

## Oral Session 1A : Audio and Signal Processing

**Date & Time:** January 6(Mon.), 2020 | 10:50-12:30

**Place:** Room A (#101-102)

**Session Chair:** Andreas Leibetseder (University of Klagenfurt, Austria)

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10:50-11:10	#62	<b>Light Field Reconstruction Using Dynamically Generated Filters</b> Xiuxiu Jing, Yike Ma, Qiang Zhao, Ke Lyu, and Feng Dai
11:10-11:30	#82	<b>Speaker-Aware Speech Emotion Recognition by Fusing Amplitude and Phase Information</b> Lili Guo, Longbiao Wang, Jianwu Dang, Zhilei Liu, and Haotian Guan
11:30-11:50	#122	<b>Gen-Res-Net: A Novel Generative Model for Singing Voice Separation</b> Congzhou Tian, Hangyu Li, Deshun Yang, and Xiaoou Chen
11:50-12:10	#212	<b>A Distinct Synthesizer Convolutional TasNet for Singing Voice Separation</b> Congzhou Tian, Deshun Yang, and Xiaoou Chen
12:10-12:30	#221	<b>Exploiting the Importance of Personalization When Selecting Music for Relaxation</b> Daniel Mélo and Nazareno Andrade

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## SS1: AI-Powered 3D Vision

**Date & Time:** January 6(Mon.), 2020 | 10:50-12:30

**Place:** Room B (#103-104)

**Session Chair:** Qiong Liu (Huazhong University of Science and Technology, China)

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- #15 **Single View Depth Estimation via Dense Convolution Network with Self-supervision**  
Yunhan Sun, Jinlong Shi, Suqin Bai, Qiang Qian, and Zhengxing Sun
- 
- #20 **Multi-data UAV Images for Large Scale Reconstruction of Buildings**  
Menghan Zhang, Yunbo Rao, Jiansu Pu, Xun Luo, and Qifei Wang
- 
- #49 **Deformed Phase Prediction Using SVM for Structured Light Depth Generation**  
Sen Xiang, Qiong Liu, Huiping Deng, Jin Wu, and Li Yu
- 
- #54 **Extraction of Multi-class Multi-instance Geometric Primitives from Point Clouds Using Energy Minimization**  
Liang Wang, Biying Yan, Fuqing Duan, and Ke Lu
- 
- #55 **Similarity Graph Convolutional Construction Network for Interactive Action Recognition**  
Xiangyu Sun, Qiong Liu, and You Yang
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- #74 **Content-Aware Cubemap Projection for Panoramic Image via Deep Q-Learning**  
(Poster) Zihao Chen, Xu Wang, Yu Zhou, Longhao Zou, and Jianmin Jiang
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- #66 **Robust RGB-D Data Registration Based on Correntropy and Bi-directional Distance**  
(Poster) Teng Wan, Shaoyi Du, Wenting Cui, Qixing Xie, Yuying Liu, and Zuoyong Li
- 
- #120 **InSphereNet: A Concise Representation and Classification Method for 3D Object**  
(Poster) Hui Cao, Haikuan Du, Siyu Zhang, and Shen Cai
- 
- #94 **3-D Oral Shape Retrieval Using Registration Algorithm**  
(Poster) Wenting Cui, Shaoyi Du, Teng Wan, Yan Liu, Yuying Liu, Yang Yang, Qingnan Mou, Mengqi Han, and Yu-cheng Guo
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- #205 **Face Super-Resolution by Learning Multi-view Texture Compensation**  
(Poster) Yu Wang, Tao Lu, Ruobo Xu, and Yanduo Zhang
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- #95 **Light Field Salient Object Detection via Hybrid Priors**  
(Poster) Junlin Zhang and Xu Wang
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## Oral Session 2A: Coding and HVS

**Date & Time:** January 6(Mon.), 2020 | 13:30-15:10

**Place:** Room A (#101-102)

**Session Chair:** Cong-Thang Truong (University of Aizu, Japan)

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13:30-13:50	#8	<b>An Efficient Encoding Method for Video Compositing in HEVC</b> Yunchang Li, Zhijie Huang, and Jun Sun
13:50-14:10	#26	<b>VHS to HDTV Video Translation Using Multi-task Adversarial Learning</b> Hongming Luo, Guangsen Liao, Xianxu Hou, Bozhi Liu, Fei Zhou, and Guoping Qiu
14:10-14:30	#186	<b>Improving Just Noticeable Difference Model by Leveraging Temporal HVS Perception Characteristics</b> Haibing Yin, Yafen Xing, Guangjing Xia, Xiaofeng Huang, and Chenggang Yan
14:30-14:50	#199	<b>Down-Sampling Based Video Coding with Degradation-Aware Restoration-Reconstruction Deep Neural Network</b> Minh-Man Ho, Gang He, Zheng Wang, and Jinjia Zhou
14:50-15:10	#233	<b>Beyond Literal Visual Modeling: Understanding Image Metaphor Based on Literal-Implied Concept Mapping</b> Chengpeng Fu, Jinqiang Wang, Jitao Sang, Jian Yu, and Changsheng Xu

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## SS2: Multimedia Analytics: Perspectives, Tools and Applications

**Date & Time:** January 6(Mon.), 2020 | 13:30-15:10

**Place:** Room B (#103-104)

**Session Chair:** Björn Thor Jonsson (IT University of Copenhagen, Denmark)

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- #88 **Multimedia Analytics Challenges and Opportunities for Creating Interactive Radio Content**  
Werner Bailer, Maarten Wijnants, Hendrik Lievens, and Sandy Claes
- 
- #102 **Interactive Search and Exploration in Discussion Forums Using Multimodal Embeddings**  
Iva Gornishka, Stevan Rudinac, and Marcel Worring
- 
- #16 **An Inverse Mapping with Manifold Alignment for Zero-Shot Learning**  
Xixun Wu, Binheng Song, Zhixiang Wang, and Chun Yuan
- 
- #195 **Baseline Analysis of a Conventional and Virtual Reality Lifelog Retrieval System**  
Aaron Duane and Cathal Gurrin
- 
- #223 **An Extensible Framework for Interactive Real-Time Visualizations of Large-Scale Heterogeneous Multimedia Information from Online Sources**  
Aikaterini Katmada, George Kalpakis, Theodora Tsirikka, Stelios Andreadis, Stefanos Vrochidis, and Ioannis Kompatsiaris
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## Video Browser Showdown

**Date & Time:** January 6(Mon.), 2020 | 16:30-19:30

**Place:** SKY Lounge, 5F, KAIST Academic Cultural Complex (E9)

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#239 **diveXplore 4.0: The ITEC Deep Interactive Video Exploration System at VBS2020**  
Andreas Leibetseder, Bernd Münzer, Jürgen Primus, Sabrina Kletz, and Klaus Schoeffmann

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#241 **Combining Boolean and Multimedia Retrieval in vitivr for Large-Scale Video Search**  
Loris Sauter, Mahnaz Amiri Parian, Ralph Gasser, Silvan Heller, Luca Rossetto,  
and Heiko Schuldt

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#248 **An Interactive Video Search Platform for Multi-modal Retrieval with Advanced Concepts**  
Nguyen-Khang Le, Dieu-Hien Nguyen, and Minh-Triet Tran

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#249 **VIREO @ Video Browser Showdown 2020**  
Phuong Anh Nguyen, Jiaxin Wu, Chong-Wah Ngo, Danny Francis, and Benoît Huet

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#250 **VERGE in VBS 2020**  
Stelios Andreadis, Anastasia Moutzidou, Konstantinos Apostolidis,  
Konstantinos Gkoutakos, Damianos Galanopoulos, Emmanouil Michail,  
Ilias Gialampoukidis, Stefanos Vrochidis, Vasileios Mezaris, and Ioannis Kompatsiaris

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#251 **VIRET at Video Browser Showdown 2020**  
Jakub Lokoč, Gregor Kovalčík, and Tomáš Souček

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#252 **SOM-Hunter: Video Browsing with Relevance-to-SOM Feedback Loop**  
Miroslav Kratochvíl, Patrik Veselý, František Mejzlík, and Jakub Lokoč

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#253 **Exquisitor at the Video Browser Showdown 2020**  
Björn Þór Jónsson, Omar Shahbaz Khan, Dennis C. Koelma, Stevan Rudinac,  
Marcel Worrying, and Jan Zahálka

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#254 **Deep Learning-Based Video Retrieval Using Object Relationships and Associated Audio Classes**  
Byoungjun Kim, Ji Yea Shim, Minho Park, and Yong Man Ro

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#255 **IVIST: Interactive Video Search Tool in VBS 2020**  
Sungjune Park, Jaeyub Song, Minho Park, and Yong Man Ro

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## Oral Session 3A: Color Processing and Art

**Date & Time:** January 7(Tue.), 2020 | 10:20-12:00

**Place:** Room A (#101-102)

**Session Chair:** Vasileios Mezaris (Centre for Research and Technology Hellas, Greece)

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10:20-10:40	#180	<b>Deep Palette-Based Color Decomposition for Image Recoloring with Aesthetic Suggestion</b> Zhengqing Li, Zhengjun Zha, and Yang Cao
10:40-11:00	#188	<b>On Creating Multimedia Interfaces for Hybrid Biological-Digital Art Installations</b> Carlos Castellanos, Bello Bello, Hyeryeong Lee, Mungyu Lee, Yoo Seok Lee, and In Seop Chang
11:00-11:20	#191	<b>Image Captioning Based on Visual and Semantic Attention</b> Haiyang Wei, Zhixin Li, and Canlong Zhang
11:20-11:40	#197	<b>An Illumination Insensitive and Structure-Aware Image Color Layer Decomposition Method</b> Wengang Cheng, Pengli Dou, and Dengwen Zhou
11:40-12:00	#207	<b>CartoonRenderer: An Instance-Based Multi-style Cartoon Image Translator</b> Yugang Chen, Muchun Chen, Chaoyue Song, and Bingbing Ni

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## SS3: Multimedia Datasets for Repeatable Experimentation (MDRE)

**Date & Time:** January 7(Tue.), 2020 | 10:20-12:00

**Place:** Room B (#103-104)

**Session Chair:** Aaron Duane (Dublin City University, Ireland)

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### **GLENDa: Gynecologic Laparoscopy Endometriosis Dataset**

#76 Andreas Leibetseder, Sabrina Kletz, Klaus Schoeffmann, Simon Keckstein, and Jörg Keckstein

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### **Kvasir-SEG: A Segmented Polyp Dataset**

#171 Debesh Jha, Pia H. Smedsrud, Michael A. Riegler, Pål Halvorsen, Thomas de Lange, Dag Johansen, and Håvard D. Johansen

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### **Rethinking the Test Collection Methodology for Personal Self-tracking Data**

#216 Frank Hopfgartner, Cathal Gurrin, and Hideo Joho

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### **Experiences and Insights from the Collection of a Novel Multimedia EEG Dataset**

#224 Graham Healy, Zhengwei Wang, Tomas Ward, Alan Smeaton, and Cathal Gurrin

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## Oral Session 4A: Detection and Classification

**Date & Time:** January 7(Tue.), 2020 | 13:00-14:40

**Place:** Room A (#101-102)

**Session Chair:** Jakub Lokoč (Charles University in Prague, Czech Republic)

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|-------------|------|--|
| 13:00-13:20 | #30  | <b>Multi-condition Place Generator for Robust Place Recognition</b><br>Yiting Cheng, Yankai Wang, Lizhe Qi, and Wenqiang Zhang   |
| 13:20-13:40 | #164 | <b>Guided Refine-Head for Object Detection</b><br>Lingyun Zeng, You Song, and Wenhai Wang  |
| 13:40-14:00 | #168 | <b>Towards Accurate Panel Detection in Manga: A Combined Effort of CNN and Heuristics</b><br>Yafeng Zhou, Yongtao Wang, Zheqi He, Zhi Tang, and Ching Y. Suen                                |
| 14:00-14:20 | #209 | <b>Subclass Deep Neural Networks: Re-enabling Neglected Classes in Deep Network Training for Multimedia Classification</b><br>Nikolaos Gkalelis and Vasileios Mezaris                        |
| 14:20-14:40 | #228 | <b>Automatic Material Classification Using Thermal Finger Impression</b><br>Jacob Gately, Ying Liang, Matthew Kolessar Wright, Natasha Kholgade Banerjee, Sean Banerjee, and Soumyabrata Dey |
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**SS4: MMAC: Multi-modal Affective Computing of  
Large-Scale Multimedia Data**

**Date & Time:** January 7(Tue.), 2020 | 13:00-14:40

**Place:** Room B (#103-104)

**Session Chair:** Wei Zhong (Communication University of China, China)

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- #87 **Relation Modeling with Graph Convolutional Networks for Facial Action Unit Detection**  
Zhilei Liu, Jiahui Dong, Cuicui Zhang, Longbiao Wang, and Jianwu Dang
- 
- #185 **Enhanced Gaze Following via Object Detection and Human Pose Estimation**  
Jian Guan, Liming Yin, Jianguo Sun, Shuhan Qi, Xuan Wang, and Qing Liao
- 
- #45 **Region Based Adversarial Synthesis of Facial Action Units**  
Zhilei Liu, Diyi Liu, and Yunpeng Wu
- 
- #18 **Facial Expression Restoration Based on Improved Graph Convolutional Networks**  
Zhilei Liu, Le Li, Yunpeng Wu, and Cuicui Zhang
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- #146 **Global Affective Video Content Regression Based on Complementary Audio-Visual Features**  
Xiaona Guo, Wei Zhong, Long Ye, Li Fang, Yan Heng, and Qin Zhang
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## Poster Session

**Date & Time:** January 7(Tue.), 2020 | 15:00-17:00

**Place:** Room C (#105-106)

- #14 **Efficient HEVC Downscale Transcoding Based on Coding Unit Information Mapping**  
Zhijie Huang, Yunchang Li, and Jun Sun
- #19 **Fine-Grain Level Sports Video Search Engine**  
Zikai Song, Junqing Yu, Hengyou Cai, Yangliu Hu, and Yi-Ping Phoebe Chen
- #21 **The Korean Sign Language Dataset for Action Recognition**  
Seunghan Yang, Seungjun Jung, Heekwang Kang, and Changick Kim
- #22 **SEE-LPR: A Semantic Segmentation Based End-to-End System for Unconstrained License Plate Detection and Recognition**  
Dongqi Tang, Hao Kong, Xi Meng, Ruo-Ze Liu, and Tong Lu
- #28 **Action Co-localization in an Untrimmed Video by Graph Neural Networks**  
Changbo Zhai, Le Wang, Qilin Zhang, Zhanning Gao, Zhenxing Niu, Nanning Zheng, and Gang Hua
- #37 **A Novel Attention Enhanced Dense Network For Image Super-Resolution**  
Zhong-Han Niu, Yang-Hao Zhou, Yu-Bin Yang, and Jian-Cong Fan
- #39 **Marine Biometric Recognition Algorithm Based on YOLOv3-GAN Network**  
Ping Liu, Hongbo Yang, and Jingnan Fu
- #47 **Multi-scale Spatial Location Preference for Semantic Segmentation**  
Qiuyuan Han and Jin Zheng
- #56 **HRTF Representation with Convolutional Auto-encoder**  
Wei Chen, Ruimin Hu, Xiaochen Wang, and Dengshi Li
- #64 **Unsupervised Feature Propagation for Fast Video Object Detection Using Generative Adversarial Networks**  
Xuan Zhang, Guangxing Han, and Wenduo He
- #67 **OmniEyes: Analysis and Synthesis of Artistically Painted Eyes**  
Gjorgji Strezoski, Rogier Knoester, Nanne van Noord, and Marcel Worring
- #72 **LDSNE: Learning Structural Network Embeddings by Encoding Local Distances**  
Xiyue Gao, Jun Chen, Jing Yao, and Wenqian Zhu
- #79 **FurcaNeXt: End-to-End Monaural Speech Separation with Dynamic Gated Dilated Temporal Convolutional Networks**  
Liwen Zhang, Ziqiang Shi, Jiqing Han, Anyan Shi, and Ding Ma
- #80 **Multi-step Coding Structure of Spatial Audio Object Coding**  
Chenhao Hu, Ruimin Hu, Xiaochen Wang, Tingzhao Wu, and Dengshi Li
- #84 **Thermal Face Recognition Based on Transformation by Residual U-Net and Pixel Shuffle Upsampling**  
Soumya Chatterjee and Wei-Ta Chu

#93	<b>K-SVD Based Point Cloud Coding for RGB-D Video Compression Using 3D Super-Point Clustering</b> Shyi-Chyi Cheng, Ting-Lan Lin, and Ping-Yuan Tseng
#97	<b>Resolution Booster: Global Structure Preserving Stitching Method for Ultra-High Resolution Image Translation</b> Siyi Zhai, Xiwei Hu, Xuanhong Chen, Bingbing Ni, and Wenjun Zhang
#109	<b>Cross Fusion for Egocentric Interactive Action Recognition</b> Haiyu Jiang, Yan Song, Jiang He, and Xiangbo Shu
#111	<b>Improving Brain Tumor Segmentation with Dilated Pseudo-3D Convolution and Multi-direction Fusion</b> Sun'ao Liu, Hai Xu, Yizhi Liu, and Hongtao Xie
#112	<b>Texture-Based Fast CU Size Decision and Intra Mode Decision Algorithm for VVC</b> Jian Cao, Na Tang, Jun Wang, and Fan Liang
#115	<b>An Efficient Hierarchical Near-Duplicate Video Detection Algorithm Based on Deep Semantic Features</b> Siyi Liang and Ping Wang
#118	<b>Meta Transfer Learning for Adaptive Vehicle Tracking in UAV Videos</b> Wenfeng Song, Shuai Li, Yuting Guo, Shaoqi Li, Aimin Hao, Hong Qin, and Qinqing Zhao
#129	<b>Adversarial Query-by-Image Video Retrieval Based on Attention Mechanism</b> Ruicong Xu, Li Niu, and Liqing Zhang
#132	<b>Joint Sketch-Attribute Learning for Fine-Grained Face Synthesis</b> Binxin Yang, Xuejin Chen, Richang Hong, Zihan Chen, Yuhang Li, and Zheng-Jun Zha
#133	<b>High Accuracy Perceptual Video Hashing via Low-Rank Decomposition and DWT</b> Lv Chen, Dengpan Ye, and Shunzhi Jiang
#136	<b>HMM-Based Person Re-identification in Large-Scale Open Scenario</b> Dongyang Li, Ruimin Hu, Wenxin Huang, Xiaochen Wang, Dengshi Li, and Fei Zheng
#140	<b>No Reference Image Quality Assessment by Information Decomposition</b> Junchen Deng, Ci Wang, and Shiqi Liu
#151	<b>Multi-Scale Comparison Network for Few-Shot Learning</b> Pengfei Chen, Minglei Yuan, and Tong Lu
#159	<b>Semantic and Morphological Information Guided Chinese Text Classification</b> Jiayu Song, Qinghua Xu, Wei Liu, Yueran Zu, and Mengdong Chen
#160	<b>A Delay-Aware Adaptation Framework for Cloud Gaming Under the Computation Constraint of User Devices</b> Duc V. Nguyen, Hutem T. T. Tran, and Truong Con Thang
#161	<b>Efficient Edge Caching for High-Quality 360-Degree Video Delivery</b> Dongbiao He, Jinlei Jiang, Cédric Westphal, and Guangwen Yang

#169	<b>Inferring Emphasis for Real Voice Data: An Attentive Multimodal Neural Network Approach</b> Suping Zhou, Jia Jia, Long Zhang, Yanfeng Wang, Wei Chen, Fanbo Meng, Fei Yu, and Jialie Shen
#172	<b>PRIME: Block-Wise Missingness Handling for Multi-modalities in Intelligent Tutoring Systems</b> Xi Yang, Yeo-Jin Kim, Michelle Taub, Roger Azevedo, and Min Chi
#174	<b>A New Local Transformation Module for Few-Shot Segmentation</b> Yuwei Yang, Fanman Meng, Hongliang Li, Qingbo Wu, Xiaolong Xu, and Shuai Chen
#179	<b>Background Segmentation for Vehicle Re-identification</b> Mingjie Wu, Yongfei Zhang, Tianyu Zhang, and Wenqi Zhang
#182	<b>Face Tells Detailed Expression: Generating Comprehensive Facial Expression Sentence Through Facial Action Units</b> Joanna Hong, Hong Joo Lee, Yelin Kim, and Yong Man Ro
#183	<b>A Deep Convolutional Deblurring and Detection Neural Network for Localizing Text in Videos</b> Yang Wang, Ye Qian, Jiahao Shi, and Feng Su
#193	<b>Generate Images with Obfuscated Attributes for Private Image Classification</b> Wei Hou, Dakui Wang, and Xiaojun Chen
#200	<b>A Compact Deep Neural Network for Single Image Super-Resolution</b> Xiaoyu Xu, Jian Qian, Li Yu, Shengju Yu, Hao Tao, and Ran Zhu
#206	<b>An Efficient Algorithm of Facial Expression Recognition by TSG-RNN Network</b> Kai Huang, Jianjun Li, Shichao Cheng, Jie Yu, Wanyong Tian, Lulu Zhao, Junfeng Hu, and Chin-Chen Chang
#208	<b>Structured Neural Motifs: Scene Graph Parsing via Enhanced Context</b> Yiming Li, Xiaoshan Yang, and Changsheng Xu
#222	<b>TK-Text: Multi-shaped Scene Text Detection via Instance Segmentation</b> Xiaoge Song, Yirui Wu, Wenhai Wang, and Tong Lu
#236	<b>More-Natural Mimetic Words Generation for Fine-grained Gait Description</b> Hirotaka Kato, Takatsugu Hirayama, Ichiro Ide, Keisuke Doman, Yasutomo Kawanishi, Daisuke Deguchi, and Hiroshi Murase
#237	<b>Lite Hourglass Network for Multi-person Pose Estimation</b> Ying Zhao, Zhiwei Luo, Changqin Quan, Dianchao Liu, and Gang Wang

## Demonstration

**Date & Time:** January 7(Tue.), 2020 | 15:00-17:00

**Place:** Room C (#105-106)

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- #240 **Browsing Visual Sentiment Datasets Using Psycholinguistic Groundings**  
Marc A. Kastner, Ichiro Ide, Yasutomo Kawanishi, Takatsugu Hirayama,  
Daisuke Deguchi, and Hiroshi Murase
- 
- #242 **Framework Design for Multiplayer Motion Sensing Game in Mixture Reality**  
Chih-Yao Chang, Bo-I Chuang, Chi-Chun Hsia, Wen-Cheng Chen, and Min-Chun Hu
- 
- #243 **Lyrics-Conditioned Neural Melody Generation**  
Yi Yu, Florian Harscoët, Simon Canales, Gurunath Reddy M, Suhua Tang, and Junjun Jiang
- 
- #244 **A Web-Based Visualization Tool for 3D Spatial Coverage Measurement of Aerial Images**  
Abdullah Alfarrarjeh, Zeyu Ma, Seon Ho Kim, Yeonsoo Park, and Cyrus Shahabi
- 
- #245 **An Attention Based Speaker-Independent Audio-Visual Deep Learning Model for Speech Enhancement**  
Zhongbo Sun, Yannan Wang, and Li Cao
- 
- #256 **DIME: An Online Tool for the Visual Comparison of Cross-modal Retrieval Models**  
Tony Zhao, Jaeyoung Choi, and Gerald Friedland
- 
- #257 **Real-Time Demonstration of Personal Audio and 3D Audio Rendering Using Line Array Systems**  
Jung-Woo Choi
- 
- #258 **A CNN-Based Multi-scale Super-Resolution Architecture on FPGA for 4K/8K UHD Applications**  
Yongwoo Kim, Jae-Seok Choi, Jaehyup Lee, and Munchurl Kim
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- #259 **Effective Utilization of Hybrid Residual Modules in Deep Neural Networks for Super Resolution**  
Abdul Muqheet and Sung-Ho Bae
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## Oral Session 5A: Face

**Date & Time:** January 8(Wed.), 2020 | 10:20-12:00

**Place:** Room A (#101-102)

**Session Chair:** Werner Bailer (Joanneum Research, Austria)

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10:20-10:40	#13	<b>Face Attributes Recognition Based on One-Way Inferential Correlation Between Attributes</b> Hongkong Ge, Jiayuan Dong, and Liyan Zhang
10:40-11:00	#35	<b>Eulerian Motion Based 3DCNN Architecture for Facial Micro-Expression Recognition</b> Yahui Wang, Huimin Ma, Xinpeng Xing, and Zeyu Pan
11:00-11:20	#41	<b>Emotion Recognition with Facial Landmark Heatmaps</b> Siyi Mo, Wenming Yang, Guijin Wang, and Qingmin Liao
11:20-11:40	#130	<b>One-Shot Face Recognition with Feature Rectification via Adversarial Learning</b> Jianli Zhou, Jun Chen, Chao Liang, and Jin Chen
11:40-12:00	#215	<b>Visual Sentiment Analysis by Leveraging Local Regions and Human Faces</b> Ruolin Zheng, Weixin Li, and Yunhong Wang

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**SS5: MULTIMED2020: Multimedia and Multimodal Analytics  
in the Medical Domain and Pervasive Environments**

**Date & Time:** January 8(Wed.), 2020 | 10:20-12:00

**Place:** Room B (#103-104)

**Session Chair:** Georgios Meditskos (Center for Research and Technology Hellas, Greece)

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**#135 Studying Public Medical Images from the Open Access Literature and Social Networks for Model Training and Knowledge Extraction**

Henning Müller, Vincent Andrearczyk, Oscar Jimenez del Toro, Anjani Dhrangadhariya, Roger Schaefer, and Manfred Atzori

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**#107 AttenNet: Deep Attention Based Retinal Disease Classification in OCT Images**

Jun Wu, Yao Zhang, Jie Wang, Jianchun Zhao, Dayong Ding, Ningjiang Chen, Lingling Wang, Xuan Chen, Chunhui Jiang, Xuan Zou, Xing Liu, Hui Xiao, Yuan Tian, Zongjiang Shang, Kaiwei Wang, Xirong Li, Gang Yang, and Jianping Fan

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**#78 NOVA: A Tool for Explanatory Multimodal Behavior Analysis and Its Application to Psychotherapy**

Tobias Baur, Sina Clausen, Alexander Heimerl, Florian Lingenfelser, Wolfgang Lutz, and Elisabeth André

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**#192 Instrument Recognition in Laparoscopy for Technical Skill Assessment**

Sabrina Kletz, Klaus Schoeffmann, Andreas Leibetseder, Jenny Benois-Pineau, and Heinrich Husslein

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**#225 Real-Time Recognition of Daily Actions Based on 3D Joint Movements and Fisher Encoding**

Panagiotis Giannakeris, Georgios Meditskos, Konstantinos Avgerinakis, Stefanos Vrochidis, and Ioannis Kompatsiaris

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**#103 Model-Based and Class-Based Fusion of Multisensor Data**

(Poster) Athina Tsanousa, Angelos Chatzimichail, Georgios Meditskos, Stefanos Vrochidis, and Ioannis Kompatsiaris

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**#235 Evaluating the Generalization Performance of Instrument Classification in Cataract Surgery Videos**

(Poster) Natalia Sokolova, Klaus Schoeffmann, Mario Taschwer, Doris Putzgruber-Adamitsch, and Yosuf El-Shabrawi

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## Oral Session 6A: Image Processing

**Date & Time:** January 8(Wed.), 2020 | 13:00-14:40

**Place:** Room A (#101-102)

**Session Chair:** Klaus Schöffmann (University of Klagenfurt, Austria)

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13:00-13:20	#32	<b>Prediction-Error Value Ordering for High-Fidelity Reversible Data Hiding</b> Tong Zhang, Xiaolong Li, Wenfa Qi, and Zongming Guo
13:20-13:40	#75	<b>Classroom Attention Analysis Based on Multiple Euler Angles Constraint and Head Pose Estimation</b> Xin Xu and Xin Teng
13:40-14:00	#203	<b>Multi-branch Body Region Alignment Network for Person Re-identification</b> Han Fang, Jun Chen, and Qi Tian
14:00-14:20	#227	<b>DeepStroke: Understanding Glyph Structure with Semantic Segmentation and Tabu Search</b> Wenguang Wang, Zhouhui Lian, Yingmin Tang, and Jianguo Xiao
14:20-14:40	#229	<b>3D Spatial Coverage Measurement of Aerial Images</b> Abdullah Alfarrarjeh, Zeyu Ma, Seon Ho Kim, and Cyrus Shahabi

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## SS6: Intelligent Multimedia Security

**Date & Time:** January 8(Wed.), 2020 | 13:00-14:40

**Place:** Room B (#103-104)

**Session Chair:** Bingkun Bao (Nanjing University of Posts and Telecommunications, China)

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- #29 **Compact Position-Aware Attention Network for Image Semantic Segmentation**  
Yajun Xu, Zhendong Mao, Peng Zhang, and Bin Wang
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- #34 **Law is Order: Protecting Multimedia Network Transmission by Game Theory and Mechanism Design**  
Chuanbin Liu, Youliang Tian, and Hongtao Xie
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- #152 **Rational Delegation Computing Using Information Theory and Game Theory Approach**  
Qiuxian Li and Youliang Tian
- 
- #210 **Multi-hop Interactive Cross-Modal Retrieval**  
Xuecheng Ning, Xiaoshan Yang, and Changsheng Xu
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## Oral Session 7A: Leaning and Knowledge Representation

**Date & Time:** January 8(Wed.), 2020 | 15:00-17:00

**Place:** Room A (#101-102)

**Session Chair:** Min-Chun Hu (National Tsing Hua University, Taiwan)

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15:00-15:20	#27	<b>Instance Image Retrieval with Generative Adversarial Training</b> Hongkai Li, Cong Bai, Ling Huang, Yugang Jiang, and Shengyong Chen
15:20-15:40	#65	<b>An Effective Way to Boost Black-Box Adversarial Attack</b> Xinjie Feng, Hongxun Yao, Wenbin Che, and Shengping Zhang
15:40-16:00	#73	<b>Crowd Knowledge Enhanced Multimodal Conversational Assistant in Travel Domain</b> Lizi Liao, Lyndon Kennedy, Lynn Wilcox, and Tat-Seng Chua
16:00-16:20	#148	<b>Improved Model Structure with Cosine Margin OIM Loss for End-to-End Person Search</b> Haoran Chen, Minghua Zhu, Xuesong Cai, Jufeng Luo, and Yunzhou Qiu
16:20-16:40	#220	<b>Effective Barcode Hunter via Semantic Segmentation in the Wild</b> Feng Ni and Xixin Cao
16:40-17:00	#194	<b>Context-Aware Residual Network with Promotion Gates for Single Image Super-Resolution</b> Xiaozhong Ji, Yirui Wu, and Tong Lu

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## Oral Session 7B: Video Processing

**Date & Time:** January 8(Wed.), 2020 | 15:00-17:00

**Place:** Room B (#103-104)

**Session Chair:** Ichiro Ide (Nagoya University, Japan)

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15:00-15:20	#5	<b>Wonderful Clips of Playing Basketball: A Database for Localizing Wonderful Actions</b> Qinyu Li, Lijun Chen, Hanli Wang, and Xianhui Liu
15:20-15:40	#91	<b>Structural Pyramid Network for Cascaded Optical Flow Estimation</b> Zefeng Sun, Hanli Wang, Yun Yi, and Qinyu Li
15:40-16:00	#104	<b>Real-Time Multiple Pedestrians Tracking in Multi-camera System</b> Muchun Chen, Yugang Chen, Truong Tan Loc, and Bingbing Ni
16:00-16:20	#106	<b>Learning Multi-feature Based Spatially Regularized and Scale Adaptive Correlation Filters for Visual Tracking</b> Ying She and Yang Yi
16:20-16:40	#201	<b>Unsupervised Video Summarization via Attention-Driven Adversarial Learning</b> Evlampios Apostolidis, Eleni Adamantidou, Alexandros I. Metsai, Vasileios Mezaris, and Ioannis Patras
16:40-17:00	#214	<b>Perceptual Localization of Virtual Sound Source Based on Loudspeaker Triplet</b> Duanzheng Guan, Dengshi Li, Xuebei Cai, Xiaochen Wang, and Ruimin Hu

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