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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)
pp. 1-4

Numerical Schemes for Advanced Reflectance Models for Shape From Shading
Oliver Vogel (Saarland University, Germany); Emiliano Cristiani (SAPIENZA - Universita di Roma, Italy)
pp. 5-8

Break

Shape From Shading with Specular Highlights: Analysis of the Phong Model
Michael Breuss (Saarland University, Germany); Yong Chul Ju (Saarland University, Germany)
pp. 9-12

Shape-from-shading Under Complex Natural Illumination
Rui Huang (University of York, United Kingdom); William Smith (University of York, United Kingdom)
pp. 13-16

Reconstruction of non-Lambertian Surfaces by Fusion of Shape From Shading and Active Range Scanning
Steffen Herbort (Dortmund University of Technology, Germany); Arne Grumpe (Dortmund University of Technology, Germany); Christian Wöhler (Dortmund University of Technology, Germany)
pp. 17-20

Shape From Specular Reflection in Calibrated Environments and the Integration of Spatial Normal Fields
Jonathan Balzer (King Abdullah University of Science and Technology, Saudi Arabia)
pp. 21-24

MA.L2: Structural Models (Lecture)

Joint Pose Estimation and Action Recognition in Image Graphs
Raja Kumar (IRISA & INRIA Rennes, France); Ivan Laptev (INRIA Paris - Rocquencourt, France); Patrick Pérez (INRIA, France); Lionel Oisel (Thomson, France)
pp. 25-28

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)
pp. 29-32

Break

Automatic Target Recognition Using Discriminative Graphical Models
Umamahesh Srinivas (Pennsylvania State University, USA); Vishal Monga (Pennsylvania State University, USA); Raghu Raj (None, USA)
pp. 33-36

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)
pp. 37-40

Planarity-Enforcing Higher-Order Graph Cut
Thomas Weibel (Fraunhofer ITWM & CRAN-ENSEM-INPL, Germany); Christian Daul (CRAN INPL Nancy, France); Didier Wolf (CRAN INPL Nancy, France); Ronald Rösch (Fraunhofer ITWM, Germany)
pp. 41-44

Learning Structural Conjunction of Image Content by Sparse Graphical Model
Donghui Wang (Zhejiang University, P.R. China); Xiao Deng (Zhejiang University, P.R. China)
pp. 45-48

MA.L3: Biomedical Image Analysis (Lecture)

Automatic Quality Enhancement and Nerve Fibre Layer Artefacts Removal in Retina Fundus Images by Off Axis Imaging
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)
pp. 49-52

Advanced Statistical Matrices for Texture Characterization: Application to DNA Chromatin and Microtubule Network Classification
Guillaume Thibault (Centre de Morphologie Mathematique & MINES PARISTECH, France); Jesus Angulo (MINES Paristech, France); Fernand Meyer (Mines ParisTech, Ecole des Mines de Paris, France)
pp. 53-56

Break

Comparison of Energy Minimization Methods for 3-D Brain Tissue Classification
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)

pp. 57-60

Clump Splitting Via Bottleneck Detection
Maddy Hui Wang (University of Alberta, Canada); Hong Zhang (University of Alberta, Canada); Nilanjan Ray (University of Alberta, Canada)
pp. 61-64

Texture Classification of Scarred and Non-Scarred Myocardium in Cardiac MRI Using Learned Dictionaries
Lasya Kotu (University of Stavanger, Norway); Kjersti Engan (University of Stavanger, Norway); Trygve Eftestøl (University of Stavanger, Norway); Stein Ørn (Stavanger University Hospital, Norway); Leik Woie (Stavanger University Hospital, Norway)
pp. 65-68

Automatic IVUS Media-Adventitia Border Extraction Using Double Interface Graph Cut Segmentation
Ehab Essa (Swansea University, United Kingdom); Xianghua Xie (Swansea University, United Kingdom); Igor Sazonov (Swansea, United Kingdom); Perumal Nithiarasu (Swansea University, United Kingdom)
pp. 69-72

MA.L4: Nonlinear and Linear Filtering (Lecture)

Non-Linearization of Free Schrödinger Equation and Pseudo-Morphological Complex Diffusion Operators
Jesus Angulo (MINES Paristech, France)
pp. 73-76

Adaptive Filtering of Raster Map Images Using Optimal Context Selection
Minjie Chen (University of Eastern Finland, Finland); Mantao Xu (Shanghai Dian Ji University, P.R. China); Pasi Fränti (University of Eastern Finland, Finland)
pp. 77-80

Break

FM Processing with Generalized Amplitude & Phase: Application to Modulation Domain Geometric Image Transformations
Chuong Nguyen (University of Oklahoma, USA); Jonathan Williams (University of Oklahoma, USA); Joseph P. Havlicek (University of Oklahoma, USA); Murad Özaydin (University of Oklahoma, USA)
pp. 81-84

Approximating Image Filters with Box Filters
Bernardo Pires (Carnegie Mellon University, USA); Karanhaar Singh (Carnegie Mellon University, USA); Jose Moura (Carnegie Mellon University, USA)
pp. 85-88

Cosine Integral Images for Fast Spatial and Range Filtering
Elhanan Elboher (The Hebrew University of Jerusalem, Israel); Michael Werman (Hebrew University of Jerusalem, Israel)
pp. 89-92

An Optimal Design of FIR Filters with Discrete Coefficients and Image Sampling Application

Ha H Kha (University of Technology Sydney, Australia); Hoang D. Tuan (University of Technology, Sydney, Australia); Truong Nguyen (University of California in San Diego, USA)

pp. 93-96

MA.L5: Image Search and Retrieval (Lecture)

Exploiting Contextual Information for Rank Aggregation

Daniel Pedronette (University of Campinas, Brazil); Ricardo da Silva Torres (Institute of Computing, State University of Campinas, Brazil)

pp. 97-100

Local Geometric Consistency Constraint for Image Retrieval

Hongtao Xie (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Ke Gao (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Yongdong Zhang (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Jintao Li (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China)

pp. 101-104

Break

Generating Vocabulary for Global Feature Representation Towards Commerce Image Retrieval

Zhang Chen (Peking University, P.R. China); Lingyu Duan (Peking University, P.R. China); Wang Chunyu (Peking University, P.R. China); Tiejun Huang (Peking University, P.R. China); Wen Gao (Peking University, P.R. China)

pp. 105-108

Efficient Bag-of-Feature Kernel Representation for Image Similarity Search

Frederic Precioso (LIP6 CNRS UMR 7606 & UPMC Paris 6, France); Matthieu Cord (UPMC Paris 6, France); David Gorisse (ETIS, CNRS, ENSEA, UniversityCergy-Pontoise, France); Nicolas Thome (University Pierre et Marie Curie, France)

pp. 109-112

Grid-based Local Feature Bundling for Efficient Object Search and Localization

Jiang Yuning (Nanyang Technology University, Singapore); Jingjing Meng (Motorola Inc., USA); Junsong Yuan (Nanyang Technological University, Singapore)

pp. 113-116

MA.L6: 3D Coding and Representation (Lecture)

Block-Adaptive Palette-based Prediction for Depth Map Coding

Shinya Shimizu (NTT Corporation, Japan); Hideaki Kimata (NTT Corporation, Japan); Shiori Sugimoto (NTT Corporation, Japan); Norihiko Matsuura (NTT Corporation, Japan)

pp. 117-120

Region-based Adaptive Bilateral Filter in Depth Map Coding
Ilsoon Lim (Samsung Electronics, Korea); Hochen Wey (Samsun Advanced Institute of Technology, Samsung Electronics Co., Ltd., Korea); Jaejoon Lee (Samsung Electronics, Korea)
pp. 121-124

Break

Object-based Layered Depth Images for Improved Virtual View Synthesis in Rate-Constrained Context
Vincent Jantet (ENS Cachan, Antenne de Bretagne, France); Christine Guillemot (INRIA, France); Luce Morin (INSA-Rennes, France)
pp. 125-128

Transform Domain Sparsification of Depth Maps Using Iterative Quadratic Programming
Gene Cheung (National Institute of Informatics, Japan); Junichi Ishida (Chuo University, Japan); Akira Kubota (Chuo University, Japan); Antonio Ortega (USC, USA)
pp. 129-132

Sparse Stereo Image Coding with Learned Dictionaries
Dimitri Palaz (EPFL, Switzerland); Ivana Tošić (UC Berkeley, USA); Pascal Frossard (Swiss Federal Institute of Technology - EPFL, Switzerland)
pp. 133-136

Efficient Compression Method for Integral Images Using Multi-view Video Coding
Shasha Shi (Télécom-Bretagne & France Télécom, France); Patrick Gioia (Orange Labs, France); Gérard Madec (Télécom-Bretagne, France)
pp. 137-140

MA.L7: Error Resilience and Channel Coding for Image & Video Systems (Lecture)

Belief Consensus for Distributed Action Recognition
Ahmed T Kamal (University of California, Riverside, USA); Bi Song (University of California at Riverside, USA); Amit Roy-Chowdhury (University of California, Riverside, USA)
pp. 141-144

Content-Aware Utility-Fair Video Streaming in Wireless Broadcasting Networks
Wen Ji (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Zhu Li (Huawei Technology USA, USA); Yiqiang Chen (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China)
pp. 145-148

Break

Resource Management for Wireless Visual Sensor Networks Based on Individual Video Characteristics
Angeliki Katsenou (University of Ioannina, Greece); Lisimachos P Kondi (University of Ioannina, Greece); Konstantinos Parsopoulos (University of Ioannina, Greece)

pp. 149-152

Tracking-Optimized Quantization for H.264 Compression in Transportation Video Surveillance Applications
Eren Soyak (Northwestern University, USA); Sotirios A. Tsaftaris (Northwestern University, USA); Aggelos K. Katsaggelos (Northwestern University, USA)
pp. 153-156

Dynamic GOP Size Control for Low-Delay Distributed Video Coding
Krishna Rao Vijayanagar (Illinois Institute of Technology, USA); Joohee Kim (Illinois Institute of Technology, USA)
pp. 157-160

Optimal Image Transmission Over Visual Sensor Networks
sungjin Lee (Yonsei University, Korea); Sanghoon Lee (Yonsei University, Korea); Alan C Bovik (University of Texas at Austin, USA)
pp. 161-164

MA.L8: Radar Imaging and Remote Sensing (Lecture)

Bayesian TV Denoising of SAR Images
MIguel Vega (University of Granada, Spain); Javier Mateos (University of Granada, Spain); Rafael Molina (Universidad de Granada, Spain); Aggelos K. Katsaggelos (Northwestern University, USA)
pp. 165-168

SAR Image Classification with Non-stationary Multinomial Logistic Mixture of Amplitude and Texture Densities
Koray Kayabol (INRIA, France); Aurelie Voisin (INRIA, France); Josiane Zerubia (INRIA, Sophia Antipolis, France)
pp. 169-172

Break

Sparsity-driven Image Formation and Space-variant Focusing for SAR
Özben Önhon (Sabanci University, Turkey); Müjdat Çetin (Sabanci University, Turkey)
pp. 173-176

Incremental Evolution of Collective Network of Binary Classifier for Polarimetric SAR Image Classification
Stefan Uhlmann (Tampere University of Technology, Finland); Serkan Kiranyaz (Tampere University of Technology, Finland); Moncef Gabbouj (Tampere University of Technology & Tampere, Finland, Finland); Turker Ince (, Turkey)
pp. 177-180

Multispectral Interest Points for RGB-NIR Image Registration
Damien Firmenich (EPFL, Switzerland); Matthew Brown (EPFL, Switzerland); Sabine Süsstrunk (EPFL, Switzerland)
pp. 181-184

Contrast Enhancement and Denoising of Poisson and Gaussian Mixture Noise for Solar Images
Bojana Begovic (Royal College Building 204 George Street & University of Strathclyde, EEE Department, United Kingdom); Vladimir Stankovic (University of

MA.PA: Image & Video Representation - Perception and Quality Models for Images & Video (Poster)

MA.PB: Multi-Resolution Methods for Image Processing (Poster)

MA.PC: Image Coding (Poster)

MA.PD: Hardware and GPU Issues in Video / High Dynamic Range Imaging and Shape Estimation (Poster)

MA.PE: CT Image Processing Methods (Poster)

MA.PF: Tracking (Poster)

MA.PG: Preprocessing and Features for Biometrics (Poster)

Pose Invariant Facial Component-Landmark Detection
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)
pp. 569-572

Spatial and Probabilistic Codebook Template Based Head Pose Estimation From Unconstrained Environments
Meltem Demirkus (Mcgill University, Canada); Boris N Oreshkin (Mcgill University, Canada); James Clark (McGill University, Canada); Tal Arbel (McGill, Canada)
pp. 573-576

Newton Optimization Based Congealing for Facial Image Alignment
Weiyuan Ni (Grenoble University, France); Alice Caplier (Institut National Polytechnique de Grenoble, France)
pp. 577-580

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)
pp. 581-584

Mapping Data on a Rotated Grid in High-dimensions for Lossless Compression
Zihong Fan (University of Southern California, USA); Antonio Ortega (USC, USA)
pp. 585-588

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)
pp. 589-592

Frame Structure Optimization for Interactive Multiview Video Streaming with Bounded Network Delay
Xiaoyu Xiu (Simon Fraser University, Canada); Gene Cheung (National Institute of Informatics, Japan); Jie Liang (Simon Fraser University, Canada)
pp. 593-596

break

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)
pp. 597-600

Interactive Multiview Image Coding

Andriy Gelman (Imperial College London, United Kingdom); Pier Luigi Dragotti (Imperial College London, United Kingdom); Vladan Velisavljević (University of Bedfordshire, United Kingdom)

pp. 601-604

A Trellis-based Approach for Robust View Synthesis

Dong Tian (Mitsubishi Electric Research Labs, USA); Anthony Vetro (Mitsubishi Electic Research Laboratories, USA); Matthew Brand (MERL, USA)

pp. 605-608

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)

pp. 609-612

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)

pp. 613-616

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)

pp. 617-620

Effective Autofocus Decision Using Reciprocal Focus Profile

Dong-Chen Tsai (National Taiwan University, Taiwan); Homer Chen (National Taiwan University, Taiwan)

pp. 621-624

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)

pp. 625-628

break

Robust Video Stabilization Approach Based on a Voting Strategy

Giovanni Puglisi (University of Catania, Italy); Sebastiano Battiato (University of Catania, Italy)

pp. 629-632

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)
pp. 633-636

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)
pp. 637-640

Paracatadioptric Camera Calibration Using Sphere Images
Huixian Duan (Chinese Academy of Sciences, P.R. China); Yihong Wu (Chinese Academy of Sciences, P.R. China)
pp. 641-644

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)
pp. 645-648

High Resolution Biologically Inspired Salient Region Detection
Yusuf Saber (Ryerson University, Canada); Matthew J Kyan (Ryerson University, Canada)
pp. 649-652

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)
pp. 653-656

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)
pp. 657-660

break

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)
pp. 661-664

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

Huu-Giao Nguyen (Institut Telecom / Telecom Bretagne / Labsticc, France)

pp. 665-668

Improving Image Similarity with Vectors of Locally Aggregated Tensors

David Picard (ETIS - ENSEA, France); Philippe H Gosselin (CNRS, ENSEA, UniversityCergy-Pontoise, France)

pp. 669-672

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)

pp. 673-676

MP.L4: Image Restoration (Lecture)

Single Image Spatially Variant Out-Of-Focus Blur Removal

Stanley Chan (University of California, San Diego, USA); Truong Nguyen (University of California in San Diego, USA)

pp. 677-680

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)

pp. 681-684

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)

pp. 685-688

Two Constrained Formulations for Deblurring Poisson Noisy Images

Mikael Carlavan (INRIA, France); Laure Blanc-Féraud (CNRS, France)

pp. 689-692

break

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)

pp. 693-696

Adaptive Regularization for Multiple Image Restoration Using an Extended Total Variations Approach

Matthew A. Kitchener (University of Wollongong, Australia); Abdesselam Bouzerdoum (University of Wollongong, Australia); Son Lam Phung (University of Wollongong, Australia)

pp. 697-700

A New Image Deblurring Algorithm with Less Ringing Artifacts Via Error Variance Estimation and Soft Decision

Ruiqin Xiong (Peking University, P.R. China)

pp. 701-704

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)

pp. 705-708

MP.L5: Best Student Paper Award Session (Lecture)

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)

pp. 709-712

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 Marti (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)

pp. 713-716

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)

pp. 717-720

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)

pp. 721-724

break

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)

pp. 725-728

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)

pp. 729-732

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)

pp. 733-736

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)

pp. 737-740

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)

pp. 741-744

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)

pp. 745-748

break

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)

pp. 749-752

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)

pp. 753-756

Frame Buffer Compression for Low-power Video Coding

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

pp. 757-760

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)

pp. 761-764

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)

pp. 765-768

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)

pp. 769-772

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)

pp. 773-776

break

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)

pp. 777-780

MP.PA: Geometry Texture and Object-based Representation (Poster)

MP.PB: 3D Modeling and Synthesis (Poster)

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)

pp. 885-888

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)

pp. 889-892

Implicit B-Spline Fitting Using the 3L Algorithm

Mohammad Rouhani (Computer Vision Center, Spain); Angel D. Sappa (Computer Vision Center, Spain)

pp. 893-896

Surface Completion of Shape and Texture Based on Energy Minimization

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)

pp. 897-900

Dense Point-To-Point Correspondences Between 3D Faces with Large Variations for Constructing 3D Morphable Models

Moritz Kaiser (Technical University of Munich, Germany); Nicolas H. Lehment (Technische Universität München, Germany); Gerhard Rigoll (Technische Universität München, Germany)

pp. 901-904

3D Mesh Compression Based on Dual-Ring Prediction and MMSE Prediction

Dae-Youn Lee (Korea University, Korea); Jae-Kyun Ahn (Korea University, Korea); Minsu Ahn (Samsung Advanced Institute of Technology, Korea); James D. K. Kim (Samsung Advanced Institute of Technology, Korea); Changyeong Kim (Samsung Advanced Institute of Technology, Korea); Chang-Su Kim (Korea University, Korea)

pp. 905-908

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)

pp. 909-912

MP.PC: Image & Video Communication (Poster)

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)

MP.PD: Stereo Processing (Poster)

MP.PE: Features for Image Analysis (Poster)

MP.PF: Image & Video Synthesis (Poster)

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

Transform Domain Semi-Super Resolution
Edson Hung (Universidade de Brasilia, Brazil); Diogo Garcia (Universidade de Brasília, Brazil); Ricardo L de Queiroz (University of Brasil, Brazil)
pp. 1193-1196

Efficient Super-Resolution Driven by Saliency Selectivity
Nabil Sadaka (Arizona State University, USA); Lina Karam (Arizona State University, USA)
pp. 1197-1200

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)
pp. 1201-1204

Fast Encoding Algorithms for Geometry-Adaptive Block Partitioning
Philippe Bordes (Technicolor, France); Edouard Francois (Technicolor, France); Dominique Thoreau (Technicolor, France)
pp. 1205-1208

break

Efficient Coding of Video Sequences by Non-Local In-Loop Denoising of Reference Frames
Eugen Wige (University of Erlangen-Nuremberg, Germany); Gilbert Yammine (University of Erlangen-Nuremberg, Germany); Peter Amon (Siemens, Germany); Andreas Hutter (Siemens Corporate Technology, Germany); Andre Kaup (University of Erlangen-Nuremberg, Germany)
pp. 1209-1212

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)
pp. 1213-1216

Picture-level Parameteric 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)
pp. 1217-1220

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)
pp. 1221-1224

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)
pp. 1225-1228

On Sparse Representations of Color Images
Xiaolin Wu (McMaster University, Canada); Guangtao Zhai (McMasster University, Canada)
pp. 1229-1232

break

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)
pp. 1233-1236

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)
pp. 1237-1240

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)
pp. 1241-1244

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)
pp. 1245-1248

TA.L3: Image Classification (Lecture)

CW-SSIM Based Image Classification
Yang Gao (University of Waterloo, Canada); Abdul Rehman (University of Waterloo, Canada); Zhou Wang (University of Waterloo, Canada)
pp. 1249-1252

Tree Trunk Detection Using Contrast Templates
Yan Lu (University of Delaware, USA); Christopher Rasmussen (University of Delaware, USA)
pp. 1253-1256

break

Human Skin Detection in Images by MSER Analysis
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)
pp. 1257-1260

HMAX-S: Deep Scale Representation for Biologically Inspired Image Categorization
Christian Theriault (Pierre et Marie Currie University, France); Nicolas Thome (University Pierre et Marie Curie, France); Matthieu Cord (UPMC Paris 6, France)
pp. 1261-1264

Stochastic Minimum Spanning Forest Approach for Spectral-Spatial Classification of Hyperspectral Images
Kévin Bernard (University of Iceland & Heriot-Watt University, United Kingdom); Yuliya Tarabalka (GIPSA-Lab, France); Jesus Angulo (MINES Paristech, France); Jocelyn Chanussot (Grenoble Institute of Technology, France); Jon Benediktsson (University of Iceland, Iceland)
pp. 1265-1268

TA.L4: Image Analysis Using Multi-Scale and Hierarchical Methods (Lecture)

Optimized Butterfly-based Lifting Scheme for Semi-Regular Meshes
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)
pp. 1269-1272

Hyperspectral Image Segmentation Using Binary Partition Trees
Silvia Valero (Universitat Politecnica de Catalunya, Spain); Philippe Salembier (Universitat Politecnica de Catalunya, Spain); Jocelyn Chanussot (Grenoble Institute of Technology, France)
pp. 1273-1276

break

Testing a Multivariate Model for Wavelet Coefficients
Roland Kwitt (University of Salzburg, Austria); Peter Meerwald (University of Salzburg, Austria); Andreas Uhl (Salzburg University, Austria); Geert Verdoolaege (Ghent University, Belgium)
pp. 1277-1280

3D Facial Expression Analysis by Using 2D and 3D Wavelet Transforms
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)
pp. 1281-1284

Detecting Gestures in Medieval Images
Joseph Schlecht (University of Heidelberg, Germany); Bernd Carqué (University of Heidelberg, Germany); Björn Ommer (IWR - University of Heidelberg, Germany)
pp. 1285-1288

Pose Estimation and Body Segmentation Based on Hierarchical Searching Tree
Li Shifeng (Dalian University of Technology, P.R. China); Huchuan Lu (Dalian University of Technology, P.R. China); Ruan (OMRON Corp., Japan); Yen-Wei Chen (Ritsumeikan University, Japan)
pp. 1289-1292

TA.L5: Astronomy and Cosmology (Special Session)

Bayesian MAP Detection of Extragalactic Point Sources in Microwave Astronomical Images
Diego Herranz (Instituto de Fisica de Cantabria, Santander, Spain); Francisco Argüeso (Universidad de Oviedo, Spain); Emanuele Salerno (ISTI-CNR, Italy); Ercan Kuruoğlu (CNR, Pisa, Italy); Koray Kayabol (INRIA, France)
pp. 1293-1296

Source Separation in Cosmology, From Global to Local Models
Jerome Bobin (CEA, France); Florent Sureau (CEA, France); Jean-Luc Starck (CEA, France)
pp. 1297-1300

break

Data Augmentation for Galaxy Density Map Reconstruction
Francois-Xavier Dupé (CEA, France); Jalal Fadili (GREYC CNRS UMR 6072, ensicaen, France); Jean-Luc Starck (CEA, France)
pp. 1301-1304

Image Processing Challenges in Weak Gravitational Lensing
Adam Amara (ETHZ, Switzerland)
pp. 1305-1308

Scale Invariant Images in Astronomy Through the Lens of Multifractal Modeling
Pierre Chainais (INRIA Lille-Nord Europe & Clermont University, France); Véronique Delouille (Royal Observatory of Belgium, Belgium); Jean-François Hochedez (LATMOS UMR CNRS 8190, France)
pp. 1309-1312

Compressed Sensing for Radio Interferometric Imaging: Review and Future Direction
Jason McEwen (Ecole Polytechnique Federale de Lausanne, Switzerland); Yves Wiaux (EPFL, Switzerland)
pp. 1313-1316

TA.L6: High Dynamic Range Imaging and Compression (Lecture)

Spatially Adaptive Filtering for Registration Artifact Removal in HDR Video
Stephen Mangiat (University of California, Santa Barbara, USA); Jerry D Gibson (University of California, Santa Barbara, USA)
pp. 1317-1320

Perception-Based High Dynamic Range Video Compression with Optimal Bit-depth Transformation
Yang Zhang (University of Bristol, United Kingdom); Erik Reinhard (University of Bristol, United Kingdom); David Bull (University of Bristol, United Kingdom)
pp. 1321-1324

break

A Single Algorithm Combining Exposure and Focus Fusion
Azhar Sufi (SRI International & Rutgers University, USA); David C. Zhang (SRI International Sarnoff, USA); Gooitzen van der Wal (SRI International, USA)
pp. 1325-1328

SDALA: Simultaneous Dynamic Range Compression and Local Contrast Enhancement Algorithm
Chi-Yi Tsai (Tamkang University, Taiwan)
pp. 1329-1332

High Dynamic Range Imaging Under Noisy Observations
Renu Rameshan (Indian Institute of Technology Bombay & Amrita Vishwa Vidyapeetham, India); Subhasis Chaudhuri (Indian Institute of Technology, Bombay, India); Rajbabu Velmurugan (IIT Bombay, India)
pp. 1333-1336

De-ghosting of HDR Images with Double-credit Intensity Mapping
Zijian Zhu (Institute for Infocomm Research, Singapore); Zhengguo Li (Institute for Inforcomm Research, Singapore); Susanto Rahardja (Institute for Infocomm Research, Singapore); Pasi Fränti (University of Eastern Finland, Finland)
pp. 1337-1340

TA.L7: Interpolation and Super-resolution (Lecture)

Fast Video Interpolation/Upsampling Using Linear Motion Model
Kwok-Wai Hung (The Hong Kong Polytechnic University, Hong Kong); Wan-Chi Siu (The Hong Kong Polytechnic University, Hong Kong)
pp. 1341-1344

Parameter Estimation in Bayesian Super-Resolution Pansharpening Using Contourlets
Israa Amro (Al-Quds Open University, Palestine); Javier Mateos (University of Granada, Spain); MIguel Vega (University of Granada, Spain)
pp. 1345-1348

break

Learning Context-Aware Sparse Representation for Single Image Super-Resolution
Min-Chun Yang (National Taiwan University, Taiwan); Chang-Heng Wang (National Taiwan University, Taiwan); Ting-Yao Hu (National Taiwan University, Taiwan); Yu-Chiang Frank Wang (Academia Sinica, Taiwan)
pp. 1349-1352

Multi-scale Non-Local Kernel Regression for Super Resolution
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)
pp. 1353-1356

Two-step Super-resolution Technique Using Bounded Total Variation and Bisquare M-estimator Under Local Illumination Changes
Mohamed M. Fouad (Military Technical College, Egypt); Richard Dansereau (Carleton University, Canada); Anthony Whitehead (Carleton Universty, Canada)
pp. 1357-1360

Discrete Infinity Harmonic Functions: Towards a Unified Interpolation Framework on Graphs
Mahmoud Ghoniem (Université de Caen Basse-Normandie, France); Abderrahim Elmoataz (Université de Caen Basse-Normandi, France); Olivier Lezoray (Université de Caen Basse-Normandie & Greyc UMR CNRS 6072, France)
pp. 1361-1364

TA.L8: Tomographic Imaging (Lecture)

On the Efficiency of Proximal Methods in CBCT and PET
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)
pp. 1365-1368

Regularized Polychromatic Reconstruction for Transmission Tomography
Kwang Eun Jang (Samsung Advanced Institute of Technology, Korea)
pp. 1369-1372

break

A Discrete-Continuous Bayesian Model for Emission Tomography
Mame Diarra Fall (Université Paris-Sud 11, France); Eric Barat (CEA, France); Claude Comtat (Service Hospitalier Frédéric Joliot, France); Thomas Dautremer (CEA, France); Thierry Montagu (CEA, France); Ali Mohammad-Djafari (Centre national de la recherche scientifique (CNRS), France)
pp. 1373-1376

Bayesian Data Fusion and Inversion in X-ray Multi-Energy Computed Tomography
Caifang Cai (Commissariat a Energie Atomique, France); Ali Mohammad-Djafari (Centre national de la recherche scientifique (CNRS), France); Samuel Legoupil

TA.PA: Statistical-Model-Based Processing and Tracking (Poster)

TA.PB: Filtering (Poster)

TA.PC: Image Processing: Analysis, Modeling, Enhancement (Poster)

TA.PD: Biomedical Image Processing and Applications (Poster)

Cancer Detection From Biopsy Images Using Probabilistic and Discriminative Features

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)

pp. 1609-1612

An Effective Method of Searching for Subregions in Chromosome Images

Toru Abe (Cyberscience Center, Tohoku University, Japan); Chieko Hamada (Tohoku University, Japan)

pp. 1613-1616

A 3D Human Teeth Database Construction Based on a Point-Based Shape Registration

Dongqing Chen (University of Louisville, USA)

pp. 1617-1620

An Ensemble-based Microaneurysm Detector for Retinal Images

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

pp. 1621-1624

TA.PE: Video Coding and Motion Estimation (Poster)

Optimal Rate Adaptation with Integer Linear Programming in the Scalable Extension of H.264/AVC

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)

pp. 1625-1628

Rate-Distortion Analysis of Super-Resolution Image/Video Decoding

Keita Takahashi (The University of Tokyo, Japan); Takeshi Naemura (Tokyo University, Japan); Masayuki Tanaka (Tokyo Institute of Technology, Japan)

pp. 1629-1632

Temporal Trajectory Filtering for Bi-Directional Predicted Frames

Marko Esche (Technische Universität Berlin, Germany); Andreas Krutz (Technische Universität Berlin, Germany); Alexander Glantz (Technische Universität Berlin, Germany); Thomas Sikora (Technische Universität Berlin, Germany)

pp. 1633-1636

Chroma Intra Prediction Using Template Matching with Reconstructed Luma Components

Chuohao Yeo (Institute for Infocomm Research, Singapore); Yih Han Tan (Institute for Infocomm Research, Singapore); Zhengguo Li (Institute for Inforcomm Research, Singapore); Susanto Rahardja (Institute for Infocomm Research, Singapore)

pp. 1637-1640

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)
pp. 1673-1676

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)
pp. 1677-1680

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)
pp. 1681-1684

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)
pp. 1685-1688

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)
pp. 1689-1692

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)
pp. 1693-1696

Color Distribution Matching Using a Weighted Subspace Descriptor
Kenjiro Sugimoto (Waseda University, Japan); Sei-ichiro Kamata (Waseda University, Japan)
pp. 1697-1700

Real-time Visual Saliency by Division of Gaussians
Ioannis Katramados (TRW Conekt, United Kingdom); Toby Breckon (Cranfield University, United Kingdom)
pp. 1701-1704

NEURAL GRAY EDGE: Improving Gray Edge Algorithm Using Neural Network
Mohsen Ebrahimi Moghaddam (Shahid Beheshti University, Iran)
pp. 1705-1708

Dimensionality Reduction of Hyperspectral Images with Wavelet Based Empirical Mode Decomposition

Esra Tunc Gormus (University of Bristol, United Kingdom); Nishan Canagarajah (University of Bristol, United Kingdom); Alin M Achim (University of Bristol, United Kingdom)

pp. 1709-1712

Removing Shadows From Images Using Color and Near-infrared

Neda Salamati (EPFL, Switzerland); Arthur Germain (EPFL, Switzerland); Sabine Süsstrunk (EPFL, Switzerland)

pp. 1713-1716

Inverse Halftoning with Nonlocal Regularization

Xin Li (West Virginia University, USA)

pp. 1717-1720

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)

pp. 1721-1724

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)

pp. 1725-1728

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)

pp. 1729-1732

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)

pp. 1733-1736

TA.PG: Applications of Image & Video Interpretation and Understanding (Poster)

Face Recognition Using Maximum Local Fisher Discriminant Analysis

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)

pp. 1737-1740

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)
pp. 1781-1784

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)
pp. 1785-1788

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)
pp. 1789-1792

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)
pp. 1793-1796

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)
pp. 1813-1816

break

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 Electic 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

break

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

break

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 Vandergheynst (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

break

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

break

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

break

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 l_\infty-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

break

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

break

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 (Universita' 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 of Wollongong, Australia); Wanqing Li (University of Wollongong, Australia)

pp. 2049-2052

Local Binary Pattern Features for Pedestrian Detection At Night/Dark Environment

Yunyun Cao (Security & Safety Systems Development Office & Tokyo Research & Development Center, Panasonic Corporation, Japan); Sugiri Pranata (Panasonic Singapore Laboratories Pte Ltd, Singapore); Hirofumi Nishimura (Tokyo R&D Center, Panasonic Corporation, Japan)

pp. 2053-2056

Effective Discretization of Gabor Features for Real-time Face Detection

Feijun Jiang (Hong Kong University of Science and Technology, P.R. China); Bertram Shi (Hong Kong University of Science and Technology, Hong Kong); Mika Fischer (Karlsruhe Institute of Technology (KIT), Germany); Hazim Ekenel (Karlsruhe Institute of Technology (KIT), Germany)

pp. 2057-2060

Robust Crowd Counting Using Detection Flow

Junliang Xing (Tsinghua University, P.R. China); Haizhou Ai (Tsinghua University, P.R. China); Liwei Liu (Tsinghua University, P.R. China); Shihong Lao (OMRON Corporation, Japan)

pp. 2061-2064

break

Direction-based Stochastic Matching for Pedestrian Recognition in Non- Overlapping Cameras

Xiaotang Chen (Institute of Automation, Chinese Academy of Science, P.R. China); Kaiqi Huang (Chinese Academy of Sciences, P.R. China); Tieniu Tan (NLPR, P.R. China)

pp. 2065-2068

Robust Shape-From-Image-Focus by 3-D Multivariate Statistical Analyses

Mathieu Fernandes (Ecole des Mines de Saint-Etienne, France); Yann Gavet (Ecole des Mines de Saint-Etienne, France); Jean-Charles Pinoli (Ecole Nationale Supérieure des Mines, France)

pp. 2069-2072

TP.PA: Image & Video Representations and Applications (Poster)

TP.PB: Biomedical Image Registration and Segmentation (Poster)

TP.PC: Image/Video Coding, Streaming and Recovery (Poster)

Contribution-based Peer Selection for Packet Protection for P2P Video Streaming Over Mesh-based Networks

Chi-Wen Lo (National Tsing Hua University, Taiwan); Chia-Wen Lin (National Tsing Hua University, Taiwan); Yung-Chang Chen (National Tsing Hua University, Taiwan); Yu Jen-Yu (Industrial Technology Research Institute, Taiwan)

pp. 2233-2236

Channel Protection for H.264 Compression in Transportation Video Surveillance Applications

Eren Soyak (Northwestern University, USA); Sotirios A. Tsaftaris (Northwestern University, USA); Aggelos K. Katsaggelos (Northwestern University, USA)

pp. 2237-2240

Scalable Video Streaming Over OpenFlow Networks:An Optimization Framework for QoS Routing

Hilmi Enes Egilmez (Koc University, Turkey); Burak Gorkemli (Koç University, Turkey); A. Murat Tekalp (Koc University, Turkey); Seyhan Civanlar (Argela Technologies, Turkey)

pp. 2241-2244

Error Recovery of Image-Based Depth Maps Using Bézier Curve Fitting

Sylvain Marcelino (Universidade de Tras-os-Montes e Alto Douro / Instituto de Telecomunicacoes Leiria, Portugal); Pedro A. Amado Assuncao (Polytechnic Institute of Leiria / Instituto de Telecomunicacoes, Portugal); Sérgio M. M. Faria (Institute of Telecommunications & Polytechnic Institute of Leiria, Portugal); Salviano Soares (Universidade de Trás-os-Montes e Alto Douro, Portugal)

pp. 2245-2248

Adaptive Policies for Real-Time Video Transmission: A Markov Decision Process Framework

Chao Chen (The University of Texas at Austin, USA); Robert Heath (The University of Texas at Austin, USA); Alan C Bovik (University of Texas at Austin, USA); Gustavo de Veciana (The University of Texas at Austin, USA)

pp. 2249-2252

Adaptive Frame and QP Selection for Temporally Super-Resolved Full-Exposure-Time Video

MIhoko Shimano (University of Tokyo, Japan); Gene Cheung (National Institute of Informatics, Japan); Imari Sato (National Institute of Informatics, Japan)

pp. 2253-2256

TP.PD: Computational and Magnetic Resonance Imaging (Poster)

An Exploration Framework for Segmentation Parameter Spaces

Sarra Ben Fredj (Creatis, France); Tristan Glatard (University of Lyon ; CREATIS-LRMN, France); Christopher Casta (CREATIS, France); Patrick Clarysse (CREATIS-LRMN, CNRS UMR 5220, INSERM U630, France)

pp. 2257-2260

Parallel Quadratic Programming for Image Processing

Matthew Brand (MERL, USA); Donghui Chen (Tufts University, USA)

pp. 2261-2264

TP.PE: Tracking and Motion Detection (Poster)

TP.PF: Scene Analysis (Poster)

TP.PG: Image Retrieval (Poster)

A Novel Image Importance Model for Content-Aware Image Resizing
Wonjun Kim (Korea Advanced Institute of Science and Technology (KAIST), Korea)
pp. 2469-2472

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)
pp. 2481-2484

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)
pp. 2485-2488

Online Vicept 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)
pp. 2489-2492

break

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)
pp. 2497-2500

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 Acadamy of Sciences, P.R. China); Changsheng Xu (Institute of Automation, Chinese Academy of Sciences & China-Singapore Institute of Digial Media, P.R. China)
pp. 2501-2504

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 Egomotion
Jin. C. Park (Yonsei University, Korea); Kalpana Seshadrinathan (Intel, USA); Sanghoon Lee (Yonsei University, Korea); Alan C Bovik (University of Texas at Austin, USA)
pp. 2509-2512

break

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 Digial Media, P.R. China); Xu Dong (Powerlayer Microsystems, P.R. China)

pp. 2533-2536

break

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)

pp. 2537-2540

Shape Context Based Image Hashing Using Local Feature Points

Xudong Lv (University of British Columbia, Canada); Z. Jane Wang (University of British Columbia, Canada)

pp. 2541-2544

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)

pp. 2545-2548

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)

pp. 2549-2552

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

break

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)

pp. 2569-2572

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)

pp. 2573-2576

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)

pp. 2581-2584

break

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 Telecomunnications 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)

pp. 2589-2592

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)

pp. 2593-2596

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 Telecomunications, 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)

pp. 2597-2600

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

break

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)
pp. 2621-2624

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)
pp. 2629-2632

break

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)
pp. 2633-2636

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)
pp. 2637-2640

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)

pp. 2641-2644

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)

pp. 2645-2648

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)

pp. 2649-2652

break

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)

pp. 2653-2656

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)

pp. 2657-2660

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)

pp. 2661-2664

WA.PA: Sparse Estimation (Poster)

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

WA.PC: Remote Sensing an Geophysical Imaging (Poster)

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)

pp. 2805-2808

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)

pp. 2809-2812

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)

pp. 2813-2816

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

Loïc Denis (Centre de Recherche Astrophysique de Lyon, France); Eric Thiébaut (Centre de Recherche Astrophysique de yon, France); Ferreol Soulez (Universite Lyon 1 & Centre de Recherche Astronomique de Lyon, France)

pp. 2817-2820

Robust Airplane Detection in Satellite Images

Li Wei (NLPR, Institute of Automation, Chinese Academy of Sciences, P.R. China); Shiming Xiang (Institute of Automation, Chinese Academy of Sciences, P.R. China); Haibo Wang (Institute of Automation, Chinese Academy of Sciences, P.R. China); Chunhong Pan (Institute of Automation, Chinese Academy of Sciences, P.R. China)

pp. 2821-2824

Extracting Salient Contour Groups From Cluttered Solar Images Via Markov Random Fields

Nurcan Durak (University of Louisville, USA); Olfa Nasraoui (University of Louisville, USA)

pp. 2825-2828

Resolution Assessment in Dynamic Image Formation

Mark D. Butala (Jet Propulsion Laboratory, USA)

pp. 2829-2832

WA.PD: Image Segmentation (Poster)

Tensor Vector Field Based Active Contours

Abhishek Kumar (University of Waterloo, Canada); Alexander Wong (University of Waterloo, Canada); Akshaya Mishra (University of Waterloo, Canada); David Clausi (University of Waterloo, Canada); Paul Fieguth (University of Waterloo, Canada)

pp. 2833-2836

A New Information Fusion Approach for Image Segmentation
Wentao Xu (University of Missouri-Columbia & East China Normal University, USA); Ratchadaporn Kanawong (University of Missouri-Columbia, USA); Ye Duan (University of Missouri, USA); Guixu Zhang (East China Normal University, P.R. China)
pp. 2873-2876

Robust Free Space Segmentation Using Active Contours and Monocular Omnidirectional Vision
Pauline Merveilleux (France, France); Ouiddad Labbani-Igbida (MIS, France); El Mustapha Mouaddib (MIS, France)
pp. 2877-2880

Higher Order Potentials with Superpixel Neighbourhood (Hsn) for Semantic Image Segmentation
Mostafa S Ibrahim (Microsoft, Egypt); Motaz El-Saban (Microsoft Research - Cairo Innovation Lab, Egypt)
pp. 2881-2884

An Intensity-Gradient-Texture Guided Methodology for Spatial Segmentation of Remotely Sensed Multi/Hyperspectral Imagery
Sreenath Rao Vantaram (Rochester Institute of Technology, USA); Eli Saber (Rochester Institute of Technology, USA); David Messinger (Rochester Institute of Technology, USA)
pp. 2885-2888

WA.PE: Image Analysis (Poster)

Nonparametric Polygonal and Multimodel Approximation of Digital Curves with Rate-Distortion Curve Modeling
Alexander Kolesnikov (University of Eastern Finland, Finland)
pp. 2889-2892

Concentric Ring Signature Descriptor for 3D Objects
Hien Van Nguyen (University of Maryland, USA); Fatih Porikli (Mitsubishi Electric Research Laboratories, USA)
pp. 2893-2896

Edgelet Tracking Using Gauss-Laguerre Circular Harmonic Filters
Lorenzo Sorgi (Via Maiorise & CIRA, Italy)
pp. 2897-2900

Graph-based Shape Matching for Deformable Objects
Hanbyul Joo (Electronics and Telecommunications Research Institute, Korea); Yekeun Jeong (KAIST, Korea); Olivier Duchenne (Ecole Normale Superieure, France); In-So Kweon (Korea Advanced Institute of Science and Technology (KAIST), Korea)
pp. 2901-2904

Change-detection Based on Support Vector Data Description Handling Dependency
Akram Belghith (University of Strasbourg, France); Christophe Collet (Louis Pasteur University, France); Jean Paul Armspach (University of Strasbourg, France)

WA.PF: Video Surveillance and Video Conferencing (Poster)

Automatic Image Orientation Detection with Prior Hierarchical Content-Based Classification

Ivana Cingovska (Skopje, Macedonia); Zoran Ivanovski (Ss. Cyril and Methodius University, Macedonia); François Martin (NXP Software B. V. Eindhoven, France)

pp. 2985-2988

Blackboard Content Classification for Lecture Videos

Ali Shariq Imran (Gjøvik University College, Norway); Faouzi Alaya Cheikh (Gjovik University College, Norway)

pp. 2989-2992

Real-time Affine Invariant Patch Matching Using DCT Descriptor and Affine Space Quantization

Xiaobo Chen (Beijing University of Posts and Telcommunications, P.R. China); Ye Feng (Beijing university of Posts and telecommunications, P.R. China); Men Aidong (Beijing University of Posts and Telecommunication, P.R. China)

pp. 2993-2996

WA.PG: Image Processing Methods for Face Recognition (Poster)

Local Color Vector Binary Pattern for Face Recognition

Seung-Ho Lee (Korea Advanced Institute of Science and Technology (KAIST), Korea); JaeYoung Choi (Korea Advanced Institute of Science and Technology (KAIST), Korea); Konstantinos N Plataniotis (University of Toronto, Canada); Yong Man Ro (KAIST, Korea)

pp. 2997-3000

Facial Expression Recognition Using Clustering Discriminant Non-negative Matrix Factorization

Symeon Nikitidis (Aristotle University of Thessaloniki & CERTH ITI, Greece); Anastasios Tefas (Aristotle University of Thessaloniki, Greece); Nikos Nikolaidis (Aristotle University of Thessaloniki & Informatics and Telematics Institute, CERTH, Greece); Ioannis Pitas (Aristotle University of Thessaloniki, Greece)

pp. 3001-3004

A Novel Kernel Discriminant Feature Extraction Framework Based on Mapped Virtual Samples for Face Recognition

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)

pp. 3005-3008

Kernel Sparse Representation with Local Patterns for Face Recognition

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)

pp. 3009-3012

Robust Facial Expression Tracking Based on Composite Constraints AAM

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)

pp. 3045-3048

Face Recognition Based on Local Uncorrelated and Weighted Global Uncorrelated Discriminant Transforms

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)

pp. 3049-3052

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)

pp. 3053-3056

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)

pp. 3057-3060

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)

pp. 3061-3064

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

WP.L2: Image Quality Assessment (Lecture)

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)
pp. 3089-3092

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)
pp. 3093-3096

Crowdsourcing Subjective Image Quality Evaluation
Flavio Ribeiro (University of São Paulo, Brazil); Dinei Florencio (Microsoft Research, USA); Vitor H Nascimento (USP, Brazil)
pp. 3097-3100

Systematic Stress Testing of Image Quality Estimators
Frank Ciaramello (Cornell University, USA); Amy Reibman (AT&T Labs - Research, USA)
pp. 3101-3104

break

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 Perkis (NTNU, Norway)
pp. 3105-3108

Assessing the Quality of Compressed Images Using EEG
Lea Lindemann (TU Braunschweig, Germany); Marcus Magnor (TU Braunschweig, Germany)
pp. 3109-3112

Image Quality Assessment of Endoscopic Panorama Images
Alexander Behrens (RWTH Aachen University, Germany); Michael Bommes (RWTH Aachen University, Germany); Sebastian Gross (RWTH Aachen University, Germany); Til Aach (RWTH Aachen University, Germany)
pp. 3113-3116

Comprehensive Assessment of Iris Image Quality
Xingguang Li (University of Science and Technology of China, P.R. China); Zhenan Sun (Achinese Academy of Sciences, P.R. China); Tieniu Tan (NLPR, P.R. China)
pp. 3117-3120

WP.L3: Video and Multichannel Segmentation (Lecture)

Towards Real-Time 3D Region-Based Segmentation: B-Spline Explicit Active Surfaces
Daniel Barbosa (Katholieke Universiteit Leuven, Portugal); Jan D'hooge (Cardiac Imageing Research, Belgium); Thomas Dietenbeck (CREATIS, France); Denis Friboulet (CREATIS, France); Olivier Bernard (Creatis, France)
pp. 3121-3124

Segmentation by Temporal Detection Integration
Yi-Ying Wang (Hermes Microvision Inc, Taiwan); Chia-han Lee (Academia Sinica, Taiwan)
pp. 3125-3128

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)
pp. 3129-3132

The Riverbed Approach for User-steered Image Segmentation
Paulo Miranda (University of Campinas & Institute of Computing, Brazil); Alexandre Falcão (Institute of Computing, University of Campinas, Brazil); Thiago Spina (University of Campinas, Brazil)
pp. 3133-3136

break

Clothing Segmentation and Recoloring Using Background Subtraction and Back Projection Method
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)
pp. 3137-3140

Harmonic Active Contours for Multichannel Image Segmentation
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)
pp. 3141-3144

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)
pp. 3145-3148

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)
pp. 3149-3152

WP.L4: Color/Multispectral Imaging and Demosaicking (Lecture)

New Color Filter Arrays of High Light Sensitivity and High Demosaicking Performance
Jue Wang (Peking Univiersity, P.R. China); Chao Zhang (Peking University, P.R. China); Pengwei Hao (Queen Mary, University of London, United Kingdom)
pp. 3153-3156

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)
pp. 3157-3160

Disregarding Spectral Overlap - a Unified Approach for Demosaicking, Compressive Sensing and Color Filter Array Design
Tripurari Singh (Image Algorithmics, USA); Mritunjay Singh (Image Algorithmics, USA)
pp. 3161-3164

Correlation-based Joint Acquisition and Demosaicing of Visible and Near-Infrared Images
Zahra Sadeghipoor (EPFL, Switzerland); Yue M. Lu (Harvard University, USA); Sabine Süsstrunk (EPFL, Switzerland)
pp. 3165-3168

break

Increasing Camera Dynamic Range Through In-Sensor Multi-Exposure White Balancing
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)
pp. 3169-3172

Multi-dimensional Earth Mover's Distance Active Contours
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)
pp. 3173-3176

Good Looking Green Images
Hadi Hadizadeh (Simon Fraser University, Canada); Ivan V. Bajic (Simon Fraser University, Canada); Parvaneh Saeedi (Simon Fraser University, Canada); Scott Daly (Dolby Laboratories, USA)
pp. 3177-3180

Edge Detection in Multispectral Images Using the N-Dimensional Self-Organizing Map
Johannes Jordan (University of Erlangen-Nuremberg, Germany); Elli Angelopoulou (Friedrich-Alexander University Erlangen-Nuremberg, Germany)
pp. 3181-3184

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)
pp. 3185-3188

Deformable DAISY Matcher for Robust Iris Recognition
Man Zhang (Chinese Academy of Sciences, Institute of Automation, P.R. China); Zhenan Sun (Achinese Academy of Sciences, P.R. China); Tieniu Tan (NLPR, P.R. China)
pp. 3189-3192

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)
pp. 3193-3196

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)
pp. 3197-3200

break

A Novel Fingerprint Matching Algorithm Using Minutiae Phase Difference Feature
Chongjin Liu (Peking University, Beijing, P.R. China); Jia Cao (Peking University, Beijing, P.R. China); Xin Gao (Peking University, Beijing, P.R. China); Xiang Fu (Peking University, Beijing, P.R. China); Jufu Feng (Peking University, P.R. China)
pp. 3201-3204

Fast and Accurate Iris Segmentation Based on Linear Basis Function and RANSAC
Kai Wang (Zhejiang University, P.R. China); Yuntao Qian (Zhejiang University, P.R. China)
pp. 3205-3208

Front View Gait Recognition Using Spherical Space Model with Human Point Clouds
Jegoon Ryu (Waseda University, Japan); Sei-ichiro Kamata (Waseda University, Japan)
pp. 3209-3212

Security Analysis of a Cancelable Iris Recognition System Based on Block Remapping

Stefan Jenisch (University of Salzburg, Austria); Andreas Uhl (Salzburg University, Austria)

pp. 3213-3216

WP.L7: Video Streaming and Error-Resilient Coding (Lecture)

Fast Mode Decision for H.264 Video Coding in Packet Loss Environment

Yuan Zhang (Communication University of China & University of California, San Diego, USA); Pamela Cosman (University of California, San Diego, USA)

pp. 3217-3220

A Unified Framework for Spectral Domain Prediction and End-To-End Distortion Estimation in Scalable Video Coding

Jingning Han (University of California Santa Barbara, USA); Vinay Melkote (Dolby Laboratories Inc., USA); Kenneth Rose (University of California, Santa Barbara, USA)

pp. 3221-3224

Face Recovery in Conference Video Streaming Using Robust Principal Component Analysis

Wai-tian Tan (Hewlett-Packard, USA); Gene Cheung (National Institute of Informatics, Japan); Yi Ma (University of Illinois at Urbana-Champaign, USA)

pp. 3225-3228

Enhanced Error Resiliency for Video with Cyclic Intra-Refresh Lines

Sandro Moiron (Instituto de Telecomunicações & University of Essex, Portugal); Mohammad Ghanbari (University of Essex, United Kingdom)

pp. 3229-3232

break

Prioritized Packet Fragmentation for H.264 Video

Kashyap Kambhatla (University of California San Diego and San Diego State University, USA); Sunil Kumar (San Diego State University, USA); Pamela Cosman (University of California, San Diego, USA)

pp. 3233-3236

Rate-distortion-optimized Content-adaptive Coding for Immersive Networked Experience of Sports Events

Haopeng Li (Royal Institute of Technology, Sweden); Markus Flierl (KTH Royal Institute of Technology, Sweden)

pp. 3237-3240

A Robust Content-Based JPWL Transmission Over a Realistic MIMO Channel Under Perceptual Constraints

Julien Abot (University of Poitiers, France); Michael Nauge (XLIM-SIC CNRS, France); Clency Perrine (Université de Poitiers, France); Chaker Larabi (Université de Poitiers & XLIM-SIC, France); Cyril Bergeron (Thalès Communictaions, France); Yannis Pousset (XLIM-SIC CNRS, France); Christian Olivier (XLIM-SIC CNRS, France)

pp. 3241-3244

Cross-Layer Design for Video Streaming with Dynamic Antenna Selection
Ching-Hui Chen (Academia Sinica, Taiwan); Wei-Ho Chung (Academia Sinica, Taiwan); Yu-Chiang Frank Wang (Academia Sinica, Taiwan)
pp. 3245-3248

WP.L8: Human Behavior Analysis and Foreground/Background Separation (Lecture)

A Dataset for Workflow Recognition in Industrial Scenes
Athanasios Voulodimos (National Technical University of Athens, Greece); Dimitris Kosmopoulos (NCSR Demokritos, Greece); Georgios Vasileiou (NCSR Demokritos, Greece); Emmanuel S. Sardis (National Technical University of Athens - NTUA, Greece); Anastasios D. Doulamis (National Technical University of Athens, Greece); Vassilios Anagnostopoulos (National Technical University of Athens, Greece); Constantinos G Lalos (National technical University of Athens, Greece); Theodora Varvarigou (National Technical University of Athens, Greece)
pp. 3249-3252

Active Learning for Human Action Recognition with Gaussian Processes
Xianghang Liu (University of New South Wales & National ICT Australia, Australia); Jian Zhang (The University of New South Wales & NICTA, Australia)
pp. 3253-3256

System for the Automated Segmentation of Heads From Arbitrary Background
Benjamin Prestele (Fraunhofer HHI, Germany); David Schneider (Fraunhofer HHI, Germany); Peter Eisert (Fraunhofer HHI & Humboldt University, Germany)
pp. 3257-3260

Robust Density Modelling Using the Student's T-Distribution for Human Action Recognition
Zia Moghaddam (University of Technology, Sydney, Australia); Massimo Piccardi (University of Technology, Sydney, Australia)
pp. 3261-3264

break

Incorporating Estimated Motion in Real-time Background Subtraction
Minglun Gong (Memorial University of Newfoundland, Canada); Li Cheng (NICTA and Australian National University, Australia)
pp. 3265-3268

Foreground Estimation Based on Robust Linear Regression Model
Gengjian Xue (Shanghai Jiao Tong University, P.R. China); Li Song (Shanghai Jiao Tong University, P.R. China); Jun Sun (Shanghai Jiao Tong University, P.R. China); Meng Wu (Shanghai Jiao Tong University, P.R. China)
pp. 3269-3272

Selective Subtraction When the Scene Cannot Be Learned
Adeel Bhutta (University of Central Florida, USA); Imran Junejo (University of Sharjah, UAE); Hassan Foroosh (University of Central Florida, USA)
pp. 3273-3276

WP.PA: Multimedia Quality Assessment and Modeling of Visual Perception (Poster)

An Image Quality Assessment Metric Based on Non-Shift Edge
Wufeng Xue (Xi'an Jiaotong University, P.R. China); Xuanqin Mou (Xi'an Jiaotong University, P.R. China)
pp. 3309-3312

RRAR: A Novel Reduced-Reference IQA Algorithm for Facial Images
Jiazhen Zhu (Shanghai University, P.R. China); Yuchun Fang (Shanghai University, P.R. China); Pengjun Ji (Shanghai University, P.R. China); Moad Abdl (Shanghai University, P.R. China); Wang Dai (Shanghai University, P.R. China)
pp. 3313-3316

Calibrating MS-SSIM for Compression Distortions Using MLDS
Christophe Charrier (Universite de Caen Basse-Normandie, France); Kenneth Knoblauch (INSERM U846, France); Laurence Maloney (Univerity of New-York, USA); Alan C Bovik (University of Texas at Austin, USA)
pp. 3317-3320

Modeling of Rate and Perceptual Quality of Video and Its Application to Frame Rate Adaptive Rate Control
Zhan Ma (Samsung Telecommunications America, USA); Meng Xu (Polytechnic Institute of New York University, USA); Kyeong Yang (Dialogic Inc, USA); Yao Wang (Polytechnic Institute of NYU, USA)
pp. 3321-3324

No-Reference Video Quality Metric for HDTV Based on H.264/AVC Bitstream Features
Christian Keimel (Technische Universität München, Germany); Manuel Klimpke (Technische Universität München, Germany); Julian Habigt (Technische Universität München, Germany); Klaus Diepold (Technische Universität München, Germany)
pp. 3325-3328

No-Reference Cross-Layer Video Quality Estimation Model Over Wireless Networks
Yang Yan (BUPT, P.R. China)
pp. 3329-3332

No Reference Metric of Video Coding Quality Based on Parametric Analysis of Video Bitstream
Osamu Sugimoto (KDDI R&D Laboratories Inc., Japan)
pp. 3333-3336

Audiovisual Quality Fusion Based on Relative Multimodal Complexity
Junyong You (Norwegian University of Science and Technology, Norway); Jari Korhonen (Technical University of Denmark, Denmark); Ulrich Reiter (Norwegian University of Science and Technology (NTNU), Norway)
pp. 3337-3340

WP.PB: Partial Differential Equations (Poster)

An Improved Region-Based Model with Local Statistical Feature
Qi Ge (Nanjing Unverisity of Science & Technology, P.R. China); Zhihui Wei (Nanjing University of Science and Technology, P.R. China)
pp. 3341-3344

WP.PC: Image Restoration and Enhancement (Poster)

WP.PD: Scalable and Adaptive Methods for Video Coding (Poster)

Extending SVC by Content-adaptive Spatial Scalability

Yongzhe Wang (Shanghai Jiao Tong University, P.R. China); Nikolce Stefanoski (Disney Research Zurich, Switzerland); Manuel Lang (Disney Research, Zurich, Switzerland); Alexander Hornung (Disney Research Zurich, Switzerland); Aljoscha Smolic (Disney Research Zurich, Switzerland); Markus Gross (ETH Zurich, Switzerland)

pp. 3493-3496

Rate Control Initialization Algorithm for Scalable Video Coding

Sergio Sanz-Rodríguez (Universidad Carlos III de Madrid, Spain); Fernando Díaz-de-María (Unversidad Carlos III de Madrid, Spain)

pp. 3497-3500

Directional Adaptive Loop Filter for Video Coding

Yunfei Zheng (Qualcomm, USA); Peng Yin (Dolby Laboratories, Inc., USA); Qian Xu (Intel Inc, USA); Joel Sole (Qualcomm, USA); Xiaoan Lu (Thomson, Inc., USA)

pp. 3501-3504

Improved for/sor-Based Video Coding and Its Performance Analysis

Jewon Kang (University of Southern California, USA); Chung-Cheng Lou (University of Southern California, USA); Seung-hwan Kim (University of Southern California, USA); C.-C. Jay Kuo (University of Southern California, USA)

pp. 3505-3508

Video Encoder Based on Lifting Transforms on Graphs

Eduardo Martínez-Enríquez (Universidad Carlos III de Madrid, Spain); Fernando Díaz-de-María (Unversidad Carlos III de Madrid, Spain); Antonio Ortega (USC, USA)

pp. 3509-3512

A Denoising Approach for Iterative Side Information Creation in Distributed Video Coding

Joao Ascenso (ISEL & IT, Portugal); Catarina Brites (IST - IT, Portugal); Fernando Pereira (IST-IT, Portugal)

pp. 3513-3516

Periodic Entropy Coder Initialization for Wavefront Decoding of Video Bitstream

Kiran M. Misra (Sharp Laboratories of America Inc., USA); Jie Zhao (Sharp Labs of America, USA); Andrew Segall (Sharp Labs, USA)

pp. 3517-3520

McFis in Hierarchical Bipredictve Pictures-Based Video Coding for Referencing the Stable Area in a Scene

Manoranjan Paul (Charles Sturt University, Australia); Weisi Lin (Nanyang Technological University, Singapore); C. T. Lau (Nanyang Technological University, Singapore); Bu Sung Lee (Nanyang Technological University, Singapore)

pp. 3521-3524

WP.PE: Electronic Imagery: Detection, Classification and Restoration (Poster)

Image Categorization Through Optimum Path Forest and Visual Words

João Paulo Papa (UNESP - Univ Estadual Paulista, Brazil); Anderson Rocha (State University of Campinas, Brazil)

WP.PF: Object Detection and Recognition (Poster)

Real-time Detection Via Homography Mapping of Foreground Polygons From Multiple Cameras

Ming Xu (Xi'an Jiaotong-Liverpool University, P.R. China)
pp. 3593-3596

Robust Abandoned Object Detection Using Region-Level Analysis

Jiyan Pan (Carnegie Mellon University, USA); Quanfu Fan (IBM T. J. Watson Research, USA); Sharath Pankanti (IBM Research, USA)
pp. 3597-3600

Canonical Correlation Analysis of Local Feature Set for View-based Object Recognition

Xian-Hua Han (Ritsumeikan University, Japan); Yen-Wei Chen (Ritsumeikan University, Japan); Ruan (OMRON Corp., Japan)
pp. 3601-3604

Hand Shape Recognition Using Distance Transform and Shape Decomposition

Junyeong Choi (Hanyang University, Korea); Hanhoon Park (NHK Science & Technology Research Laboratories, Japan); Jong-Il Park (Hanyang University, Korea)
pp. 3605-3608

Human Detection with Contour-based Local Motion Binary Patterns

Thanh Duc Nguyen (University of Wollongong, Australia); Philip Ogunbona (University of Wollongong, Australia); Wanqing Li (University of Wollongong, Australia)
pp. 3609-3612

Pictorial Structures for Object Recognition and Part Labeling in Drawings

Amir Sadovnik (Cornell University, USA); Tsuhan Chen (Cornell University, USA)
pp. 3613-3616

Robust Head Pose Estimation Via Convex Regularized Sparse Regression

Ji Hao (Carnegie Mellon University, USA); Risheng Liu (Dalian University of Technology, P.R. China); Fei Su (Beijing university of posts and telecommunications, P.R. China); Zhixun Su (Dalian University of Technology, P.R. China); Yan Tian (Hikvision Digital Technology Co. Ltd, P.R. China)
pp. 3617-3620

WP.PG: Video Retrieval (Poster)

Towards a Better Understanding of Model-Free Semantic Concept Detection for Annotation and Near-Duplicate Video Clip Detection

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)
pp. 3621-3624

Quadtree Classified Vector Quantization Based Image Retrieval Scheme

Hsin-Hui Chen (National Taiwan University, Taiwan); Hsin-Teng Sheu (Tung-Nan University, Taiwan); Jian-Jiun Ding (National Taiwan University, Taiwan)
pp. 3625-3628

View-based 3D Model Retrieval Using Two-Level Spatial Structure

Pengjie Li (Beijing University of Posts and Telecommunications, P.R. China); Huadong Ma (Beijing University of Posts and Telecommunications, P.R. China); An-Long Ming (Beijing University of Posts and Telecommunications, P.R. China)

pp. 3657-3660

A Bag-of-Regions Approach to Sketch-Based Image Retrieval

Rui Hu (University of Surrey, United Kingdom); Tinghuai Wang (University of Surrey, United Kingdom); John Philip Collomosse (University of Surrey, United Kingdom)

pp. 3661-3664

Image Coding with Face Descriptors Embedding

Alberto Boschetti (University of Brescia, Italy); Nicola Adami (University of Brescia, Italy); Riccardo Leonardi (University of Brescia, Italy); Masahiro Okuda (The University of Kitakyushu, Japan)

pp. 3665-3668

On the Surprisingly Accurate Transfer of Image Parameters Between Medical and Solar Images

Juan Banda (Montana State University, USA); Rafal Angryk (Montana State University, USA); Petrus C Martens (Montana State University & Harvard Smithsonian Center for Astrophysics, USA)

pp. 3669-3672

Comparison of Video Sequences with Histograms of Motion Patterns

Jurandy Almeida (University of Campinas, Brazil); Neucimar Leite (State University of Campinas, Brazil); Ricardo da Silva Torres (Institute of Computing, State University of Campinas, Brazil)

pp. 3673-3676

Location-Based Image Retrieval for Urban Environments

Jerry Zhang (University of California, Berkeley, USA); Aaron Hallquist (University of California, Berkeley, USA); Avideh Zakhor (University of California at Berkeley, USA)

pp. 3677-3680

WP.L5: Advances in Transforms for Video Coding (Special Session)

One-Dimensional Directional Unified Transform for Intra Coding

Jun Yamaguchi (Toshiba, Japan); Taichiro Shiodera (Toshiba Corporation, Japan); Saori Asaka (Toshiba Corporation, Japan); Akiyuki Tanizawa (Toshiba Corporation, Japan); Tomoo Yamakage (Toshiba Corporation, Japan)

pp. 3681-3684

Low-complexity Mode-Dependent KLT for Block-Based Intra Coding

Chuohao Yeo (Institute for Infocomm Research, Singapore); Yih Han Tan (Institute for Infocomm Research, Singapore); Zhengguo Li (Institute for Inforcomm Research, Singapore)

pp. 3685-3688

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