer Rate Control of H.264/AVC

Kairan Sun (Fudan University, P.R. China); Bo Yan (Fudan University, P.R. China)
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Decoder Side True Motion Estimation for Very Low Bitrate B-frame Coding

Hasan F Ates (Isik University, Istanbul, Turkey); Burak Cizmeci (Technische Universitaet Muenchen, Germany)

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Motion Compensated Prediction Using Partial Mesh Generation

Han Huang (Beijing Jiaotong University, P.R. China); John W. Woods (Rensselaer Polytechnic Institute, USA); Yao Zhao (Beijing Jiaotong University, P.R. China)

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High Definition Video Intra-Only Coding Based on Node-Cell Macroblock Pixel Structure and 2-D Interleaved DCT

Dong Zheng (Communications Research Center, Canada); Demin Wang (Communications Research Center, Canada); Liang Zhang (Communications Research Centre Canada, Canada)

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Mode Dependent Dct/Dst for Intra Prediction in Block-Based Image/Video Coding

Ankur Saxena (Samsung Telecommunications America, USA); Felix Fernandes (Samsung Electronics Co., Ltd, USA)

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TA.PF: Color/Multispectral Imaging and Rendering (Poster)

Modeling and Application of Color Noise Perception Dependent on Background Color and Spatial Frequency

Makoto Shohara (Japan Advanced Institute of Science and Technology, Japan); Kazunori Kotani (JAIST, Japan)

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Compressive Demosaicing for Periodic Color Filter Arrays

Mohammad Aghagolzadeh (Michigan State University, USA); Abdolreza Abdolhosseini Moghadam (Michigan State University, USA); Mrityunjay Kumar (Eastman Kodak Company, USA); Hayder Radha (Michigan State University, USA)

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Color Distribution Matching Using a Weighted Subspace Descriptor

Kenjiro Sugimoto (Waseda University, Japan); Sei-ichiro Kamata (Waseda University, Japan)

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Ioannis Katramados (TRW Conekt, United Kingdom); Toby Breckon (Cranfield University, United Kingdom)

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Mohsen Ebrahimi Moghaddam (Shahid Beheshti University, Iran)

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Removing Shadows From Images Using Color and Near-infrared

Neda Salamati (EPFL, Switzerland); Arthur Germain (EPFL, Switzerland); Sabine Süsstrunk (EPFL, Switzerland)
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Xin Li (West Virginia University, USA)
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Electro-Photographic Model Based Stochastic Clustered-Dot Halftoning with Direct Binary Search

Puneet Goyal (Purdue University, USA); Madhur Gupta (Purdue University, USA); Carl Staelin (Hewlett-Packard Laboratories, Israel); Mani Fischer (Hewlett-Packard Laboratories, Israel); Omri Shacham (Hewlett-Packard Indigo, Israel); Tamar Kashti (Hewlett-Packard Indigo, Israel); Jan Allebach (Purdue University, USA)
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High Resolution Subpixel and Subframe Rendering for Color Flatpanel and Projector Displays

Keigo Hirakawa (University of Dayton, USA); Jing Gu (Kingway Technology Shanghai Ltd., P.R. China)
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Color Quantization Using C-Means Clustering Algorithms

M. Emre Celebi (Louisiana State University in Shreveport, USA); Quan Wen (University of Electronic Science and Technology of China, P.R. China); Juan Chen (University of Electronic Science and Technology of China, P.R. China)
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Design of Color Screen Sets for Robustness to Color Plane Misregistration

Jin-Young Kim (Purdue University, USA); Yung-Yao Chen (Purdue University, USA); Mani Fischer (Hewlett-Packard Laboratories, Israel); Omri Shacham (Hewlett-Packard Indigo, Israel); Carl Staelin (Hewlett-Packard Laboratories, Israel); Jan Allebach (Purdue University, USA)
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TA.PG: Applications of Image & Video Interpretation and Understanding (Poster)

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Lei Wang (Xidian University, P.R. China); Hongbing Ji (School of Electronic Engineering, Xidian University, P.R. China); Ya Shi (Xidian University, P.R. China)
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A Non-Temporal Texture Driven Approach to Real-time Fire Detection

Audrey Chenebert (Cranfield University, United Kingdom); Toby Breckon (Cranfield University, United Kingdom); Anna Gaszczak (Cranfield University, United Kingdom)
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Temporal Trimap Propagation for Video Matting Using Inferential Statistics

Muhammad Sarim (University of Surrey, United Kingdom)
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A Biologically Inspired System for Fast Handwritten Digit Recognition

Zhe Wang (Beijing Jiaotong University, P.R. China); Yaping Huang (Beijing Jiaotong University, P.R. China); Siwei Luo (Beijing Jiaotong University, P.R. China); Liang Wang (Beijing Jiaotong University, P.R. China)
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Joint Optimization of Background Subtraction and Object Detection for Night Surveillance

Congcong Li (Cornell University, USA); Chih-Wei Lin (Industrial Technology Research Institute, Taiwan); Shiaw-Shian Yu (Industrial Technology Research Institute, Taiwan); Tsuhan Chen (Cornell University, USA)
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Automatic Bandwidth Estimation Strategy for High-Quality Non-Parametric Modeling Based Moving Object Detection

Carlos Cuevas (Universidad Politécnica de Madrid, Spain); Narciso García (Universidad Politécnica de Madrid, Spain)
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Face Recognition Through Regional Weight Estimation

Daniel Yule (University of Northern British Columbia, Canada); Liang Chen (University of N. British Columbia, Canada)
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Ultrasound Video Analysis for Understanding Infant Breastfeeding

Gianluca Monaci (Philips research, The Netherlands); Mike Woolridge (University of Leeds, United Kingdom)
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Exploiting Feature Correspondence Constraints for Image Recognition

Linbo Wang (Nanjing University, P.R. China); Feng Tang (Hewlett-Packard Laboratories, USA); Yanwen Guo (Nanjing University, P.R. China); Suk Hwan Lim (HP Labs, USA); Nelson L. Chang (Hewlett-Packard Laboratories, USA)
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Sparse Cost-sensitive Classifier with Application to Face Recognition

Jiangyue Man (Nanjing University of Posts and Telecommunications, P.R. China); Xiaoyuan Jing (College of Automation, Nanjing University of Posts and Telecommunications & State Key Laboratory for Software Engineering, Wuhan University, P.R. China); David Zhang (The Hong Kong Polytechnic University, Hong Kong); Chao Lan (Nanjing University of Posts and Telecommunications, P.R. China)
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Hierarchical Bag-of-Features for Hand Posture Recognition

Yuelong Chuang (Zhejiang University, P.R. China)
pp. 1777-1780

Context-driven Moving Object Detection in Aerial Scenes with User Input

Christophe Guilmart (ENS Cachan & Onera, France); Stéphane Herbin (Onera, France); Patrick Perez (Technicolor, France)
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Human Face Classification Based on Localized Blur Descriptors

Abdul Adeel Mohammed (University of Waterloo, Canada); Jonathan Wu (University of Windsor, Canada); Maher Sid-Ahmed (University of Windsor, Canada)
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Combining Global and Local Features for Food Identification in Dietary Assessment

Marc Bosch (Purdue University, USA); Fengqing Zhu (Purdue University, USA); Nitin Khanna (Purdue University, USA); Carol Boushey (Purdue University, USA); Ed Delp (Purdue University, USA)
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Human Detection Using Multi-camera and 3D Scene Knowledge

Chengbin Zeng (Beijing University of Posts and Telecommunications, P.R. China); Huadong Ma (Beijing University of Posts and Telecommunications, P.R. China)
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Multimodal Learning for Multi-Label Image Classification

Yanwei Pang (Tianjin University, P.R. China); Zhao Ma (Tianjin University, P.R. China); Yuan Yuan (Chinese Academy of Sciences, P.R. China); Xuelong Li (Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences, P.R. China); Kongqiao Wang (Nokia Research Center, P.R. China)
pp. 1797-1800

TP.L1: Distributed Compression: Multimedia Applications (Special Session)

Distributed Compression: Overview of Current and Emerging Multimedia Applications

Lina Stankovic (University of Strathclyde, United Kingdom); Vladimir Stankovic (University of Strathclyde, United Kingdom); Samuel Cheng (University of Oklahoma, USA)
pp. 1801-1804

Quality-Controlled View Interpolation for Multiview Video

Mina Makar (Stanford University, USA); Yao-Chung Lin (Stanford University, USA); Ngai-Man Cheung (Stanford University, USA); Derek Pang (Stanford University, USA); Bernd Girod (Stanford University, USA)
pp. 1805-1808

A Comparison of the Error Resiliency of Bit-Plane Based and Symbol Based Pixel-Domain Distributed Video Coding

Hu Chen (Technische Universität München, Germany); Eckehard Steinbach (Munich University of Technology, Germany); Chang Wen Chen (State University of New York at Buffalo, USA)
pp. 1809-1812

Distributed Coding of Endoscopic Video

Nikos Deligiannis (Vrije Universiteit Brussel – IBBT, Belgium); Frederik Verbist (Vrije Universiteit Brussel – IBBT, Belgium); Joeri Barbarien (Vrije Universiteit Brussel,

Belgium); Jürgen Slowack (Ghent University, Belgium); Rik Van de Walle (Ghent University - IBBT, Belgium); Peter Schelkens (Vrije Universiteit Brussel, Belgium); Adrian Munteanu (Vrije Universiteit Brussel, Belgium)
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Wyner-Ziv Coding for Depth Maps in Multiview Video-Plus-Depth

Giovanni Petrazzuoli (Télécom ParisTech, France); Marco Cagnazzo (TELECOM ParisTech, France); Frederic Dufaux (Telecom Paristech & CNRS, France); Beatrice Pesquet-Popescu (Télécom ParisTech, France)
pp. 1817-1820

Distributed Compression of Zerotrees of Wavelet Coefficients

Yige Wang (MERL, USA); Shantanu Rane (Mitsubishi Electric Research Laboratories, USA); Petros T Boufounos (MERL & Rice University, USA); Anthony Vetro (Mitsubishi Electric Research Laboratories, USA)
pp. 1821-1824

Distributed Source Coding for Securing a Hand-Based Biometric Recognition System

Mauricio Ramalho (Instituto de Telecomunicações, Portugal); Paulo Lobato Correia (Instituto Superior Tecnico - Universidade Tecnica Lisboa & Instituto de Telecomunicacoes, Portugal); Luis Ducla Soares (I.S.C.T.E. / I.T. - Lisbon, Portugal)
pp. 1825-1828

Distributed Transforms for Efficient Data Gathering in Arbitrary Networks

Javier Trufero (University of Southern California, USA); Sunil K. Narang (University of Southern California, USA); Antonio Ortega (USC, USA)
pp. 1829-1832

TP.L2: Image and Noise Models for Restoration (Lecture)

Resolution-invariant Separable ARMA Modeling of Images

Aurélien Bourquard (Ecole Polytechnique Federale de Lausanne, Switzerland); Hagai Kirshner (EPFL, Switzerland); Michael Unser (EPFL, Switzerland)
pp. 1833-1836

CONDY: Ultra-Fast High Performance Restoration Using Multi-Frame L2-Relaxed-L0 Sparsity and Constrained Dynamic Heuristics

Javier Portilla (Consejo Superior de Investigaciones Científicas, Spain); Elena Gil-Rodrigo (Consejo Superior de Investigaciones Científicas, Spain); David Miraut (Universidad Rey Juan Carlos, Spain); Ricardo Suarez-Mesa (Universidad Rey Juan Carlos, Spain)
pp. 1837-1840

Sparsity-based Image Deblurring with Locally Adaptive and Nonlocally Robust Regularization

Xin Li (West Virginia University, USA); Weisheng Dong (Xidian University, P.R. China); Guangming Shi (Xidian University, P.R. China); Lei Zhang (The Hong Kong Polytechnic University, Hong Kong)
pp. 1841-1844

Patch Similarity Under Non Gaussian Noise

Charles-Alban Deledalle (Telecom ParisTech & Institut Telecom, CNRS LTCI, France);
Florence Tupin (Télécom Paris, France); Loïc Denis (Centre de Recherche
Astrophysique de Lyon, France)
pp. 1845-1848

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Generalized Subspace Based High Dimensional Density Estimation

Karthikeyan Shanmuga Vadivel (University of California Santa Barbara, USA);
Mehmet Emre Sargin (Google Inc., USA); Swapna Joshi (UCSB, USA); Bangalore
Manjunath (UCSB, USA); Scott Grafton (UCSB, USA)
pp. 1849-1852

Ising Field Parameter Estimation From Incomplete and Noisy Data

Jean-François Giovannelli (IMS, UMR CNRS 52 18, Université Bordeaux 1, France)
pp. 1853-1856

Noise Estimation Using Statistics of Natural Images

Guangtao Zhai (McMasster University, Canada); Xiaolin Wu (McMaster University,
Canada)
pp. 1857-1860

Hazy Image Modeling Using Color Ellipsoids

Kristofor Gibson (University of California San Diego, USA); Truong Nguyen
(University of California in San Diego, USA)
pp. 1861-1864

TP.L3: Motion Analysis and Object Tracking (Lecture)

A Fast Object Tracking Approach Based on Sparse Representation

Zhenjun Han (Graduate University of Chinese Academy of Sciences, P.R. China);
Jianbin Jiao (Graduate University of Chinese Academy of Sciences, P.R. China);
Qixiang Ye (Graduate University of Chinese Academy of Sciences, P.R. China)
pp. 1865-1868

Efficiently Selecting Spatially Distributed Keypoints for Visual Tracking

Steffen Gauglitz (University of California, Santa Barbara, USA); Luca Foschini
(University of California, Santa Barbara, USA); Matthew Turk (University of California,
Santa Barbara, USA); Tobias Höllerer (University of California, Santa Barbara, USA)
pp. 1869-1872

***Simultaneous 3D Object Tracking and Camera Parameter Estimation by Bayesian
Methods and Transdimensional MCMC Sampling***

Raúl Mohedano (Universidad Politécnica de Madrid, Spain); Narciso García
(Universidad Politécnica de Madrid, Spain)
pp. 1873-1876

***Multi-person Tracking Based on Vertical Reference Lines and Dynamic Visibility
Analysis***

Xinghan Luo (Utrecht University, The Netherlands); Robby Tan (Utrecht University,
The Netherlands); Remco C. Veltkamp (Utrecht University, The Netherlands)
pp. 1877-1880

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Local Complexity Adaptable Trajectory Partitioning Via Minimum Message Length

Charles Twardy (George Mason University, USA); Anthony Stefanidis (George Mason University, USA)

pp. 1881-1884

Fast TV-L1 Optical Flow for Interactivity

Emmanuel d'Angelo (EPFL & Signal Processing Lab 2, Switzerland); Johan Paratte (EPFL, Switzerland); Gilles Puy (EPFL, Switzerland); Pierre Vanderghyest (EPFL, Switzerland)

pp. 1885-1888

Co-occurrence Flow for Pedestrian Detection

Atsuto Maki (Toshiba Research Europe, United Kingdom); Akihito Seki (Toshiba Corporation, Japan); Tomoki Watanabe (Toshiba Corporation, Japan); Roberto Cipolla (University of Cambridge, United Kingdom)

pp. 1889-1892

Hierarchical Fusion of Descriptor Matching and L-K Optical Flow

Haibo Wang (Institute of Automation, Chinese Academy of Sciences, P.R. China); Chunhong Pan (Institute of Automation, Chinese Academy of Sciences, P.R. China); Franck Davoine (CNRS, P.R. China); ShaoGuo Liu (Institute of Automation, Chinese Academy of Sciences, P.R. China)

pp. 1893-1896

TP.L4: Sparse Image Recovery (Lecture)

Increasing Imaging Resolution by Covering Your Sensor

Michael Schöberl (University of Erlangen-Nuremberg, Germany); Jürgen Seiler (University of Erlangen-Nuremberg, Germany); Siegfried Foessel (Fraunhofer IIS, Germany); Andre Kaup (University of Erlangen-Nuremberg, Germany)

pp. 1897-1900

Inverse Problems with Poisson Noise: Primal and Primal-Dual Splitting

Francois-Xavier Dupé (CEA, France); Jalal Fadili (GREYC CNRS UMR 6072, ensicaen, France); Jean-Luc Starck (CEA, France)

pp. 1901-1904

Sparse Image Restoration Using Iterated Linear Expansion of Thresholds

Hanjie Pan (The Chinese University of Hong Kong, Hong Kong); Thierry Blu (EPFL, Switzerland)

pp. 1905-1908

Cutset Sampling and Reconstruction of Images

Ashish Farmer (University of Michigan, USA); Awlok Josan (University of Michigan, USA); Matthew Prelee (University of Michigan, USA); David L Neuhoff (University of Michigan, USA); Thrasyvoulos N. Pappas (Northwestern University, USA)

pp. 1909-1912

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A Graph Cut Method for Linear Inverse Problems

Ahmet Tuysuzoglu (Boston University, USA); Ivana Stojanovic (Boston University, USA); David Castanon (Boston University, USA); William Karl (Boston University, USA)

pp. 1913-1916

Convex Approaches to Model Wavelet Sparsity Patterns

Nikhil Rao (University Of Wisconsin Madison, USA); Rob Nowak (University of Wisconsin, Madison, USA); Stephen J Wright (University of Wisconsin, USA); Nick Geoffrey Kingsbury (University of Cambridge, United Kingdom)

pp. 1917-1920

Weighted Fidelity in Non-Uniformly Quantized Compressed Sensing

Laurent Jacques (University of Louvain, Belgium); David Hammond (University of Oregon, USA); Jalal Fadili (GREYC CNRS UMR 6072, ensicaen, France)

pp. 1921-1924

Refractive Index Estimation Using Photometric Stereo

Gule Saman (University of York, United Kingdom); Edwin Hancock (University of York, United Kingdom)

pp. 1925-1928

TP.L5: Image Forensics (Lecture)

Detection of Non-Aligned Double JPEG Compression with Estimation of Primary Compression Parameters

Tiziano Bianchi (University of Firenze, Italy); Alessandro Piva (University of Florence, Italy)

pp. 1929-1932

Identifying Computer Generated Graphics Via Histogram Features

Ruoyu Wu (Institute of Computer Science and Technology, Peking University, P.R. China); Xiaolong Li (Institute of Computer Science and Technology, Peking University, P.R. China); Bin Yang (Institute of Computer Science and Technology, Peking University, P.R. China)

pp. 1933-1936

Eye Specular Highlights Telltales for Digital Forensics: a Machine Learning Approach

Priscila Saboia (State University of Campinas, Brazil); Tiago Carvalho (University of Campinas (Unicamp), Brazil); Anderson Rocha (State University of Campinas, Brazil)

pp. 1937-1940

An Application of Sparse Code Shrinkage to Image Steganalysis Based on Supervised Learning

Michiharu Niimi (Kyushu Institute of Technology, Japan); Hideki Noda (Kyushu Institute of Technology, Japan)

pp. 1941-1944

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Modeling the EXIF-Image Correlation for Image Manipulation Detection

Jiayuan Fan (Nanyang Technological University, Singapore); Alex Kot (Nanyang Technological University, Singapore); Hong Cao (Nanyang Technological University, Singapore); Farook Sattar (University of Victoria, Canada)
pp. 1945-1948

Countering JPEG Anti-Forensics

Giuseppe Valenzise (Politecnico di Milano, Italy); Vitaliano Nobile (Politecnico di Milano, Italy); Marco Tagliasacchi (Politecnico di Milano, Italy); Stefano Tubaro (Politecnico di Milano, Italy)
pp. 1949-1952

Exploring Compression Effects for Improved Source Camera Identification Using Strongly Compressed Video

Wei-Hong Chuang (University of Maryland, USA); Hui Su (University of Maryland, USA); M Wu (University of Maryland, USA)
pp. 1953-1956

Passive Spread-Spectrum Steganalysis

Ming Li (State University of New York at Buffalo, USA); Michel Kulhandjian (State University of New York at Buffalo, USA); Dimitris A. Pados (State University of New York at Buffalo, USA); Stella N. Batalama (State University of New York at Buffalo, USA); Michael Medley (Air Force Research Laboratory, USA)
pp. 1957-1960

TP.L6: 3D Image Generation and Analysis (Lecture)

2D to 3D Conversion of Sports Content Using Panoramas

Lars Schnyder (Disney Research Zurich, Switzerland); Oliver Wang (Disney Research Zurich, Switzerland); Aljoscha Smolic (Disney Research Zurich, Switzerland)
pp. 1961-1964

Hole Filling with Random Walks Using Occlusion Constraints in View Synthesis

Sunghwan Choi (Yonsei University & Digital Image Media Laboratory, Korea); Bumsub Ham (Yonsei University, Korea); Kwang Hoon Sohn (Yonsei University, Korea)
pp. 1965-1968

A Triangular-Warping Based View Synthesis Scheme with Enhanced Artifact Reduction for FTV

Chao-Hsuan Li (National Chiao Tung University, Taiwan); Hsueh-Ming Hang (NCTU, Taiwan)
pp. 1969-1972

Super-Resolution Plane Sweeping for Free-Viewpoint Image Synthesis

Keita Takahashi (The University of Tokyo, Japan); Masato Ishii (NEC Corporation, Japan); Takeshi Naemura (Tokyo University, Japan)
pp. 1973-1976

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Depth Map Reconstruction Using Color-based Region Merging

Camilo Dorea (University of Brasilia, Brazil); Ricardo L de Queiroz (University of Brasil, Brazil)
pp. 1977-1980

Recovering Depth From a Single Image Using Spectral Energy of the Defocused Step Edge Gradient

Cheng-Wei Chen (National Taiwan University, Taiwan); Yung-Yaw Chen (National Taiwan University, Taiwan)
pp. 1981-1984

3D Surface Registration Using Z-SIFT

Lulu He (Northwestern University, USA); Sen Wang (Eastman Kodak Company, USA); Thrasyvoulos N. Pappas (Northwestern University, USA)
pp. 1985-1988

TP.L7: Lossless and Predictive Coding (Lecture)

L_2 Restoration of I_{∞} -decoded Images with Context Modeling

Jiantao Zhou (McMaster University, Canada); Xiaolin Wu (McMaster University, Canada)
pp. 1989-1992

Image Similarity Using the Normalized Compression Distance Based on Finite Context Models

Armando J Pinho (University of Aveiro, Portugal); Paulo Ferreira (University of Aveiro, Portugal)
pp. 1993-1996

On Lossless Image Compression Using the Burrows-Wheeler Transform

Donald Adjeroh (West Virginia University, USA); Kalyan Bhupathiraju (West Virginia University, USA)
pp. 1997-2000

Exploitation of Context Classification for Parallel Pixel Coding in JPEG-LS

Simeon Wahl (University of Stuttgart, Germany); Haitham Tantawy (University of Stuttgart, Germany); Zhe Wang (University of Stuttgart, Germany); Philipp Werner (University of Stuttgart, Germany); Sven Simon (University of Stuttgart, Germany)
pp. 2001-2004

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Improved H.264/AVC Lossless Intra Compression Using Multiple Partition Prediction for 4X4 Intra Block

Sang Heon Lee (Seoul Nat'l University, Korea); Jewoong Ryu (Seoul National University, Korea); Nam-Ik Cho (Seoul National University, Korea)
pp. 2005-2008

Improved Lossless Coding Algorithm in H.264/AVC Based on Hierarchical Intra Prediction

Li-Li Wang (Hong Kong Polytechnic University, Hong Kong); Wan-Chi Siu (The Hong Kong Polytechnic University, Hong Kong)
pp. 2009-2012

Adaptive Least Squares Prediction for Stereo Image Coding

Luís Lucas (Polytechnic Institute of Leiria & Institute of Telecommunications, Portugal); Nuno Rodrigues (IPL/Institute of Telecommunications, Portugal); Eduardo Silva (UFRJ, Brazil); Sérgio M. M. Faria (Institute of Telecommunications & Polytechnic Institute of Leiria, Portugal)
pp. 2013-2016

TP.L8: Ultrasound and Microscopic Imaging (Lecture)

Elastographic Image Reconstruction: A Stochastic State Space Approach

Jun Wang (Zhejiang University, P.R. China)
pp. 2017-2020

Reducing the Training Set Using Semi-Supervised Self-Training Algorithm for Segmenting the Left Ventricle in Ultrasound Images

Jacinto C. Nascimento (Instituto de Sistemas e Robotica, Portugal); Gustavo Carneiro (Instituto de Sistemas e Robótica (ISR), Portugal)
pp. 2021-2024

Enhanced Classification of Focal Hepatic Lesions in Ultrasound Images Using Novel Texture Features

Sihyoung Lee (Korea Advanced Institute of Science and Technology, Korea); In A Jo (Korea Advanced Institute of Science and Technology, Korea); Kyung Won Kim (Seoul National University Hospital, Korea); Jae Young Lee (Seoul National University Hospital, Korea); Yong Man Ro (KAIST, Korea)
pp. 2025-2028

Realistic Log-Compressed Law for Ultrasound Image Recovery

Gonzalo Vegas-Sánchez-Ferrero (University of Valladolid, Spain); Diego Martín-Martínez (University of Valladolid, Spain); Pablo Casaseca-de-la-Higuera (University of Valladolid, Spain); Lucilio Cordero-Grande (University of Valladolid, Spain); Santiago Aja-Fernández (Universidad de Valladolid, Spain); Marcos Martín-Fernández (Universidad de Valladolid, Spain); Cesar Palencia (University of Valladolid, Spain)
pp. 2029-2032

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Compact Rotation Invariant Image Descriptors by Spectral Trimming

Maxime Taquet (Belgium & Computational Radiology Laboratory, Harvard Medical School, Belgium); Laurent Jacques (University of Louvain, Belgium); Benoit Macq (UCL, Belgium); Sylvain Jaume (Massachusetts Institute of Technology & Harvard Medical School, USA)
pp. 2033-2036

Modeling of PSF for Refractive Index Variation in Fluorescence Microscopy

Sameer Hiware (Indian Institute of Technology Bombay, India); Pradyot Porwal (Indian Institute of Management Bangalore & Indian Institute of Technology Bombay, India); Rajbabu Velmurugan (IIT Bombay, India); Subhasis Chaudhuri (Indian Institute of Technology, Bombay, India)
pp. 2037-2040

Image Filtering Using Anisotropic Structure Tensor for Cell Membrane Enhancement in 3D Microscopy

Sorin Pop (Institut Pasteur, France); Alexandre Dufour (Institut Pasteur, France);
Jean-Christophe Olivo-Marin (Institut Pasteur, France)
pp. 2041-2044

ALL-IDB: The Acute Lymphoblastic Leukemia Image Database for Image Processing

Ruggero Donida Labati (Università degli Studi di Milano, Italy); Vincenzo Piuri
(University of Milan, Italy); Fabio Scotti (Università degli Studi di Milano, Italy)
pp. 2045-2048

TP.L9: Object and Human Detection (Lecture)

Detecting Humans Under Occlusion Using Variational Mean Field Method

Thanh Duc Nguyen (University of Wollongong, Australia); Philip Ogunbona (University
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Constantin Vertan (University Politehnica of Bucharest, Romania); Marta Zamfir (Tessera Technologies, Inc., Romania); Alexandru Drîmbărean (Tessera Ireland, Ireland); Adrian Zamfir (Tessera Technologies, Inc., Romania)
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Key Frame Extraction From Consumer Videos Using Sparse Representation

Mrityunjay Kumar (Eastman Kodak Company, USA); Alexander Loui (Eastman Kodak Company, USA)
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On the Use of Conceptual Information in a Concept-Based Image Indexing and Retrieval Framework

Radi Jarrar (MONASH University, Malaysia); Mohammed Belkhatir (CNRS Lyon, France); Chris Messom (MONASH University, Malaysia)
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Improving Image Tag Recommendation Using Favorite Image Context

Wonyong Eom (Korea Advanced Institute of Science and Technology, Korea); Sihyoung Lee (Korea Advanced Institute of Science and Technology, Korea); Wesley Marcel De Neve (Korea Advanced Institute of Science and Technology (KAIST), Korea); Yong Man Ro (KAIST, Korea)
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Query Sensitive Dynamic Web Video Thumbnail Generation

Chunxi Liu (Graduate University of Chinese Academy of Sciences, CAS, P.R. China); Qingming Huang (Graduate School of Chinese Academy of Sciences, P.R. China); Shuqiang Jiang (Institute of Computing Technology, Chinese Academy of Sciences, Beijing, P.R. China)
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Graph-Based Multiple-Instance Learning with Instance Weighting for Image Retrieval

Fei Li (Fujitsu Research and Development Center Co., Ltd., P.R. China); Rujie Liu (Fujitsu Research & Development Co., Ltd, P.R. China)
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Image Database Categorization Using Robust Unsupervised Learning of Finite Generalized Dirichlet Mixture Models

Mohamed Ben Ismail (University of Louisville, USA); Hichem Frigui (University of Louisville, USA)
pp. 2457-2460

Weakly Supervised Locality Sensitive Hashing for Duplicate Image Retrieval

Cao Yudong (Beijing University of Posts and Telecommunications, P.R. China); Zhang Honggang (Beijing University of Posts and Telecommunications, P.R. China); Jun Guo (BUPT, P.R. China)
pp. 2461-2464

Fast Common Visual Pattern Detection Via Radiate Geometric Model

Linyang Chu (Institute of Computing Technology, Chinese Academy of Science, P.R. China); Shuqiang Jiang (Institute of Computing Technology, Chinese Academy of Sciences, Beijing, P.R. China); Qingming Huang (Graduate School of Chinese Academy of Sciences, P.R. China)
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A Novel Image Importance Model for Content-Aware Image Resizing

Wonjun Kim (Korea Advanced Institute of Science and Technology (KAIST), Korea)
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Multi-Keyframe Abstraction From Videos

Ping Li (The Chinese University of Hong Kong, Hong Kong); Yanwen Guo (Nanjing University, P.R. China); H. Q. Sun (The Chinese University of Hong Kong, P.R. China)
pp. 2473-2476

Select Informative Features for Recognition

Zixuan Wang (Stanford University, USA)
pp. 2477-2480

A Balanced Semi-supervised Hashing Method for CBIR

Jianhui Zhou (Dalian University of Technology, P.R. China); Haiyan Fu (Dalian University of Technology, P.R. China); Xiangwei Kong (Dalian University of Technology, P.R. China)
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Wednesday, September 14

WA.L1: Recent Advances in Web-scale Image Annotation (Special Session)

Learning the Trip Suggestion From Landmark Photos on the Web

Rongrong Ji (Columbia University, P.R. China); Ling-Yu Duan (Peking University, P.R. China); Jie Chen (Peking University, P.R. China); Shuang Yang (Peking University, P.R. China); Hongxun Yao (Harbin Institute of Technology, P.R. China); Tiejun Huang (Peking University, P.R. China); Wen Gao (ICT-ISVISION Joint R&D Laboratory for Face Recognition, CAS, P.R. China)
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Online Vcept Learning for Web-Scale Image Understanding

Liang Li (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Shuqiang Jiang (Institute of Computing Technology, Chinese Academy of Sciences, Beijing, P.R. China); Qingming Huang (Graduate School of Chinese Academy of Sciences, P.R. China)
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Representative Sampling with Certainty Propagation for Image Retrieval

Jian Cheng (Chinese Academy of Sciences, P.R. China); Biao Niu (Institute of Automation, Chinese Academy of Sciences, P.R. China); Hanqing Lu (the Institute of Automation, Chinese Academy of Sciences, P.R. China)
pp. 2493-2496

Learning Semantic Embedding At a Large Scale

Min-Hsuan Tsai (University of Illinois at Urbana-Champaign, USA); Jinjun Wang (Epson Research and Development, USA); Tong Zhang (Rutgers University, USA);

Yihong Gong (NEC Labs American, USA); Thomas S Huang (University of Illinois at Urbana-Champaign, USA)
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Descriptive Local Feature Groups for Image Classification

Lei Yu (Institute of Automation, Chinese Academy of Sciences, P.R. China); Jing Liu (Institute of Automation, Chinese Academy of Sciences, P.R. China); Changsheng Xu (Institute of Automation, Chinese Academy of Sciences & China-Singapore Institute of Digital Media, P.R. China)
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WA.L2: Video Quality Assessment (Lecture)

A Spatiotemporal Most-Apparent-Distortion Model for Video Quality Assessment

Phong Vu (Oklahoma State University, USA); Cuong Vu (Oklahoma State University, USA); Damon Chandler (Oklahoma State University, USA)
pp. 2505-2508

Spatio-temporal Quality Pooling Accounting for Transient Severe Impairments and Emotion

Jin. C. Park (Yonsei University, Korea); Kalpana Seshadrinathan (Intel, USA); Sanghoon Lee (Yonsei University, Korea); Alan C Bovik (University of Texas at Austin, USA)
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Machine Learning Based Modeling of Spatial and Temporal Factors for Video Quality Assessment

Manish Narwaria (Nanyang Technological University, Singapore); Weisi Lin (Nanyang Technological University, Singapore)
pp. 2513-2516

A Novel Full-Reference Video Quality Metric and Its Application to Wireless Video Transmission

Yang Peng (Technische Universität München, Germany); Eckehard Steinbach (Munich University of Technology, Germany)
pp. 2517-2520

3D-DCT Based Perceptual Quality Assessment of Stereo Video

Lina Jin (Tampere University of Technology, Finland); Atanas Boev (Tampere University of Technology, Finland); Atanas Gotchev (Tampere University of Technology, Finland); Karen Egiazarian (Tampere University of Technology, Finland)
pp. 2521-2524

A Perceptual Quality Assessment Metric Using Temporal Complexity and Disparity Information for Stereoscopic Video

Munchurl Kim (Korea Advanced Institute of Science and Technology, Korea)
pp. 2525-2528

WA.L3: Copy and Near-Duplicate Detection (Lecture)

Commercial Mining Based on Temporal Recurrence Hashing Algorithm and Bag-Of-Fingerprints Model

Xiaomeng Wu (National Institute of Informatics, Japan); Shin'ichi Satoh (National Institute of Informatics, Japan)
pp. 2529-2532

Copy Detection Towards Semantic Mining for Video Retrieval

Shikui Wei (Beijing Jiaotong University & Nanyang Technological University, P.R. China); Yao Zhao (Beijing Jiaotong University, P.R. China); Changsheng Xu (Institute of Automation, Chinese Academy of Sciences & China-Singapore Institute of Digital Media, P.R. China); Xu Dong (Powerlayer Microsystems, P.R. China)
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Salient Covariance for Near-duplicate Image and Video Detection

Ligang Zheng (Sun Yat-sen University, P.R. China); Guoping Qiu (University of Nottingham, United Kingdom); Jiwu Huang (Sun Yat-sen University, P.R. China); Hao Fu (University of Nottingham, United Kingdom)
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Shape Context Based Image Hashing Using Local Feature Points

Xudong Lv (University of British Columbia, Canada); Z. Jane Wang (University of British Columbia, Canada)
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PKUBench: A Context Rich Mobile Visual Search Benchmark

Rongrong Ji (Columbia University, P.R. China); Ling-Yu Duan (Peking University, P.R. China); Jie Chen (Peking University, P.R. China); Shuang Yang (Peking University, P.R. China); Tiejun Huang (Peking University, P.R. China); Hongxun Yao (Harbin Institute of Technology, P.R. China); Wen Gao (ICT-ISVISION Joint R&D Laboratory for Face Recognition, CAS, P.R. China)
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Fast Face Sequence Matching in Large-scale Video Databases

Hung Thanh Vu (University of Science & University of Science, Ho Chi Minh city, Vietnam); Thanh Duc Ngo (The Graduate University for Advanced Studies, Japan); Thao-Ngoc Nguyen (University of Science, Vietnam); Duy-Dinh Le (National Institute of Informatics, Japan); Shin'ichi Satoh (National Institute of Informatics, Japan); Le Bac (University of Science, Vietnam); Anh Duc Duong (University of Science, VNU-HCM, Vietnam)
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WA.L4: Image Denoising (Lecture)

Patch-based Locally Optimal Denoising

Priyam Chatterjee (Pelican Imaging Corporation, USA); Peyman Milanfar (University of California, Santa Cruz, USA)
pp. 2553-2556

Nonlinear Curvelet Diffusion for Noisy Image Enhancement

Ying Li (Northwestern Polytechnical University, P.R. China); Huijun Ning (Northwestern Polytechnical University, P.R. China); Yanning Zhang (Northwestern Polytechnical University, P.R. China); David Dagan Feng (University of Sydney & Hong Kong Polytechnic University, Australia)
pp. 2557-2560

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MMSE Nonlocal Means Denoising Algorithm for Poisson Noise Removal

Chul Lee (Korea University, Korea); Chulwoo Lee (Korea University, Korea); Chang-Su Kim (Korea University, Korea)
pp. 2561-2564

Learning a Wavelet Tree for Multichannel Image Denoising

Zhen James Xiang (Princeton University, USA); Zhuo Zhang (Princeton University, USA); Pingmei Xu (Princeton University, USA); Peter Ramadge (Princeton University, USA)
pp. 2565-2568

Robust Sparse Image Denoising

Radovan Obradovic (RT-RK Novi Sad, Serbia); Marko Janev (Mathematical Institute of the Serbian Academy of Sciences and Arts, Serbia); Borislav Antic (University of Heidelberg, Germany); Vladimir Crnojević (Novi Sad, Serbia); Nemanja Petrovic (University of Novi Sad, Serbia)
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Video Denoising Based on Transform Domain Minimum Mean Square Error

Dai (Hong Kong University of Science and Technology, Hong Kong); Oscar C. Au (HKUST, Hong Kong); Chao Pang (Hong Kong University of Science and Technology, Hong Kong); Feng Zou (Hong Kong University of Science and Technology, Hong Kong)
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WA.L5: 3D Video Processing and Rendering (Lecture)

Scribble Based Interactive 3D Reconstruction Via Scene Co-segmentation

Adarsh Kowdle (Cornell University, USA); Yao-Jen Chang (Cornell University, USA); Dhruv Batra (Carnegie Mellon University, USA); Tsuhan Chen (Cornell University, USA)
pp. 2577-2580

Adaptive Plenoptic Sampling

Christopher Gilliam (Imperial College London, United Kingdom); Pier Luigi Dragotti (Imperial College London, United Kingdom); Mike Brookes (Imperial College London, United Kingdom)
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Efficient Depth Blurring with Occlusion Handling

Timothy Popkin (Vision Semantics Ltd & Queen Mary University of London, United Kingdom); Andrea Cavallaro (Queen Mary, University of London, United Kingdom); David Hands (British Telecommunications plc, United Kingdom)
pp. 2585-2588

A New Multidirectional Extrapolation Hole-Filling Method for Depth-Image-Based Rendering

Lai Man Po (City University of Hong Kong, Hong Kong); Shihang Zhang (Shenzhen Graduate School of Peking University, P.R. China); Xuyuan Xu (City University of Hong Kong, Hong Kong); Yuesheng Zhu (Shenzhen Graduate School, Peking University, P.R. China)
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Parameterization and Appearance Preserving on Cubic Cells for 3D Digital Preservation of Cultural Heritage

Karl Apaza-Agüero (Universidade Federal do Parana, Brazil); Luciano Silva (Universidade Federal do Paraná, Brazil); Olga R Bellon (Universidade Federal do Parana & IMAGO Research Group, Brazil)
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Can 3D Synthesized Views Be Reliably Assessed Through Usual Subjective and Objective Evaluation Protocols?

Emilie Bosc (Institut National des Sciences Appliquées de Rennes (INSA de Rennes), France); Martin Köppel (Fraunhofer Institut for Telecommunications, Heinrich-Hertz-Institut, Germany); Romuald Pépion (IRCCyN, Université de Nantes, France); Muriel Pressigout (IETR / INSA de Rennes, France); Luce Morin (INSA-Rennes, France); Patrick Ndjiki-Nya (Fraunhofer-Gesellschaft, Germany); Patrick Le Callet (IRCCYN, France)
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WA.L6: Exploiting and Analyzing Text in Electronic Images (Lecture)

Mobile Visual Search on Printed Documents Using Text and Low Bit-Rate Features

Sam S Tsai (Stanford University, USA); Huizhong Chen (Stanford University, USA); David M Chen (Stanford University, USA); Georg Schroth (Technische Universität München, Germany); Radek Grzeszczuk (Nokia Research Center, USA); Bernd Girod (Stanford University, USA)
pp. 2601-2604

A New Hybrid Method to Detect Text in Natural Scene

Gang Zhou (Xi'an Jiaotong University, P.R. China); Yuehu Liu (Xi'an Jiaotong University, P.R. China); Zhiqiang Tian (Xi'an Jiaotong University, P.R. China); Yuanqi Su (Xi'an Jiaotong University, P.R. China)
pp. 2605-2608

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Robust Text Detection in Natural Images with Edge-enhanced Maximally Stable Extremal Regions

Huizhong Chen (Stanford University, USA); Sam S Tsai (Stanford University, USA); Georg Schroth (Technische Universität München, Germany); David M Chen (Stanford

University, USA); Radek Grzeszczuk (Nokia Research Center, USA); Bernd Girod (Stanford University, USA)
pp. 2609-2612

Handwritten Connected Digits Detection: An Approach Using Instance Selection

Cristiano Pereira (Federal University of Pernambuco & Federal Institute of Pernambuco, Brazil); George D. C. Cavalcanti (Federal University of Pernambuco, Brazil)
pp. 2613-2616

A Robust Skew Detection Method Based on Maximum Gradient Difference and R-signature

Mehdi Felhi (University Nancy 2 & Océ - Canon Group, France); Nicolas Bonnier (Océ - Canon Group, France); Salvatore Tabbone (University Nancy 2, France)
pp. 2617-2620

Automated Image Quality Assessment for Camera-Captured OCR

Xujun Peng (BBN Technologies, USA); Huaigu Cao (Raytheon BBN Technologies, USA); Krishna Subramanian (Raytheon BBN Technologies, USA); Rohit Prasad (BBN Technologies, USA); Premkumar Natarajan (BBN Technologies, USA)
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WA.L7: Distributed Video Coding (Lecture)

Progressive Correlation Noise Refinement for Transform Domain Wyner-Ziv Video Coding

Juan Song (State Key Lab. of Integrated Service Networks, Xidian University, P.R. China); Keyan Wang (State Key Lab. of Integrated Service Networks, Xidian University, P.R. China); Haiying Liu (State Key Lab. of Integrated Service Networks, Xidian University, P.R. China); Yunsong Li (Xidan University, P.R. China); Chengke Wu (State Key Laboratory of ISN, XI'DIAN University, P.R. China)
pp. 2625-2628

Global Motion Guided Adaptive Temporal Inter- / Extrapolation for Side Information Generation in Distributed Video Coding

Ralph Hänsel (University of Rostock, Germany); Erika Müller (University of Rostock, Germany)
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Parallel Iterative Decoding of Transform Domain Wyner-Ziv Video Using Cross Bitplane Correlation

Huynh Luong (Technical University of Denmark, Denmark); Xin Huang (Technical University of Denmark, Denmark); Soren Forchhammer (Technical University of Denmark, Denmark)
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Improved Wyner-ziv Video Coding Efficiency Using Bit Plane Prediction

Jeffrey Micallef (University of Malta, Malta); Reuben A. Farrugia (University of Malta, Malta); Carl J. Debono (University of Malta, Malta)
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Onboard Low-Complexity Compression of Solar Images

Shuang Wang (University of Oklahoma, USA); Lijuan Cui (University of Oklahoma, USA); Samuel Cheng (University of Oklahoma, USA); Lina Stankovic (University of Strathclyde, United Kingdom); Vladimir Stankovic (University of Strathclyde, United Kingdom)
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WA.L8: MRI: Cardiac and Neural Applications (Lecture)

A Novel Approach for Accurate Estimation of Left Ventricle Global Indexes From Short-Axis Cine MRI

Fahmi Khalifa (Bioimaging Laboratory & University of Louisville, Louisville, KY, USA); Garth Beache (Diagnostic Radiology Department, USA); Georgy Gimel'farb (University of Auckland, USA); Ayman Sabry El-Baz, PhD (University of Louisville, USA)
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Aorta Segmentation Using the Watershed Algorithm for an Augmented Reality System in Laparoscopic Surgery

Fernando López-Mir (Universidad Politécnica de Valencia & Instituto Interuniversitario de Investigación en Bioingeniería y Tecnología Orientada al ser Humano, Spain); Valery Naranjo (Universidad Politecnica de Valencia, Spain); Jesus Angulo (MINES Paristech, France); Eliseo Villanueva (Universidad Politécnica de Valencia, Spain); Mariano Alcañiz (Universidad Politécnica de Valencia, Spain); Susana López-Celada (Hospital Clínica Benidorm, Unidad Resonancia Magnética, INNSCANER, Spain)
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Automatic Subcortical Tissue Segmentation of MR Images Using Optimum-Path Forest Clustering

Fábio A. M. Cappabianco (Federal University of São Paulo & Universidade Federal de Sao Paulo, Brazil); Jaime Ide (Federal University of São Paulo, Brazil); Alexandre Falcão (Institute of Computing, University of Campinas, Brazil); Chiang-shan Li (Yale University, USA)
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3D Shape Analysis of the Brain Cortex with Application to Dyslexia

Matthew J Nitzken (University of Louisville & Bioimaging Laboratory, USA); Manuel Casanova (University of Louisville, USA); Georgy Gimel'farb (University of Auckland, USA); Ahmed Elnakib (Bioimaging Lab, USA); Fahmi Khalifa (Bioimaging Laboratory & University of Louisville, Louisville, KY, USA); Andy Switala (University of Louisville, USA); Ayman Sabry El-Baz, PhD (University of Louisville, USA)
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Detection of Resting-State Brain Activity in Magnetic Resonance Images Through Wavelet Feature Cluster Analysis

Geert Verdoolaege (Ghent University, Belgium); Leslie Vlerick (Ghent University Hospital, Belgium); Eric Achten (Ghent University Hospital, Belgium)
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WA.PA: Sparse Estimation (Poster)

Total Variation-Wavelet-Curvelet Regularized Optimization for Image Restoration

Shunsuke Ono (Tokyo Institute of Technology, Japan); Takamichi Miyata (Tokyo Institute of Technology, Japan); Katsunori Yamaoka (Tokyo Institute of Technology, Japan)

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Image Reconstruction From Compressed Linear Measurements with Side Information

Vijayaraghavan Thirumalai (EPFL, Switzerland); Pascal Frossard (Swiss Federal Institute of Technology - EPFL, Switzerland)

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Multitemporal Image Change Detection with Compressed Sparse Representation

Leyuan Fang (Hunan University, P.R. China); Shutao Li (Hunan University, P.R. China); Jianwen Hu (Hunan University, P.R. China)

pp. 2673-2676

Single-View Reconstruction From an Unknown Spherical Mirror

Zhihu Chen (The University of Hong Kong, Hong Kong); Kwan-Yee Kenneth Wong (The University of Hong Kong, Hong Kong); Miaomiao Liu (The University of Hongkong, Hong Kong); Dirk Schnieders (The University of Hong Kong, Hong Kong)

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Optical Flow Estimation Using Sparse Gradient Representation

Muhammad Nawaz (University of Wollongong, Australia); Abdesselam Bouzerdoum (University of Wollongong, Australia); Son Lam Phung (University of Wollongong, Australia)

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Luminance Constrained Total Variation and Its Application for Optimized Decoding of JPEG 2000

Takamichi Miyata (Tokyo Institute of Technology, Japan); Yoshinori Sakai (Tokyo Institute of Technology, Japan)

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Modified-CS-residual for Recursive Reconstruction of Highly Undersampled Functional MRI Sequences

Wei Lu (Iowa State University, USA); Taoran Li (Iowa State University, USA); Ian Atkinson (University of Illinois at Chicago, USA); Namrata Vaswani (Iowa State University, USA)

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Sparse Representation Based Band Selection for Hyperspectral Images

Shuangjiang Li (University of Tennessee at Knoxville, USA); Hairong Qi (the University of Tennessee, USA)

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Total-Variation Regularized Motion Estimation in a Periodic Image Sequence

Wenyuan Qi (Illinois Institute of Technology, USA); Xiaofeng Niu (Illinois Institute of Technology, USA); Yongyi Yang (Illinois Institute of Technology, USA)

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3D Image Reconstruction From Sparse Measurement of Wideband Millimeter Wave SAR Experiments

Hamed Kajbaf (Missouri University of Science and Technology, USA); Joseph Case (Missouri University of Science and Technology, USA); Yahong Rosa Zheng (Missouri University of Science and Technology, USA)

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Compressive Passive Millimeter-Wave Imaging

Sevket Derin Babacan (Northwestern University, USA); Martin Luessi (Northwestern University, USA); Leonidas Spinoulas (Northwestern University, USA); Aggelos K. Katsaggelos (Northwestern University, USA); Nachappa Gopalsami (Argonne National Laboratory, USA); Thomas W Elmer, II (Argonne National Laboratory, USA); Ryan Ahern (Argonne National Laboratory, USA); Shaolin Liao (Argonne National Laboratory, USA); Apostolos Raptis (Argonne National Laboratory, USA)

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Hybrid Blind Deconvolution of Images Using Variable Splitting and Proximal Point Methods

Sudipto Dolui (University of Waterloo, Canada); Oleg Michailovich (University of Waterloo, Canada)

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A New Block Compressive Sensing to Control the Number of Measurements

Hyungkeuk Lee (Yonsei University, Korea); Heeseok Oh (Wireless Network Lab., Yonsei University, Korea); Sanghoon Lee (Yonsei University, Korea)

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A Memory Gradient Algorithm for L2-L0 Regularization with Applications to Image Restoration

Emilie Chouzenoux (Université Paris-Est Marne-la-Vallée, France); Jean-Christophe Pesquet (University Paris-Est, France); Hugues Talbot (Université Paris Est, France); Anna Jezierska (Université Paris-Est Marne-la-Vallée, France)

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WA.PB: Data Hiding and Media Security (Poster)

An Effective Image Steganalysis Method Based on Neighborhood

Qingxiao Guan (University of Science and Technology of China, P.R. China); Jing Dong (Institute of Automation, Chinese Academy of Sciences, P.R. China); Tieniu Tan (NLPR, P.R. China)

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Frequency Domain Infrared Watermarking for Printed CMYK Image

Yonghui Zhao (Xerox Research Center Webster, USA); Zhigang Fan (Xerox Corporation, USA); Martin Hoover (Xerox Research Center Webster, USA)

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Affine Transformation Invariant Image Watermarking Using Moment Normalization and Radial Symmetry Transform

Athanasios Nikolaidis (Technological Educational Institute of Serres, Greece)

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Compression and Protection of JPEG Images

Yi-Chong Zeng (Academia Sinica, Taiwan); Fay Huang (National Ilan University, Taiwan); Mark Liao (Academia Sinica, Taiwan)
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Secure JPEG Steganography by LSB+ Matching and Multi-Band Embedding

Hao-tian Wu (Sun Yat-Sen University, P.R. China); Jiwu Huang (Sun Yat-sen University, P.R. China)
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Reversible Watermarking Based on Generalized Histogram Shifting

Mohammad Arabzadeh, Mohammad Abadi (Shiraz University of Technology, Iran); Mohammad Sadegh Helfroush (Shiraz University of Technology, Iran); Habibollah Danyali (Shiraz University of Technology, Iran); Keyvan Kasiri (Shiraz University of Technology, Iran)
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Robust Watermark Extraction Using SVD-based Dynamic Stochastic Resonance

Rajlaxmi Chouhan (PDPM Indian Institute of Information Technology, Design and Manufacturing Jabalpur, India); Rajib Kumar Jha (PDPM Indian Institute of Information Technology, Design & Manufacturing Jabalpur, India); Apoorv Chaturvedi (PDPM IIITDM Jabalpur, India); Toshihiko Yamasaki (The University of Tokyo, Japan); Kiyoharu Aizawa (University of Tokyo, Japan)
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Improved Multiplicative Spread Spectrum Embedding for Image Data Hiding

Amir Valizadeh (University of British Columbia, Canada); Z. Jane Wang (University of British Columbia, Canada)
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Countermeasure of Re-recording Prevention Against Attack with Short Wavelength Pass Filter

Takayuki Yamada (Graduate University for Advanced Studies, Japan); Gohshi Seiichi (Sharp Corporation, Japan); Isao Echizen (National Institute of Informatics (NII), Japan)
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A New Blind Robust Image Watermarking Scheme in SVD-DCT Composite Domain

Zhen Li (NTU, Singapore); Kim Hui Yap (Nanyang Technological University, Singapore); Ying Lei (School of EEE, Nanyang Technological University, Singapore)
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Virtual View Invariant Domain for 3D Video Blind Watermarking

Javier Franco-Contreras (Technicolor, France); Séverine Baudry (Technicolor, France); Gwenael J Doërr (Technicolor, France)
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A Novel Approach to Adaptive Image Authentication

Pawel Korus (AGH University of Science and Technology, Poland); Andrzej Dziech (AGH University of Science and Technology, Poland)
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A Collusion Resilient Key Management Scheme for Multi-dimensional Scalable Media Access Control

Xinglei Zhu (State University of New York at Buffalo, USA); Chang Wen Chen (State University of New York at Buffalo, USA)
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Synchronization of Texture and Depth Map by Data Hiding for 3D H.264 Video

Zafar Shahid (LIRMM, France); William Puech (University of Montpellier & LIRMM, France)
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WA.PC: Remote Sensing and Geophysical Imaging (Poster)

A New Approach to the Automated Mapping of Pockmarks in Multi-Beam Bathymetry

Richard Harrison (University of East Anglia & Gardline Geosurvey, United Kingdom); Valerie Bellec (Norges Geologiske Undersekelse (NGU), Trondheim, Norway); Dave Mann (Gardline Geosurvey, United Kingdom); Wenjia Wang (University of East Anglia, United Kingdom)
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Radio Astronomical Image Deconvolution Using Prolate Spheroidal Wave Functions

Sarod Yatawatta (ASTRON, The Netherlands)
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Globally Optimal Reconstruction of Millimeter-Wave Radiometric Images with Belief Propagation

Michel Sarkis (Sony Deutschland Gmbh, Germany); Murat Shahrashoub (Sony Deutschland Gmbh, Germany)
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Adaptive Patches for Change Detection

Xing Gong (Institute of Automation, Chinese Academy of Science & LIAMA, P.R. China); Thomas Corpetti (CNRS - University Rennes 2, France)
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Cascaded Active Learning for Object Retrieval Using Multiscale Coarse to Fine Analysis

Pierre Blanchart (Télécom ParisTech, France); Marin Ferecatu (CNAM, France)
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Component-based Restoration of Speckled Images

Vishal Patel (University of Maryland, USA); Glenn Easley (University of Maryland, USA); Rama Chellappa (University of Maryland, USA)
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Estimation of an Optimal Spectral Band Combination to Evaluate Skin Disease Treatment Efficacy Using Multi-Spectral Images

Sylvain Prigent (INRIA Sophia Antipolis, France); Didier Zugaj (Galderma, France); Xavier Descombes (INRIA, France); Philippe Martel (Galderma, France); Josiane Zerubia (INRIA, Sophia Antipolis, France)
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Segmenting Extended Structures in Radio Astronomical Images by Filtering Bright Compact Sources and Using Wavelets Decomposition

Marta Peracaula (University of Girona, Spain); Arnau Oliver (University of Girona, Spain); Albert Torrent (University of Girona, Spain); Xavier Lladó (University of Girona, Spain); Jordi Freixenet (University of Girona, USA); Joan Martí (University of Girona, Spain)

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Ground Topography Estimation Over Forests Using PolInSAR Image by Means of Coherence Set

Bin Zou (Harbin Institute of Technology, P.R. China); Da Lu (Harbin Institute of Technology, P.R. China); Hongjun Cai (Harbin Institute of Technology, P.R. China); Ye Zhang (Harbin Institute of Technology, P.R. China)

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A Fast Multiple Birth and Cut Algorithm Using Belief Propagation

Ahmed Gamal-Eldin (INRIA Sophia Antipolis, France); Xavier Descombes (INRIA, France); Guillaume Charpiat (INRIA, Sophia Antipolis, France); Josiane Zerubia (INRIA, Sophia Antipolis, France)

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Fast Model of Space-Variant Blurring and Its Application to Deconvolution in Astronomy

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Franz Graf (Ludwig-Maximilians-Universität München, Germany); Hans-Peter Kriegel (Ludwig-Maximilians-Universität München, Germany); Michael Weiler (Ludwig-Maximilians-Universität München, Germany)
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Sandra Avila (Federal University of Minas Gerais & Universite Pierre et Marie Curie, Brazil); Nicolas Thome (University Pierre et Marie Curie, France); Matthieu Cord (UPMC Paris 6, France); Eduardo Valle (State University of Campinas & RECOD Lab, Brazil); Arnaldo Araújo (Federal University of Minas Gerais, Brazil)

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Ming Yang (NEC Laboratories America, USA); Kai Yu (NEC Laboratories America, USA)

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Chen Wu (Google Inc., USA); Ramin Samadani (HP Labs, USA); April Slayden Mitchell (Hewlett-Packard, USA); Mary G. Baker (HP Labs, USA); Dan Gelb (Hewlett-Packard Labs, USA)
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Symeon Nikitidis (Aristotle University of Thessaloniki & CERRT ITI, Greece); Anastasios Tefas (Aristotle University of Thessaloniki, Greece); Nikos Nikolaidis (Aristotle University of Thessaloniki & Informatics and Telematics Institute, CERRT, Greece); Ioannis Pitas (Aristotle University of Thessaloniki, Greece)
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Sheng Li (Nanjing University of Posts and Telecommunications, P.R. China); Xiaoyuan Jing (College of Automation, Nanjing University of Posts and Telecommunications & State Key Laboratory for Software Engineering, Wuhan University, P.R. China); David Zhang (The Hong Kong Polytechnic University, Hong Kong); Yongfang Yao (Nanjing University of Posts and Telecommunications, P.R. China); Lusha Bian (Nanjing University of Posts & Telecommunications, P.R. China)
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Cuicui Kang (National Laboratory of Pattern Recognition, P.R. China); Shengcai Liao (Institute of Automation, Chinese Academy of Sciences, P.R. China); Shiming Xiang (Institute of Automation, Chinese Academy of Sciences, P.R. China); Chunhong Pan (Institute of Automation, Chinese Academy of Sciences, P.R. China)
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Chao Lan (Nanjing University of Posts and Telecommunications, P.R. China); Xiaoyuan Jing (College of Automation, Nanjing University of Posts and Telecommunications & State Key Laboratory for Software Engineering, Wuhan University, P.R. China); David Zhang (The Hong Kong Polytechnic University, Hong Kong); Shiqiang Gao (Nanjing University of Posts and Telecommunications, P.R. China); Jingyu Yang (Nanjing University of Science and Technology, P.R. China)
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Ching-Te Chiu (National Tsing Hua University, Taiwan); Cyuan Jhe Wu (National Tsing Hua University, Taiwan)
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Raymond Ptucha (Rochester Institute of Technology, USA); Grigorios Tsagkatakis (Rochester Institute of Technology, USA); Andreas Savakis (Rochester Institute of Technology, USA)
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Haichao Zhang (Northwestern Polytechnical University & University of Illinois at Urbana-Champaign, USA); Nasser Nasrabadi (US Army Research Laboratory, USA); Thomas S Huang (University of Illinois at Urbana-Champaign, USA); Yanning Zhang (Northwestern Polytechnical University, P.R. China)
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Local Primitive Code Mining for Fast and Accurate Face Recognition

Li Jiangwei (Nokia Research Center, P.R. China); Lei Xu (Nokia Research Center, P.R. China); Kongqiao Wang (Nokia Research Center, P.R. China); Ma Yong (Nokia Research Center, P.R. China); Xiong Tao (Nokia Research Center, P.R. China)
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Mingyang Jiang (Peking University, P.R. China); Jufu Feng (Peking University, P.R. China)
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A Mixture of Gated Experts Optimized Using Simulated Annealing for 3D Face Recognition

Wael Ben Soltana (LIRIS ECL, France); Di Huang (Ecole Centrale Lyon, France); Mohsen Ardabilian (Ecole Centrale Lyon & LIRIS LAB-UMR 5205 CNRS, France); Liming Chen (EC Lyon, France); Chokri Ben Amar (University of Sfax, National School of Engineers, Tunisia)
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Semi-supervised Face Recognition with LDA Self-training

Xuran Zhao (EURECOM, France); Nicholas Evans (EURECOM, France); Jean-Luc Dugelay (Institut EURECOM, France)
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Xuetao Feng (Samsung Advanced Institute of Technology, P.R. China); Xiaolu Shen (Samsung Advanced Institute of Technology, P.R. China); Mingcai Zhou (Samsung Advanced Institute of Technology, P.R. China); Hui Zhang (Samsung Advanced Institute of Technology, P.R. China); Jungbae Kim (Samsung Advanced Institute of Technology, Korea)

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Xiaoyuan Jing (College of Automation, Nanjing University of Posts and Telecommunications & State Key Laboratory for Software Engineering, Wuhan University, P.R. China); Sheng Li (Nanjing University of Posts and Telecommunications, P.R. China); David Zhang (The Hong Kong Polytechnic University, Hong Kong); Jingyu Yang (Nanjing University of Science and Technology, P.R. China)

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Expression Robust 3D Face Recognition Via Mesh-based Histograms of Multiple Order Surface Differential Quantities

Huibin Li (Ecole Centrale de Lyon, France); Di Huang (Ecole Centrale Lyon, France); Pierre Lemaire (Ecole Centrale de Lyon, France); Jean-Marie Morvan (Universite Claude Bernard, France); Liming Chen (EC Lyon, France)

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WP.I: Round Table on Reproducible Research

WP.L1: Analysis of Microscopy and Reconstructive Images for Applications in Medicine and Biology (Special Session)

3D Microscopic Imaging by Synchrotron Radiation micro/nano-CT

Francoise Peyrin (Universite de Lyon INSA Lyon & Inserm U1044 UMR CNRS 5220, France); Alexandra Pacureanu (Université de Lyon, France); Max Langer (Université de Lyon, France)

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The Formulation of a Non-Linear Hertzian Model in Order to Assess the Mechanical Strength of Human Cells Based on Data From an Atomic Force Microscope

David Burton (Liverpool John Moores University, United Kingdom); Mark Murphy (Liverpool John Moore University, United Kingdom); Francis Lilley (Liverpool John Moores University, United Kingdom); Munther A Gdeisat (Liverpool John Moores University, United Kingdom)

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A Novel Technique for the Restoration of Atomic Force Microscope Images Enabling an Approximation of AFM Impulse Response

Ahmed Ahtaiba (Liverpool John Moores University, United Kingdom); Munther A Gdeisat (Liverpool John Moores University, United Kingdom); David Burton (Liverpool John Moores University, United Kingdom); Francis Lilley (Liverpool John Moores

University, United Kingdom); Mark Murphy (Liverpool John Moore University, United Kingdom); Gary Johnston (Liverpool John Moores University, United Kingdom)
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Analysis of Microscopy and Reconstructive Images for Applications in Medicine and Biology

Gary Johnston (Liverpool John Moores University, United Kingdom); David Burton (Liverpool John Moores University, United Kingdom); Francis Lilley (Liverpool John Moores University, United Kingdom); Annette Doyle (Liverpool John Moores University, United Kingdom); Mark Murphy (Liverpool John Moore University, United Kingdom); Greg Madden (Liverpool John Moores University, United Kingdom); Munther A Gdeisat (Liverpool John Moores University, United Kingdom); Christopher Moore (The Christie NHS Foundation Trust, United Kingdom); Tom Marchant (The Christie NHS Foundation Trust, United Kingdom); Bogdan J Matuszewski (University of Central Lancashire, United Kingdom)
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Numerical Evaluation of Sampling Bounds for Near-Optimal Reconstruction in Compressed Sensing

Yoann Le Montagner (Institut Pasteur, France); Marcio Marim (Institut Pasteur, France); Elsa Angelini (Télécom ParisTech, France); Jean-Christophe Olivo-Marin (Institut Pasteur, France)
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Confocal Microscopy Segmentation Using Active Contour Based on Alpha-Divergence

Leila Meziou (ETIS UMR CNRS 8051, France); Aymeric Histace (ETIS UMR CNRS 8051 & University of Cergy-Pontoise, ENSEA, France); Frederic Precioso (LIP6 CNRS UMR 7606 & UPMC Paris 6, France); Bogdan J Matuszewski (University of Central Lancashire, United Kingdom); Mark Murphy (Liverpool John Moore University, United Kingdom)
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Segmentation of Cellular Structures in Actin Tagged Fluorescence Confocal Microscopy Images

Bogdan J Matuszewski (University of Central Lancashire, United Kingdom); Mark Murphy (Liverpool John Moore University, United Kingdom); David Burton (Liverpool John Moores University, United Kingdom); Tom Marchant (The Christie NHS Foundation Trust, United Kingdom); Christopher Moore (The Christie NHS Foundation Trust, United Kingdom); Aymeric Histace (ETIS UMR CNRS 8051 & University of Cergy-Pontoise, ENSEA, France); Frederic Precioso (LIP6 CNRS UMR 7606 & UPMC Paris 6, France)
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Quantifying Structure Regularity in Fluorescence Microscopy Cell Images Using a Novel Multi-Dimensional Approximate Entropy Metric

Tom Marchant (The Christie NHS Foundation Trust, United Kingdom); Mark Murphy (Liverpool John Moore University, United Kingdom); Greg Madden (Liverpool John Moores University, United Kingdom); Christopher Moore (The Christie NHS Foundation Trust, United Kingdom)
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No-reference Image Quality Assessment Based on Visual Codebook

Peng Ye (University of Maryland, College Park, USA); David Doermann (University of Maryland Institute for Advanced Computer Studies, USA)
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DCT Statistics Model-Based Blind Image Quality Assessment

Michele Saad (The University of Texas at Austin, USA); Alan C Bovik (University of Texas at Austin, USA); Christophe Charrier (Universite de Caen Basse-Normandie, France)
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Crowdsourcing Subjective Image Quality Evaluation

Flavio Ribeiro (University of São Paulo, Brazil); Dinei Florencio (Microsoft Research, USA); Vitor H Nascimento (USP, Brazil)
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Systematic Stress Testing of Image Quality Estimators

Frank Ciaramello (Cornell University, USA); Amy Reibman (AT&T Labs - Research, USA)
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Objective Metrics for Quality of Experience in Stereoscopic Images

Liyuan Xing (Q2S-NTNU, Norway); Junyong You (Norwegian University of Science and Technology, Norway); Touradj Ebrahimi (EPFL, Switzerland); Andrew Perkiš (NTNU, Norway)
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Assessing the Quality of Compressed Images Using EEG

Lea Lindemann (TU Braunschweig, Germany); Marcus Magnor (TU Braunschweig, Germany)
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Alexander Behrens (RWTH Aachen University, Germany); Michael Bommers (RWTH Aachen University, Germany); Sebastian Gross (RWTH Aachen University, Germany); Til Aach (RWTH Aachen University, Germany)
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Comprehensive Assessment of Iris Image Quality

Xingguang Li (University of Science and Technology of China, P.R. China); Zhenan Sun (Chinese Academy of Sciences, P.R. China); Tieniu Tan (NLPR, P.R. China)
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Towards Real-Time 3D Region-Based Segmentation: B-Spline Explicit Active Surfaces

Daniel Barbosa (Katholieke Universiteit Leuven, Portugal); Jan D'hooge (Cardiac Imaging Research, Belgium); Thomas Dietenbeck (CREATIS, France); Denis Friboulet (CREATIS, France); Olivier Bernard (Creatis, France)
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Segmentation by Temporal Detection Integration

Yi-Ying Wang (Hermes Microvision Inc, Taiwan); Chia-han Lee (Academia Sinica, Taiwan)
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Image Labeling by Multiple Segmentation

Quan Zhou (Department of Electronics and Information Engineering, Huazhong University of Science and Technology, P.R. China); Canxiang Yan (Huazhong University of Science and Technology, P.R. China); Yingying Zhu (Huazhong University of Science and Technology, P.R. China); Xiang Bai (Huazhong University of Science and Technology, P.R. China); Wenyu Liu (Huazhong University of Science and Technology, P.R. China)
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Paulo Miranda (University of Campinas & Institute of Computing, Brazil); Alexandre Falcão (Institute of Computing, University of Campinas, Brazil); Thiago Spina (University of Campinas, Brazil)
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Susu Yao (Institute for Infocomm Research, Singapore); Ishtiaq Rasool Khan (A*STAR Institute for Infocomm Research, Singapore); Farzam Farbiz (A-Star Institute for Infocomm Research, Singapore)
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Virginia Estellers (Ecole Polytechnique Federale de Lausanne (EPFL), Switzerland); Dominique Zosso (Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland); Xavier Bresson (City University of Hong Kong, Hong Kong); Jean-Philippe Thiran (École Polytechnique Fédérale de Lausanne & Signal Processing Laboratory, Switzerland)
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Automatic Fish Segmentation Via Double Local Thresholding for Trawl-Based Underwater Camera Systems

Meng-Che Chuang (University of Washington, USA); Jenq-Neng Hwang (University of Washington, USA); Kresimir Williams (National Oceanic and Atmospheric Administration, USA); Richard Towler (National Oceanic and Atmospheric Administration, USA)
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Automatic People Segmentation with a Template-Driven Graph Cut

Cyrille Migniot (Grenoble Institute of Technology & GIPSA-LAB, France); Pascal Bertolino (Grenoble Institute of Technology, France); Jean-Marc Chassery (Grenoble Institute of Technology & GIPSA-LAB, France)
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New Color Filter Arrays of High Light Sensitivity and High Demosaicking Performance

Jue Wang (Peking University, P.R. China); Chao Zhang (Peking University, P.R. China); Pengwei Hao (Queen Mary, University of London, United Kingdom)
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Multispectral Demosaicking Using Adaptive Kernel Upsampling

Yusuke Monno (Tokyo Institute of Technology, Japan); Masayuki Tanaka (Tokyo Institute of Technology, Japan); Masatoshi Okutomi (Tokyo Institute of Technology, Japan)
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Tripurari Singh (Image Algorithmics, USA); Mritunjay Singh (Image Algorithmics, USA)
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Zahra Sadeghipoor (EPFL, Switzerland); Yue M. Lu (Harvard University, USA); Sabine Süsstrunk (EPFL, Switzerland)
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Michael Schöberl (University of Erlangen-Nuremberg, Germany); Wolfgang Schnurrer (University of Erlangen Nuremberg, Germany); Siegfried Foessel (Fraunhofer IIS, Germany); Andre Kaup (University of Erlangen-Nuremberg, Germany)
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Carlos S. Mendoza (University of Sevilla, Spain); Germán Bohórquez-Ruiz (University of Sevilla, Spain); Begoña Acha (University of Sevilla, Spain); Carmen Serrano (University of Sevilla, Spain)
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Hadi Hadizadeh (Simon Fraser University, Canada); Ivan V. Bajic (Simon Fraser University, Canada); Parvaneh Saeedi (Simon Fraser University, Canada); Scott Daly (Dolby Laboratories, USA)
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Johannes Jordan (University of Erlangen-Nuremberg, Germany); Elli Angelopoulou (Friedrich-Alexander University Erlangen-Nuremberg, Germany)
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WP.L6: Hand and Iris-based Biometrics (Lecture)

Contact-Free Hand Geometry Identification System

Jing-Ming Guo (National Taiwan University of Science and Technology, Taiwan); Yun-Fu Liu (National Taiwan University of Science and Technology, Taiwan)
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Deformable DAISY Matcher for Robust Iris Recognition

Man Zhang (Chinese Academy of Sciences, Institute of Automation, P.R. China); Zhenan Sun (Chinese Academy of Sciences, P.R. China); Tieniu Tan (NLPR, P.R. China)
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Incorporating Color Information for Reliable Palmprint Authentication

Aythami Morales (Universidad de Las Palmas de Gran Canaria & University Las Palmas de Gran Canaria, Spain); Ajay Kumar (The Hong Kong Polytechnic University, Hong Kong); Miguel A. Ferrer (Las Palmas de Gran Canaria University, Spain)
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Feature-domain Super-Resolution for Iris Recognition

Kien Nguyen (Queensland University of Technology, Australia); Clinton Fookes (Queensland University of Technology, Australia); Sridha Sridharan (Queensland University of Technology, Australia); Simon Denman (Queensland University of Technology, Australia)
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Katharina Quast (Friedrich-Alexander University Erlangen-Nuremberg, Germany); Christoph Seeger (University of Erlangen-Nuremberg, Germany); Mohan Trivedi (UCSD, USA); Andre Kaup (University of Erlangen-Nuremberg, Germany)
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Hyun-seok Min (KAIST, Korea); JaeYoung Choi (Korea Advanced Institute of Science and Technology (KAIST), Korea); Wesley Marcel De Neve (Korea Advanced Institute of Science and Technology (KAIST), Korea); Yong Man Ro (KAIST, Korea)
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