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Oral session: Machine Learning

- Local feature hierarchy for face recognition across pose and illumination
  Xiaoyue Jiang, Dong Zhang, Xiaoyi Feng*

- Hyperspectral Image Analysis using Deep Learning - a Review
  Henrik Petersson, David Gustafsson, David Bergström*

- Score Thresholding for Accurate Instance Classification in Multiple Instance Learning
  Marc-André Carbonneau, Eric Granger, Ghyslain Gagnon*

- On Semantic Image Segmentation Using Deep Convolutional Neural Network with Shortcuts and Easy Class Extension
  Chunlai Wang, Lukas Mauch, Ze Guo, Bin Yang*

- Extracting Region of Interest for Palmprint by Convolutional Neural Networks
  *Xianjie Bao, Zhenhua Guo**

- Fusion System Based on Belief Functions Theory and Approximated Belief Functions for Tree Species Recognition
  Didier Coquin, Rihab Ben Ameur, Lionel Valet*

Poster Session #1

- P#1: Adaptive Dynamic Time Warping for Recognition of Natural Gestures
  Hajar Hiyadi, Fakhr-Eddine Ababsa, Christophe Montagne, El Houssine Bouyakhf, Fakhita Regragui*

- P#2: Automatic detection of cervical cells in Pap-smear images using polar transform and k-means segmentation
  Mihai Neghina, Christoph Rasche, Mihai Ciuc, Alina Sultana, Ciprian Tiganesteanu*

- P#3: Automated Segmentation of RPE Layer for the Detection of Age Macular Degeneration Using OCT Images
  Samra Naz, Aneeqa Ahmed, Usman Akram, Shoab Ahmed Khan*

- P#4 : Multiple Description Coding Based on Enhanced X-tree
  *Canhui Cai, Jing Chen, Huanqiang Zeng**

- P#5: Advanced Low Cost Clustering System
  Giuseppe Spampinato, Arcangelo Ranieri Bruna, Salvatore Curti, Viviana D'Alto*

- P#6 : Color Correction in Image Stitching Using Histogram Specification and Global Mapping
  Qi-Chong Tian, Laurent D. Cohen*

- P#7: Fast HEVC CU/PU Mode Decision Based on ANN and Texture Analysis
  Shuaihu Zhou, Zuochang Ye, Yan Wang*

- P#8: A Robust Face Anti-spoofing Approach Using Partial Convolutional Neural Network
  Lei Li, Xiaoyi Feng, Zinelabidine Boulkenafet, Zhaoqiang Xia, Mingming Li, Abdenour Hadid*

- P#9: No-reference Quality Assessment for Contrast-distorted Image
  Jun Wu, Zhaoqiang Xia, Yifeng Ren, Huifang Li*

- P#10: Structure-Based Image Inpainting
  Adib Akl, Edgard Saad, Charles Yaacoub*

- P#11: Detection and Spatial Analysis of Hepatic Steatosis in Histopathology Images using Sparse Linear Models
  *Nazre Batool**

- P#12: MCMC based Sampling Technique for Robust Multi-Model Fitting and Visual Data Segmentation
  Alireza Sadri, Ruwan Tennakoon, Reza Hoseinnezhad, Alireza Bab-Hadiashar*

- P#13: Using Web Images as Additional Training Resource for the Discriminative Generalized Hough Transform
  Alexander Mader, Hauke Schramm, Carsten Meyer*

- P#14: Stain separation in digital bright field histopathology
  *Laura Astola**

- P#15: Segmentation of retinal vessels in adaptive optics images for assessment of vasculitis
  Marthe Lagarrigue-Charbonnier, Florence Rossant, Isabelle Bloch, Marie-Hélène Errera, Michel Paques*

- P#16: On the Use of Image Quality Measures for Image Restoration
  Fouad Boudjenouia, Karim Abed-Meraim, Aladine Chetouani, Rachid Jennane*

- P#17: Bit-Stream-Based Scrambling for Regions of Interest in H.264/AVC Videos With Drift Reduction
  Andreas Unterweger, Jan De Cock, Andreas Uhl*

- P#18 :High-Capacity Data Hiding in Encrypted Images using MSB Prediction
  Pauline Puteaux, Dave Trinel, William Puech*

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  Ileana Montoya Perez, Jussi Toivonen, Parisa Mohavedi, Harri Merisaari, Marko pesola, Pekka Taimen, Peter J. Boström, Aida Kiviniemi, Hannu J. Aronen, Tapio Pahikkala, Ivan Jambor*

- Automatic Modeling and Classification of Vitreomacular Traction Pathology Stages
  Agnieszka Stankiewicz, Tomasz Marciniak, Adam Dabrowski, Marcin Stopa, Piotr Rakowicz, Elżbieta Marciniak*

- Automatic monitoring system for the detection and evaluation of the evolution of hemangiomas
  Catalina Neghina, Marta Zamfir, Mihai Ciuc, Alina Sultana, Maria Popescu*

- Evaluation of feature sensitivity to training data inaccuracy in detection of retinal lesions
  *Lauri Laaksonen, Antti Hannuksela, Ela Claridge, Pauli Fält, Markku Hauta-Kasari, Hannu Uusitalo, Lasse Lensu**

- Incorporating Human Knowledge in Automated Celiac Disease Diagnosis
  Michael Gadermayr, Hubert Kogler, Maximilian Karla, Andreas Vécsei, Andreas Uhl, Dorit Merhof*

- Classification of mammographic microcalcification clusters using a combination of topological and location modelling
- *Oluwaseun Ashiru*, Reyer Zwiggelaar*

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- On the use of skin texture features for gender recognition: an experimental evaluation
  Francesco Bianconi, Fabrizio Smeraldi, Maryam Abdollahyan, Perry Xiao*

- Phylogeny of JPEG images by ancestor estimation using missing markers on image pairs
  Noé Le Philippe, William Puech, Christophe Fiorio*

- Resource-Efficient Latent Fingerprint Age Estimation for Adhoc Crime Scene Forensics: Quality Assessment of Flat Bed Scans and Statistical Features
  Ronny Merkel, Jana Dittmann, Claus Vielhauer*

- Investigation of Adaptive Local Threshold Segmentation in Context of 3D-Handwriting Forensics

Michael Kalbitz, Tobias Scheidat, Claus Vielhauer*

- Face spoofing detection with image quality regression
  Haoliang Li, Shiqi Wang, Alex Kot*

Poster session #2

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- P#20: Efficient BSIF-based Near-Infrared Iris Recognition
  Christian Rathgeb*, Florian Struck, Christoph Busch

- P#21: De-Convolutional Auto-Encoder for Enhancement of Fingerprint Samples
  Patrick Schuch, Simon Schulz, Christoph Busch*

- P#22: Multi-Biometric Template Protection - A Security Analysis of Binarized Statistical Features for Bloom Filters on Smartphones
  Martin Stokkenes, Raghavendra Ramachandra, Morten Sigaard, Kiran Raja, Marta Gómez-Barrero, Christoph Busch*

- P#23: An Accurate Eye Localization Approach For Smart Embedded System
  Zhaoqiang Xia, Wenhao Zhang, Fang Tan, Xiaoyi Feng, Abdenour Hadid*

- P#24: Face Presentation Attack Detection Across Spectrum using Time-Frequency Descriptors of Maximal Response in Laplacian Scale-Space
  Raghavendra Ramachandra, Kiran Raja, Sebastien Marcel, Christoph Busch*

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  Isabel Patiño Mejia, Andreas Zell*

- P#26: Quality Dependent Multimodal Fusion of Face and Iris Biometrics
  Nefissa Khiari Hili, Christophe Montagne, Sylvie Lelandais, Kamel Hamrouni*

- P#27: Fake Face Detection Based on Radiometric Distorsions
  Taiamiti Edmunds, Alice Caplier*

- P#28: Thermal Super-Pixels for Bimodal Stress Recognition
  Ramin Irani, Kamal Nashrollahi, Abhinav Dhall, Thomas Moeslund, Tom Gedeon*

- P#29: An Automated Method for Realistic Face Simulation and Facial Landmark Annotation and its Application to Active Appearance Models
  Marcin Kopaczka, Calo Hensel, Dorit Merhof*

- P#30: On Pain Assessment from Facial Videos Using Spatio-Temporal Local Descriptors
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- P#31: Feature covariance for human action recognition
  Alexandre Perez, Hedi Tabia, David Declercq, Alain Zanotti*

- P#32: OUHANDS database for hand detection and pose recognition
  Matti Matilainen, Pekka Sangi, Jukka Holappa, Olli Silvén*

- P#33: Initiating GrabCut by Color Difference for Automatic Foreground Extraction of Passport Imagery
  Adriá Sangüesa, Nicolai Jørgensen, Christian A. Larsen, Kamal Nasrollahi, Thomas B. Moeslund*

- P#34: Towards Gaze-based Video Annotation
  Mohamed Soliman, Hamed R.-Tavakoli, Jorma Laaksonen*

- P#35: An effective histogram-based approach to JPEG-100 forensics
  Anh Thu Phan Ho, Kai Wang, François Cayre*

- P#36: Towards Skin Image Mosaicing
  Khuram Faraz, Walter Blondel, Marine Amouroux, Christian Daul*

Oral session: Advances in Medical Imaging II

- Reconstruction of retinal spectra from RGB data using a RBF network
  *Uyen Nguyen, Lauri Laaksonen, Hannu Uusitalo, Lasse Lensu**

- Combining Deep Learning and Hand-Crafted Features for Skin Lesion Classification
  Tomas Majtner, Sule Yildirim-Yayilgan, Jon Yngve Hardeberg*

- Low-rank and Sparse Matrix Decomposition based on $S_{1/2}$ and $L_{1/2}$ Regularizations in Dynamic MRI
  Xu-Xin Lin, LiangYong Xia, Yong Liang, Hai-Hui Huang, Hua Chai, Kuok-Fan Chan*

- Characterization of Hematologic Malignancies based on Discrete Orthogonal Moments
  Rodrigo Nava, Germán González, Jan Kybic, Boris Escalante-Ramírez*

- Enhancement of micro-channels within the human mastoid bone based on local structure tensor analysis
  Olivier Cros, Anders Eklund, Michael Gaihede, Hans Knutsson,*

- Comparison of 2D and 3D Region-based Deformable Models and Random Walker Methods for PET Segmentation

Kévin Gosse, Stéphanie Jehan Besson, Francois Lecellier, Su Ruan*

Oral session: Object detection and Tracking

- How to reach top accuracy for a visual pedestrian warning system from a car?
  Floris De Smedt, Steven Puttemans, Toon Goedemé*
- Automated visual fruit detection for harvest estimation and robotic harvesting
  Steven Puttemans, Yasmin Vanbrabant, Laurent Tits, Toon Goedemé*
- Automatic detection, tracking and counting of birds in marine video content
  *Roeland T'Jampens, Francisco Hernández, Florian Vandecasteele, Steven Verstockt**
- Fast Growing Hough Forest as a Stable Model for Object Detection
  Antoine Tran, Antoine Manzanera*
- Pedestrian Detection using HOG, LUV and Optical Flow as Features with AdaBoost as Classifier
  Rabia Rauf, Ahmad R. Shahid, Sheikh Ziauddin, Asad Ali Safi*
- Fast Chinese Character Detection from Complex Scenes
  Xiaoyue Jiang, Jie Lian, Zhaoqiang Xia, Xiaoyi Feng, Abdenour Hadid*

Poster session #3

- P#37: Intensity Normalization of Sidescan Sonar Imagery
  MS Al-Rawi, Adrián Galdrán, Xin Yuan, Martina Eckert, José-Fernán Martínez, Fredrik Elmgren, Baran Cürüklü, Jonathan Rodriguez, Joaquim Bastos, Marc Pinto*
- P#38: An Analysis of 3D Point Cloud Reconstruction from Light Field Images
  Cristian Perra, Francesca Murgia, Daniele Giusto*
- P#39: Towards Spectral Prediction of 2.5D Prints for Soft-Proofing Applications
  Théo Phan Van Song, Christine Andraud, María V. Ortiz-Segovia*
- P#40: A Vector Quantization Based k-NN Approach for Large-Scale Image Classification
  Ezgi Can Ozan, Ekaterina Riabchenko, Serkan Kiranyaz, Moncef Gabbouj*
- P#41: Square to Hexagonal Lattice Conversion Based on One-Dimensional Interpolation
  Xiangguo Li, Bryan Gardiner, Sonya A. Coleman*
- P#42: Camera Communication Deblurring: a Semiblind Spatial Fractionally-Spaced Adaptive Equalizer with Flexible Filter Support Design
  Stefano Pergoloni, Mauro Biagi, Stefania Colonnese, Roberto Cusani, Gaetano Scarano*

- P#43: Microaneurysm Detection in Retinal Images Using an Ensemble Classifier
  Mohamed Habib, Roshan Welikala , Andreas Hoppe, Christopher Owen, Alicja Rudnicka, Sarah Barman,*

- P#44: Acquiring Multispectral Light Transport Using Multi-Primary DLP Projector
  *Kayano Maeda, Takahiro Okabe**

- P#45: Improving curve skeletons of tubular volumes
  Florent Grélard, Fabien Baldacci, Anne Vialard, Jean-Philippe Domenger*

- P#46: Median based pixel selection for partial image encryption
  Anish Goel, Kaustubh Chaudhari*

- P#47: A Perceptual-based Rate Control for HEVC
  Aisheng Yang, Huanqiang Zeng, Lin Ma, Jing Chen, Canhui Cai, Kai-Kuang Ma*

- P#48: A Multidimensional Scaling Optimization and Fusion Approach For the Unsupervised Change Detection Problem in Remote Sensing Images
  Redha Touati, Max Mignotte*

- P#49: Graphical stochastic models for tracking applications with variational message passing inference
  Felix Trusheim, Alexandru Condurache, Alfred Mertins*

- P#50: Two Dimensional Translation Detection by Comprehensively Calculating Three Cross–correlations
  *Wei-Jun Chen**

- P#51: Performance Evaluation of a Statistical and a Neural Network Model for Nonrigid Shape-Based Registration
  Alexandra Psarrou , Anastassia Angelopoulou, Markos Mentzelopoulos, José García-Rodriguez*

- P#52: MedianStruck for Long-term Tracking Applications
  Florian Baumann, Enes Dayancges, Josep Aulinas, Matthias Zobel*

- P#53: Multi-modal Subspace Learning with Dropout regularization for Cross-modal Recognition and Retrieval
  Guanqun Cao, Muhammad Adeel Waris, Alexandros Iosifidis, Moncef Gabbouj*

- P#54: Optimized Fast Walsh-Hadamard Transform on OpenCL-GPU and OpenCL-CPU
  Pedro Pereira, Patricio Domingues, Nuno Rodrigues, Sergio Faria, Gabriel Falcao*

- P#55: Hyperspectral Face Recognition using 3D Discrete Wavelet Transform
  Aman Ghasemzadeh, Hasan Demirel*

Oral Session : Best Reviewed Papers

- Unsupervised Deep Hashing for Large-scale Visual Search
  Zhaoqiang Xia, Xiaoyi Feng, Jinye Peng, Abdenour Hadid*

- Single image super-resolution reconstruction in presence of mixed Poisson-Gaussian noise
  Buda Bajic, Joakim Lindblad, Natasa Sladoje*

- Fast feature matching for detailed point cloud generation
  Daniel Berjón, Rafael Pagés, Francisco Morán*

- CNN Transfer Learning for the Automated Diagnosis of Celiac Disease
  Georg Wimmer, Andreas Vécsei, Andreas Uhl*

- Prototype-based Class-Specific Nonlinear Subspace Learning for Large-Scale Face Verification
  Alexandros Iosifidis, Moncef Gabbouj*

- RealSense = Real Heart Rate: Illumination Invariant Heart Rate Estimation from Videos
  Jie Chen, Zhuoqing Chang, Qiang Qiu, Xiaobai Li, Guillermo Sapiro, Alex Bronstein, Matti Pietikäinen*