

Day 1 (7/18)

8:30-9:30	Tutorial on DeepFake Creation, Detection and Obstruction		
9:30-10:00	Break		
10:00-12:00			
12:00-13:00	Lunch Break		
13:00-14:00	Workshop on Artificial Intelligence in Sports	Tutorial on Network-Empowered Scalable, Reliable and Secure Media Delivery	Tutorial on Tensor Computations for Multimedia Data Processing
14:00-14:30	Break		
14:30-15:30			
15:30-16:00	Break		
16:00-17:00			

Day 2 (7/19)

8:00-8:30	Opening			
8:30-9:30	Oral Image Analysis and Processing	Oral Audio Analysis and Processing	Oral Face I	Oral Human Pose and Action
	441	647	815	1363
	949	89	104	141
	572	927	349	3
	158	594	461	5
	492	1209		149
9:30-10:00	Break			
10:00-11:00	Oral Machine Learning I	Oral Object/Person Detection and Identification	Oral Video Analysis and Processing I	Oral Recommendation and Mining
	1104	537	146	751
	837	546	1251	485
	885	773	415	700
	1516	1001	367	879
	56	1392	228	1115
11:00-12:00	Keynote (Ted Chang)			
12:00-13:00	Lunch Break			
13:00-14:00	Oral Multimodal Analysis I	Oral Depth and Image Processing	Oral Object Detection	Oral Retrieval
	1139	1342	1016	418
	1552	576	1482	350
	725	1079	36	935
	1067	1077	55	956
	1358	1219	963	995
14:00-14:30	Break			
14:30-15:30	Oral Machine Learning II	Oral Video Coding	Oral Video Processing and Analysis II	Challenge on Low-power Deep Learning
	426	969	1105	101w
	171	1119	1087	102w
	526	1129	1329	103w
	291	839	1463	
	327	1216	645	
15:30-16:00	Break			
16:00-17:00	SS on Human-Centered Intelligent Multimedia Understanding I	SS on Human-Centered Intelligent Multimedia Understanding II	SS on Multimodal Intelligence	SS on Advances in Point Cloud Acquisition, Processing and Understanding
	374	34	842	100
	521	35	1294	804
	792	573	1341	844
	817	1177	1531	909
	20	1579	1565	1165
	Reception			





Day 5 (7/22)

8:30-9:30	Workshop on Big Surveillance Data Analysis & Processing	Tutorial on Edge-Cloud Collaborative Multimedia Analysis	Workshop on Artificial Intelligence for Art Creation
9:30-10:00	Break		
10:00-12:00			
12:00-13:00	Lunch Break		
13:00-14:00	Workshop on 3D Multimedia Analytics, Search and Generation	Workshop on Hyper-Realistic Multimedia for Enhanced Quality of Experience	
14:00-14:30	Break		
14:30-15:30			
15:30-16:00	Break		
16:00-17:00			

8:30-9:30

**Oral Image Analysis and Processing**

**Domain-Generalized Textured Surface Anomaly Detection**

Shang-Fu Chen (National Taiwan University)  
Yu-Min Liu (National Taiwan University)  
Chia-Ching Lin (National Taiwan University)  
Trista Pei-chun Chen (Inventec Corporation)  
Yu-Chiang Frank Wang (National Taiwan University)

**Shadow Removal Through Learning-based Region Matching and Mapping Function Optimization**

Shih-Wei Hsieh (National Taiwan University)  
Chih-Hsiang Yang (National Taiwan University)  
Yi-Chang Lu (National Taiwan University)

**Parallel Edge-Image Learning for Image Inpainting**

Junfeng Hu (National University of Singapore)  
Chengxin Wang (National University of Singapore)  
Ying Zhang (NWPU)  
Li Liu (Chongqing University)  
Yifang Yin (A\*STAR)  
Roger Zimmermann (NUS)

**Source Free Domain Adaptation for Semantic Segmentation via Distribution Transfer and Adaptive Class-balanced Self-training**

Cheng-Yu Yang (National Tsing-Hua University)  
Yuan-Jhe Kuo (National Tsing Hua University)  
Chiou-Ting Hsu (National Tsing Hua University)

**Towards Underwater Image Restoration: A Physical-accurate Pipeline and a Large Scale Full-reference Benchmark**

Jiayan Tong (Tongji University)  
Tianjun Zhang (Tongji University)  
Lin Zhang (Tongji University, China)

8:30-9:30

## **Oral Audio Analysis and Processing**

### **Spatial-Temporal-Class Attention Network for Acoustic Scene Classification**

Xinlei Niu (Australian National University)

Charles Patrick Martin (Australian National University)

### **Multimodal Music Emotion Recognition with Hierarchical Cross-Modal Attention Network**

Jiahao Zhao (Fudan University)

Ganghui Ru (Fudan University)

Yi Yu (NII); Yulun Wu (Fudan University)

Dichucheng Li (Fudan University); Wei Li (Fudan University)

### **HarmoF0: Logarithmic Scale Dilated Convolution for Pitch Estimation**

Weixing Wei (Fudan University)

Peilin Li (Fudan University)

Yi Yu (NII); Wei Li (Fudan University)

### **Global-Local Similarity Function for Automatic Playlist Generation**

Haonan Cheng (Communication University of China)

Ruyu Zhang (Communication University of China)

XiaoYing Huang (Communication University of China)

Long Ye (Communication University of China)

8:30-9:30

**Oral Face I**

**Learning Facial Liveness Representation for Domain Generalized Face Anti-Spoofing**

Zih-Ching Chen (National Taiwan University)  
Lin-Hsi Tsao (National Taiwan University)  
Chin-Lun Fu (National Taiwan University)  
Shang-Fu Chen (National Taiwan University)  
Yu-Chiang Frank Wang (National Taiwan University)

**Learning to Augment Face Presentation Attack Dataset via Disentangled Feature Learning from Limited Spoof Data**

Pei-Kai Huang (National Tsing Hua University)  
Chu-Ling Chang (National Tsing Hua University)  
Hui-Yu Ni (National Tsing Hua University)  
Chiou-Ting Hsu (National Tsing Hua University)

**Physics-based Appearance and Illumination Estimation from a Single Face Image**

Wei Liu (The University of Sydney)  
Chaoyue Wang (JD.com)  
Changxing Ding (South China University of Technology)

**CMANet: Curvature-aware soft mask guided attention fusion network for 2D+3D facial expression recognition**

Zhaoqing Zhu (University of Science and Technology of China)  
Mingzhe Sui (University of Science and Technology of China)  
Hanting Li (University of Science and Technology of China)  
Feng Zhao (University of Science and Technology of China)



8:30-9:30

## **Oral Human Pose and Action**

### **Monocular 3D Human Pose Estimation with Domain Feature Alignment and Self Training**

Yan-Hong Zhang (National Tsinghua University); Calvin Ku (National Tsinghua University)  
Min-Chun Hu (National Tsing Hua University)  
Hung-Kuo Chu (National Tsing Hua University)

### **Dyadic Human Relation Recognition**

Keen Kogashi (kyoto university)  
Shohei Nobuhara (Kyoto University)  
Ko Nishino (Kyoto University)

### **X-HRNet: Towards Lightweight Human Pose Estimation with Spatially Unidimensional Self-Attention**

Yixuan Zhou (UESTC)  
Xuanhan Wang (University of Electronic Science and Technology of China)  
Xing Xu (University of Electronic Science and Technology of China)  
Lei Zhao (The University of Electronic Science and Technology of China)  
Jingkuan Song (UESTC)

### **Spatio-Temporal Self-Supervision Enhanced Transformer Networks for Action Recognition**

Yongkang Zhang (Capital Normal University)  
Han Zhang (Capital Normal University)  
Guoming Wu (Capital Normal University)  
Jun Li (Capital Normal University)

### **MrCAN: Class-Aware Network with Multi-relations for Temporal Action Detection**

Dongqi Wang (Shanghai Jiao Tong University)  
Zixuan Zhao (Shanghai Jiao Tong University)  
Xu Zhao (Shanghai Jiao Tong University)

**Generative and Adaptive Multi-Label Generalized Zero-Shot Learning**

Kuan-Ying Chen (National Taiwan Normal University)

Mei-Chen Yeh (National Taiwan Normal University)

**DistillDARTS: Network Distillation for Smoothing Gradient Distributions in Differentiable Architecture Search**

Zhexi Zhang (Shanghai Jiao Tong University)

Xiaoxing Wang (Shanghai Jiao Tong University)

Wenlong Liao (Shanghai Jiao Tong University)

Tao Yin (Shanghai Jiao Tong University)

Huanxi Liu (Shanghai Jiao Tong University)

Zhenyu Ren (Aliyun)

Jian Yin (Alibaba Group)

Shuzhi Feng (Alibaba Group)

**Searching Latent Sub-goals in Hierarchical Reinforcement Learning as Riemannian Manifold Optimization**

Sidun Liu (NUDT)

Peng Qiao (NUDT)

Yong Dou (National University of Defense Technology)

Ruochun Jin (National University of Defense Technology)

**Deep Unfolding for Compressed Sensing with Denoiser**

Chi Ma (Shenzhen University)

Joey Tianyi Zhou (Institute of High Performance Computing, A\*STAR)

Xiao Zhang (South-Central University for Nationalities)

Yu Zhou (Shenzhen University)

**Semantic-driven Automatic Filter Pruning for Neural Networks**

Yang Guo (Peking University)

Wei Gao (SECE, Shenzhen Graduate School, Peking University)

**Finding the Achilles Heel: Progressive Identification Network for Camouflaged Object Detection**

Mu-Chun Chou (National Yang Ming Chiao Tung University)  
Hung-Jen Chen (National Yang Ming Chiao Tung University)  
Hong-Han Shuai (National Yang Ming Chiao Tung University)

**Attentive Decoupling Network for Cloth-Changing Re-identification**

Zhengwei Yang (Wuhan University of Technology)  
Xian Zhong (Wuhan University of Technology)  
Hong Liu (National Institute of Informatics)  
Zhun Zhong (University of Trento)  
Zheng Wang (Wuhan University)

**Learning Robust Latent Space of Basketball Player Trajectories for Tactics Analysis**

Yang-Sheng Chao (National Tsing Hua University)  
Wen-Cheng Chen (National Cheng Kung University)  
Jian-Wei Peng (National Cheng Kung University)  
Min-Chun Hu (National Tsing Hua University)

**Noise-Tolerant Learning with Silhouette Coefficient for Unsupervised Person Re-Identification**

Yu Feng (Northeastern University)  
Shuying Zhao (Northeastern University)  
Yunzhou Zhang (Northeastern University)  
Yixiu Liu (Northeastern University)  
Shangdong Zhu (Northeastern University)  
Sonya Coleman (School of Computing and Intelligent Systems, University of Ulster)

**Toward To Real Low-Resolution Person Re-Identification: A New Dataset and Baseline**

Dongting Sun (NUDT)  
Lulu Yang (NUDT)  
long lan (NUDT)  
Zhigang Luo (NUDT)

**Support-set based Multi-modal Representation Enhancement for Video Captioning**

Xiaoya Chen (University of Electronic Science and Technology of China)  
Jingkuan Song (University of Electronic Science and Technology of China)  
Pengpeng Zeng (University of Electronic Science and Technology of China)  
Lianli Gao (The University of Electronic Science and Technology of China)  
Heng Tao Shen (University of Electronic Science and Technology of China (UESTC))

**Dual-Scale Alignment-Based Transformer On Linguistic Skeleton Tags For Non-Autoregressive Video Captioning**

Xian Zhong (Wuhan University of Technology)  
Yi Zhang (Wuhan University of Technology)  
Shuqin Chen (Wuhan University of Technology)  
Zhixin Sun (Wuhan University of Technology)  
Zheng Huantao (Wuhan University of Technology)  
Kui Jiang (National Engineering Research Center for Multimedia Software, School of Computer Science, Wuhan University)

**Data-free Network Debiasing for Long-Tailed Visual Recognition**

Jinmian Cai (Fudan University)  
Zheng Wang (Fudan University)  
Huazhu Fu (IHPC, ASTAR)  
Jingjing Chen (Fudan University)  
Yu-Gang Jiang (Fudan University)

**Detecting Anomalous Events from Unlabeled Videos via Temporal Masked Auto-Encoding**

Jingtao Hu (National University of Defense Technology)  
Guang Yu (National University of Defense Technology)  
Siqi Wang (National University of Defense Technology)  
En Zhu (National University of Defense Technology)  
Zhiping Cai (NUDT); Xinzhong Zhu (Zhejiang Normal University)

**Dast-Net: Depth-Aware Spatio-Temporal Network for Video Deblurring**

Qi Zhu (University of Science and Technology of China)  
Zeyu Xiao (University of Science and Technology of China)  
Jie Huang (University of Science and Technology of China)  
Feng Zhao (University of Science and Technology of China)

**They Like Comedy, Don't You? A Cluster-based Meta-learning for Cold-start Recommendation**

Feng Jiang (Beijing University of Posts and Telecommunications)  
Qianfang Xu (Beijing University of Posts and Telecommunications)  
Wenliang Li (Beijing University of Posts and Telecommunications)  
Bo Xiao (Beijing University of Posts and Telecommunications)  
Yuhao Luo (Beijing University of posts and telecommunications)

**Factorial User Modeling with Hierarchical Graph Neural Network for Enhanced Sequential Recommendation**

Lvxin Xue (Fudan University)  
Deqing Yang (Fudan University)  
Yanghua Xiao (Fudan University)

**M3Rec: Cross-Modal Context Enhanced Micro-Video Recommendation with Mutual Information Maximization**

Qihan Du (Renmin University of China)  
Li Yu (Renmin University of China)  
Huiyuan Li (Renmin University of China)  
Ningrui Ou (Renmin University of China)  
Xinjing Gong (Northeast Agricultural University)  
Junyao Xiang (Renmin University of China)

**Reliable Self-Supervised Information Mining for Deep Subspace Clustering**

Junjie Liang (Shantou University)  
Han Gao (Shantou University)  
Haojun Sun (Shantou University)  
Rui Li (Shantou University)  
Cheng Liu (Shantou University)

**Source-free Unsupervised Cross-Domain Pedestrian Detection via Pseudo Label Mining and Screening**

Zhiri Tang (City University of Hong Kong)  
Qianfen Jiao (City University of Hong Kong)  
Jian Zhong (City University of Hong Kong)  
Si Wu (South China University of Technology)  
Hau San Wong (City University of Hong Kong)

**NHFNet: A Non-Homogeneous Fusion Network for Multimodal Sentiment Analysis**

Ziwan Fu (Beijing University of Posts and Telecommunications)

Feng Liu (East China Normal University)

Qing Xu (Beijing University of Posts and Telecommunications)

Jiayin Qi (Shanghai University of International Business and Economics)

Xiangling Fu (Beijing University of Posts and Telecommunications)

Aimin Zhou (East China Normal University)

Zhibin Li (East China Normal University)

**Hierarchical Multi-modal Fusion on Dynamic Heterogeneous Graph for Health Insurance Fraud Detection**

Jian Zhang (Xiamen University)

Fan Yang (Department of Automation, Xiamen University)

Kaibiao Lin (Xiamen University of Technology)

Yongxuan Lai (Xiamen University)

**Human Attention Based Movie Summarization: Dataset and Baseline Model**

Defang Zhao (Tongji University)

Dandan Zhu (Shanghai Jiao Tong University)

Xionghuo Min (Shanghai Jiao Tong University)

Jiaomin Yue (Shanghai Jiao Tong University)

Kaiwei Zhang (Shanghai Jiao Tong University)

Qiangqiang Zhou (Jiangxi Normal University)

Guangtao Zhai (Shanghai Jiao Tong University)

Xiaokang Yang (Shanghai Jiao Tong University)

**Utilizing BERT Intermediate Layers for Multimodal Sentiment Analysis**

Wenwen Zou (Nanjing University of Science and Technology)

Jundi Ding (Nanjing University of Science and Technology)

Chao Wang (Nanjing University of Science and Technology)

**HMAI-BERT: Hierarchical Multimodal Alignment and Interaction Network-Enhanced Bert for Multimodal Sentiment Analysis**

Xianbing Zhao (Harbin Institute of Technology (Shenzhen))

Yixin Chen (Harbin Institute of Technology Shenzhen Graduate School)

Yiting Chen (Harbin Institute of Technology)

Sicen Liu (Harbin Institute of Technology, Shenzhen)

Buzhou Tang (Harbin Institute of Technology, China)

**SADG-Net: Sparse Adaptive Dynamic Guidance Network for Depth Completion**

Hao Wu (Tsinghua University)  
Guodong Zhang (Tsinghua University)  
Chenchen Feng (Tsinghua University)  
Sifan YANG (Tsinghua Shenzhen International Graduate School)  
Wenming Yang (Tsinghua University)  
Guijin Wang (Tsinghua University, China)

**Learning Stereo Depth Estimation with Bio-Inspired Spike Cameras**

Yixuan Wang (Peking University)  
Jianing Li (Peking University)  
Lin Zhu (Peking University)  
Xijie XIANG (Shanghai Jiao Tong University)  
Tiejun Huang (Peking University)  
Yonghong Tian (Peking University)

**Learning Data Hallucination and Reciprocal Guidance for Underwater Depth Estimation and Color Correction**

Biao Wu (Dalian University of Technology)  
Xinchen Ye (Dalian University of Technology)  
Fei Xue (Dalian University of Technology)  
Rui Xu (Dalian University of Technology)

**Feature Pyramid Boosting Network for Rendering Natural Bokeh**

Yi Liu (Tsinghua)  
Juncheng Zhang (Tsinghua University)  
Qingmin Liao (Tsinghua University)  
Haoyu Ma (Tsinghua University)  
Shaojun Liu (Shenzhen Technology University)

**Trace-Level Invisible Enhanced Network For 6D Pose Estimation**

Hanbo Sang (Shanghai Jiao Tong University)  
Zelin Ni (Shanghai Jiao Tong University)  
Huanyu He (Shanghai Jiaotong University)  
Xuesong Gao (Hisense Group Holdings)  
Qihao Sun (Hisense Group Holdings)  
Lei Qu (Hisense Group Holdings)  
Sihai Zhang (Hisense TransTech Co., Ltd.)  
Wenwen Wang (Hisense TransTech Co., Ltd.)  
Supavade Aramvith (Chulalongkorn University)  
Weiyao Lin (Shanghai Jiao Tong university)

**GRDN: Graph Relation Decision Network for Object Detection**

Xiwei Yang (Guangxi Normal University)  
Xinfang Zhong (Guangxi Normal University)  
Zhixin Li (Guangxi Normal University)

**Multi-Target Domain Transfer Detector on Bad Weather Conditions**

Chonghuan Liu (Sun Yat-Sen University)  
Ruizhi Liu (Sun Yat-sen University)  
Zhuo Su (Sun Yat-sen University)  
Fan Zhou (Sun Yat-sen university)

**Dual Selection Network for Video Object Detection**

Tianxiang Hou (Xiamen University)  
Qiang Qi (Xiamen University)  
Yang Lu (Xiamen University)  
Kaiwen Du (Xiamen University)  
Hanzi Wang (Xiamen University)

**Rethinking the Grouping Process in Corner-Based Detectors**

Haoran Wei (University of Chinese Academy of Sciences)  
Yangguang Zhu (University of Chinese Academy of Sciences, Beijing 100049, China)  
Ping Guo (Intel Labs China)  
Bing Wang (UCAS)  
Jiamei Fu (UCAS)

**Contrastive Class-specific Encoding for Few-shot Object Detection**

Dizhong Lin (Chengdu University of Information Technology)  
Ying Fu (Chengdu university of information technology)  
Xin Wang (Keya Medical)  
Shu Hu (University at Buffalo)  
Bin Zhu (Microsoft Research Asia)  
Qi Song (Keya Medical)  
Xi Wu (Chengdu University of Information Technology)  
Jiliu Zhou (Chengdu University of Information Technology)  
Siwei Lyu (University at Buffalo)



**Vision Transformer Hashing for Image Retrieval**

Shiv Ram Dubey (Indian Institute of Information Technology, Allahabad)

Satish Kumar Singh (IIIT Alahabad)

Wei-Ta Chu (National Cheng Kung University)

**Fine-Grained Cross-Modal Retrieval with Triple-Streamed Memory Fusion Transformer Encoder**

Weikuo Guo (Dalian University of Technology)

Huaibo Huang (Institute of Automation, Chinese Academy of Sciences)

Xiangwei Kong (Zhejiang University)

Ran He (Institute of Automation, Chinese Academy of Sciences)

**Spatial-Temporal Alignment via Optimal Transport for Video-Text Retrieval**

Zerun Feng (Beijing University of Posts and Telecommunications)

Zhimin Zeng (Beijing University of Posts and Telecommunications)

Caili Guo (Beijing University of Posts and Telecommunications)

Zheng Li (Beijing University of Posts and Telecommunications)

Yufeng Zhang (China Telecom Dict Application Capability Center)

**Attribute-Guided Fashion Image Retrieval by Iterative Similarity Learning**

Cairong Yan (Donghua University)

Kang Yan (Donghua University)

Yanting Zhang (Donghua University)

Yongquan Wan (Shanghai University)

Dandan Zhu (Shanghai Jiao Tong University)

**Instance-Level Semantic Alignment for Zero-Shot Cross-Modal Retrieval**

Kai Wang (University of Electronic Science and Technology of China)

Yifan Wang (University of Electronic Science and Technology of China)

Xing Xu (University of Electronic Science and Technology of China)

Zuo Cao (MEITUAN)

Xunliang Cai (MEITUAN)

**ROGC: Role-Oriented Graph Convolution Based Multi-Agent Reinforcement Learning**

Yuntao Liu (National Laboratory for Parallel and Distributed Processing, National University of Defense Technology, Changsha, Hunan)

Yuan Li (National Innovation Institute of Defense Technolog)

Xinhai Xu (Academy of Military Sciences)

Donghong Liu (Academy of Military Sciences)

Yong Dou (National University of Defense Technology)

**Multi-View Deep Matrix Factorization with Consensual Solution from Multiple Paths**

Sheng Huang (Fuzhou University)

Lele Fu (Sun Yat-sen University)

Yunhe Zhang (Fuzhou University)

Haiping Xu (Minjiang University)

Shiping Wang (Fuzhou University)

**EDSF: Fast and Accurate Ellipse Detection via Disjoint-set Forest**

Jingen Jiang (UCAS)

Mingyang Zhao (University of Chinese Academy and Sciences & Beijing Academy of Artificial Intelligence)

Zeyu Shen (Institute of Software, Chinese Academy of Sciences)

Dong-Ming Yan (NLPR, CASIA)

**Rethinking Hard-Parameter Sharing in Multi-Domain Learning**

Lijun Zhang (University of Massachusetts Amherst)

Qizheng Yang (University of Massachusetts Amherst)

Xiao Liu (University of Massachusetts Amherst)

Hui Guan (University of Massachusetts, Amherst)

**Improving Class Balancing at Both Feature Extractor and Classifier Head**

Kanghao Chen (Sun Yat-Sen University)

Huijuan Lu (Sun Yat-Sen University)

Ruixuan Wang (Sun Yat-sen University)

Wei-Shi Zheng (Sun Yat-sen University, China)

14:30-15:30

## **Oral Video Coding**

### **Adaptive Bitrate Control Mechanism Based on Long-Term Evaluation**

Pierre Lebreton (NTT)

Kazuhisa Yamagishi (NTT)

### **Perceptually-Aware Per-Title Encoding for Adaptive Video Streaming**

Vignesh V Menon (Alpen-Adria-Universität Klagenfurt)

Hadi Amirpour (Alpen-Adria-Universität Klagenfurt)

Mohammad Ghanbari (University of Essex)

Christian Timmerer (Alpen-Adria-Universität Klagenfurt)

### **Complexity-Oriented Per-shot Video Coding Optimization**

Hongcheng Zhong (Institute of Image Communication and Network Engineering, Shanghai Jiao Tong University)

Jun Xu (Institute of Image Communication and Network Engineering, Shanghai Jiao Tong University)

Chen Zhu (Shanghai Jiao Tong University)

Donghui Feng (Cooperative Medianet Innovation Center, Shanghai, China)

Li Song (Shanghai Jiao Tong University)

### **A Hardware Implementation of Entropy Encoder for 8K Video Coding**

Lvfang Tao (Peking University)

Wei Gao (SECE, Shenzhen Graduate School, Peking University)

### **Random Forest Accelerated CU Partition for Inter Prediction in H.266/VVC**

Jingyi Li (Xidian University)

Saiping Zhang (Xidian University)

FuZheng Yang (Xidian University)

**P2SL: Private-Shared Subspaces Learning for Affective Video Content Analysis**

Qi Wang (Chongqing University of Posts and Telecommunications)

Xiaohong Xiang (Chongqing University of Posts and Telecommunications)

Jun Zhao (Chongqing University of Posts and Telecommunications)

Xin Deng (Chongqing Key Laboratory of Computational Intelligence (Chongqing University of Posts and Telecommunications))

**Trajectory Prediction from Ego View: a Coordinate Transform and Tail-light Event Driven Approach**

Wenlong Liao (Shanghai Jiao Tong University)

Xiaolei Chen (Shanghai Jiao Tong University)

Weipeng Zhang (Shanghai Jiao Tong University)

Huanxi Liu (Shanghai Jiao Tong University)

Junchi Yan (Shanghai Jiao Tong University)

Yingxin Lou (Tencent)

Tao Xue (Tencent)

Shuqi Mei (Tencent)

**Towards Temporal Event Detection: A Dataset and Benchmarks**

Zhenguo Yang (Guangdong University of Technology)

Haizhong Zhu (Guangdong University of Technology)

Zhiwei Guo (Guangdong University of Technology)

Han Lin (Guangdong University of Technology)

Zehang Lin (The Hong Kong Polytechnic University)

Qing Li (The Hong Kong Polytechnic University)

Wenyin Liu (Guangdong University of Technology)

**Multi-Granularity Semantic Clues Extraction for Video Question Answering**

Fei Zhou (Tianjin University)

Yahong Han (Tianjin University)

**Relation Reasoning for Video Pedestrian Trajectory Prediction**

Haowen Tang (Xi'an Jiaotong University)

Ping Wei (Xi'an Jiaotong University)

Huan Li (Xi'an Jiaotong University)

Jiapeng Li (Xi'an Jiaotong University)

Nanning Zheng (Xi'an Jiaotong University)

**Adaptive Multi-order Graph Neural Networks for Human Motion Prediction**

Pengxiang Su (Jilin University)

Wei Liu (Jilin University)

**Human-Centered Prior-Guided and Task-Dependent Multi-Task Representation Learning for Action Recognition Pre-Training**

Guanhong Wang (Zhejiang University)

Lu Keyu (Zhejiang University)

Yang Zhou (Zhejiang University)

Zhanhao He (Zhejiang university)

Gaoang Wang (Zhejiang University)

**Decomposing Identity and View for Cross-View Gait Recognition**

Xinliang Zhai (Shandong University)

Xianye Ben (Shandong University)

Chang Liu (Shandong University)

Tingxuan Xie (Shandong University)

**Information Enhancement and Recursive Learning Network in A Coarse-Refine Manner for Pancreas Segmentation**

Yu Liu (Jilin University)

Yongping Huang (Jilin University)

Rui Guo (Jilin University)

**MKE-GCN: Multi-modal Knowledge Embedded Graph Convolutional Network for Skeleton-Based Action Recognition in the Wild**

Sen Yang (UESTC)

Xuanhan Wang (University of Electronic Science and Technology of China)

Lianli Gao (The University of Electronic Science and Technology of China)

Jingkuan Song (UESTC)

**Spatial-Temporal Correlation Modeling for Motion Prediction**

Yingying Jiao (Jilin University)  
Haipeng Chen (Jilin University)  
Chang Yao (Zhejiang University)  
Pengxiang Su (Jilin University)  
Fu Chong (Zhejiang University)  
Xiang Wang (National University of Singapore)

**Unsupervised Domain Adaptation Learning for Infant Pose Recognition with Synthetic Data**

Cheng-Yen Yang (University of Washington)  
Zhongyu Jiang (University of Washington)  
Shih-Yu Gu (University of Washington)  
Jenq-Neng Hwang (University of Washington)  
Jang-Hee Yoo (ETRI)

**Mix-up Self-Supervised Learning for Contrast-agnostic Applications**

Yichen Zhang (National University of Singapore)  
Yifang Yin (A\*STAR)  
Ying Zhang (NWPU)  
Roger Zimmermann (NUS)

**Mitigating Label-Noise for Facial Expression Recognition in The Wild**

Huan Yan (Hefei University of Technology)  
Yu Gu (Hefei University of Technology)  
Xiang Zhang (Hefei University of Technology)  
Yantong Wang (Hefei University of Technology)  
Yusheng Ji (National Institute of Informatics)  
Fuji Ren (Tokushima University)

**Boosting Lip Reading with A Multi-View Fusion Network**

Xueyi Zhang (National University of Defense Technology)  
Chengwei Zhang (Hebei University of Technology)  
Jinping Sui (Dalian Naval Academy)  
Changchong Sheng (National University of Defense Technology)  
Wanxia Deng (National University of Defense Technology)  
Li Liu (National University of Defense Technology)

**Modeling Field-level Factor Interactions for Fashion Recommendation**

Yujuan Ding (The Hong Kong Polytechnic University)  
Tracy Mok (The Hong Kong Polytechnic University)  
Xun Yang (University of Science and Technology of China)  
Yanghong Zhou (The Hong Kong Polytechnic University)

**RPITN: Review Based Preference Invariance Transfer Network for Cross-Domain Recommendation**

Zi Jie Zuo (Ocean University of China)  
Jie Nie (Ocean University of China)  
Zian Zhao (Ocean University of China)  
Huaxin Xie (Ocean University of China)  
Xiangqian Ding (Ocean University of China)  
Shusong Yu (Ocean University of China)  
Lei Huang (Ocean University of China)  
Yuxuan Yue (Ocean University of China)  
Xin Wang (Tsinghua University)

**A Channel Mix Method for Fine-Grained Cross-Modal Retrieval**

Yang Shen (Nanjing University of Science and Technology)  
Xu Hao XH SUN (Nanjing University of Science and Technology)  
Xiu-Shen Wei (Nanjing University of Science and Technology)  
Hanxu Hu (Nanjing University of Science and Technology)  
Zhipeng Chen (National Computer Network Emergency Response Technical Team, Coordination Center of China)

**SMDT: Cross-View Geo-Localization with Image Alignment and Transformer**

Xiaoyang Tian (UESTC)  
Jie Shao (University of Electronic Science and Technology of China)  
Deqiang Ouyang (Chongqing University)  
Anjie Zhu (University of Electronic Science and Technology of China)  
Feiyu Chen (University of Electronic Science and Technology of China)

**Dual Re-Weighting Network for Multi-Source Domain Adaptation**

Ziyun Cai (Nanjing University of Posts and Telecommunications)  
Tengfei Zhang (Nanjing University of Posts and Telecommunications)  
Jing Xiao-Yuan (School of Computer, Wuhan University)

**Partial-to-Partial Point Cloud Registration Based on Multi-level Semantic-Structural Cognition**

Yucheng Shu (Chongqing University of Posts and Telecommunications)  
Zongzhuang Hou (Chongqing University of Posts and Telecommunications)  
Bin Xiao (Chongqing University of Posts and Telecommunications)  
Xiuli Bi (Chongqing University of Posts and Telecommunications)  
Xiao Luan (Chongqing University of Posts and Telecommunications)  
Weisheng Li (Chongqing University of Posts and Telecommunications)

**HyperpointNet For Point Cloud Sequence-Based 3D Human Action Recognition**

Xing Li (Hohai University)  
Qian Huang (Hohai University)  
Tianjin Yang (Hohai University)  
Qianhan Wu (Hohai University)

**Self-Supervised Point Cloud Completion on Real Traffic Scenes via Scene-Concerned Bottom-up Mechanism**

Yiming Ren (Shanghai Tech)  
Peishan Cong (ShanghaiTech)  
Xinge Zhu (The Chinese University of Hong Kong)  
Yuexin Ma (ShanghaiTech University)

**OPENDENSELANE: A New Lidar-Based Dataset for HD Map Construction**

Xiaolei Chen (Shanghai Jiao Tong University)  
Wenlong Liao (Shanghai Jiao Tong University)  
Bin Liu (Shanghai Jiao Tong University)  
Junchi Yan (Shanghai Jiao Tong University)  
Tao He (Anhui COWAROBOT CO., Ltd.)

**LGP-Net: Local Geometry Preserving Network for Point Cloud Completion**

Yibo Wang (Beijing University of Technology)  
Jin Wang (Beijing University of Technology)  
Yunhui Shi (Beijing University of Technology)  
Longhua Sun (Beijing University of Technology)  
Baocai Yin (Beijing University of Technology)



10:00-11:00

**Best Paper Session**

**SoftGAN: Towards Accurate Lung Nodules Segmentation via Soft Mask Supervision**

Changwei Wang (Institute of Automation, Chinese Academy of Sciences; School of Artificial Intelligence, University of Chinese Academy of Sciences)

Rongtao Xu (Institute of Automation, Chinese Academy of Sciences; School of Artificial Intelligence, University of Chinese Academy of Sciences)

Shibiao Xu (School of Artificial Intelligence, Beijing University of Posts and Telecommunications)

Weiliang Meng (Institute of Automation, Chinese Academy of Sciences; School of Artificial Intelligence, University of Chinese Academy of Sciences)

Jun Xiao (University of Chinese Academy of Sciences)

Qimin Peng (Aksofy (Beijing) Advanced Technology Co., Ltd)

Xiaopeng Zhang (Institute of Automation, Chinese Academy of Sciences; School of Artificial Intelligence, University of Chinese Academy of Sciences)

**GTLR: Graph-based Transformer with Language Reconstruction for Video Paragraph Grounding**

Xun Jiang (UESTC)

Xing Xu (University of Electronic Science and Technology of China)

Jingran Zhang (University of Electronic Science and Technology of China (UESTC))

Fumin Shen (UESTC)

Zuo Cao (MEITUAN)

Xunliang Cai (MEITUAN)

**Multi-Dimensional Model Compression of Vision Transformer**

Zejiang Hou (Princeton University)

Sun-Yuan Kung (Princeton University)

**Deep Category-aware Hashing for Object Retrieval in Multi-label Image**

Yun Zou (Huazhong University of Science and Technology)

Xiaoyan Tan (Huazhong University of Science and Technology)

Jingkuan Song (UESTC)

Ke Zhou (Huazhong University of Science and Technology)

Fuhao Zou (Huazhong University of Science and Technology)

**Targeted Anonymization: A Face Image Anonymization Method for Unauthorized Models**

Kangyi Ding (University of Electronic Science and Technology of China)  
Teng Hu (University of Electronic Science and Technology of China)  
Xiaolei Liu (University of Electronic Science and Technology of China)  
Weina Niu (University of Electronic Science and Technology of China)  
Yanping Wang (University of Electronic Science and Technology of China)  
Xiaosong Zhang (University of Electronic Science and Technology of China)

**Migrating Face Swap to Mobile Devices: A Lightweight Framework and A Supervised Training Solution**

Haiming Yu (iQIYI Inc)  
Hao Zhu (Nanjing University)  
Xiangju Lu (iQIYI, Inc.)  
Junhui Liu (iQIYI Inc)

**Face Inverse Rendering from Single Images in the Wild**

Meng Wang (Tianjin University)  
Wenjing Dai (Technical University of Denmark)  
Xiaojie Guo (Tianjin University)  
Jiawan Zhang (Tianjin University)

**Sample-Level and Class-Level Adaptive Training for Face Recognition**

Mengjiao Wang (Fujitsu)  
Rujie Liu (Fujitsu)  
Abe Narishige (Fujitsu)  
Tomoaki Matsunami (Fujitsu)  
Uchida Hidetsugu (Fujitsu)  
Lina Septiana (Fujitsu)

**RCNet: Recurrent Collaboration Network Guided by Facial Priors for Face Super-Resolution**

Jiaxu Leng (Chongqing University of Posts and Telecommunications)  
Ye Wang (Chongqing university of Posts and Telecommunications)

**G-Head: Gating Head for Multi-Task Learning in One-stage Object Detection**

He Jiang (Institute of Automation, Chinese Academy of Sciences)

Qingyi Gu (Institute of Automation, Chinese Academy of Sciences)

**Boundary-Guided Probability Hashing**

Wenjin Hu (Beijing University of Technology)

Yukun Chen (Beijing University of Technology)

Lifang Wu (Beijing University of Technology)

Ge Shi (Beijing University of Technology)

Meng Jian (Beijing University of Technology)

Sinuo Deng (Beijing University of Technology)

**Listen and Look: Multi-Modal Aggregation and Co-Attention Network for Video-Audio Retrieval**

Xiaoshuai Hao (Institute of information technology, Chinese Academy of Sciences)

Wanqian Zhang (Institute of Information Engineering, Chinese Academy of Sciences)

Dayan Wu (Institute of Information Engineering, Chinese Academy of Sciences)

Fei Zhu (Institute of Information Engineering, Chinese Academy of Sciences)

Bo Li (Institute of Information Engineering, Chinese Academy of Sciences)

**A Dataset and Method for Gait Recognition with Unmanned Aerial Vehicles**

Tao Ding (Sichuan University)

Qijun Zhao (Sichuan University)

Feng Liu (Sichuan University)

Hailun Zhang (Sichuan University)

Pengyu Peng (Sichuan University)

**Feature-Balanced Loss for Long-tailed Visual Recognition**

Mengke Li (Hong Kong Baptist University)

Yiu-ming Cheung (Hong Kong Baptist University)

Juyong Jiang (Hong Kong Baptist University)

Hui Ji (Hong Kong Baptist University)

**Vote-based Multi-level Context Attention Network for 3D Point Cloud Object Detection**

Shuhua Wang (University of Chinese Academy of Sciences)  
Ke Lu (University of Chinese Academy of Sciences)  
Jian Xue (University of Chinese Academy of Sciences)  
Liping Hou (University of Chinese Academy of Sciences)  
Lun Hengsheng (中国科学院大学)

**A Novel Grid-based Geometry Compression Framework for Spinning LiDAR Point Clouds**

Wei Zhang (Xidian University)  
Youguang Yu (Xidian University)  
FuZheng Yang (Xidian University)

**Reinforcement Learning Based Point-Cloud Acquisition and Recognition Using Exploration-Classification Reward Combination**

Kevin Riou (Nantes Université, Ecole Centrale Nantes, CNRS, LS2N, UMR 6004, F-44000 Nantes, France)  
Kevin Subrin (Nantes Université, IUT de Nantes, Centrale Nantes, CNRS, LS2N)  
Patrick Le Callet (Université de Nantes, France)

**Cross-Attention-Based Feature Extraction Network for 3D Point Cloud Registration**

Shiyi Guo (Institute of Automation, Chinese Academy of Sciences)  
Yujie Fu (Institute of Automation, Chinese Academy of Sciences)  
Zhengda Qian (Institute of Automation, Chinese Academy of Sciences)  
Zheng Rong (Institute of Automation, Chinese Academy of Sciences)  
Yihong Wu (Institute of Automation, Chinese Academy of Sciences)

**Directed Mix Contrast for Lidar Point Cloud Segmentation**

Yuheng Lu (Peking University)  
Fangping Chen (Peking University)  
Ziwei Zhang (Peking University)  
Fan Yang (Peking University)  
Xiaodong Xie (Peking University)

**Bacnet: Boundary-Anchor Complementary Network for Temporal Action Detection**

Zixuan Zhao (Shanghai Jiao Tong University)  
Dongqi Wang (Shanghai Jiao Tong University)  
Xu Zhao (Shanghai Jiao Tong University)

**Cross-Domain Action Recognition via Prototypical Graph Alignment**

Binbin Yang (Sun Yat-sen University)  
Junhao Zhong (Sun Yat-sen University)  
Pengxu Wei (Sun Yat-sen University)  
Dongyu Zhang (Sun Yat-sen University)  
Liang Lin (Sun Yat-sen University)

**Adaptive Recursive Circle Framework for Fine-Grained Action Recognition**

Hanxi Lin (Beijing Institute of Technology)  
Wentian Zhao (Beijing Institute of Technology)  
Xinxiao Wu (Beijing Institute of Technology)

**Hierarchical Graph Convolutional Skeleton Transformer for Action Recognition**

Ruwen Bai (Institute of Information Engineering, Chinese Academy of Sciences)  
Min Li (Institute of Information Engineering, Chinese Academy of Sciences)  
Bo Meng (School of Optics and Electronics, Beijing Institute of Technology)  
Fengfa Li (University of Chinese Academy of Sciences)  
Miao Jiang (Institute of Information Engineering, Chinese Academy of Sciences)  
Junxing Ren (Institute of Information Engineering, Chinese Academy of Sciences)  
Degang Sun (Institute of Information Engineering, Chinese Academy of Sciences)

**When Skeleton Meets Appearance: Adaptive Appearance Information Enhancement for Skeleton Based Action Recognition**

Suqin Wang (Chinese Academy of Sciences)  
Lu Zhou (CASIA)  
Yingying Chen (CASIA)  
Jiangtao Huo (Army Medical University, NCO School of PLA)  
Jinqiao Wang (Institute of Automation, Chinese Academy of Sciences)

**Speech Emotion Recognition Based on Discriminative Features Extraction**

Ke Liu (Northwest University)  
Jingzhao Hu (Northwest University)  
Yutao Liu (Northwest University)  
Jun Feng (Northwest University)

**Faststream: A Very Low Bit Rate Speech Codec Operates on LPCs**

Li Xiao (School of Computer Science, Wuhan University)  
Weiping Tu (Wuhan University)  
Jingyi Li (Wuhan University)  
Yajie Liu (School of Computer Science, Wuhan University)  
Chang Han (School of Computer Science, Wuhan University)

**An Experimental Comparison Between Low-resource Semi-Supervised and High-Resource Supervised Automatic Speech Recognition Models**

Ao-ran Gan (University of Science and Technology of China)  
Jie Zhang (University of Science and Technology of China)  
Ming-hui Wu (iFlytek Research)  
Xin Fang (iFlytek Research)  
Lirong Dai (University of Science and Technology of China)

**Fusing Acoustic and Text Emotional Features for Expressive Speech Synthesis**

Ying Feng (Wuhan University of Technology)  
Pengfie Duan (Wuhan University of Technology)  
Yunfei Zi (wuhan university of technology)  
Yaxiong Chen (Wuhan University of Technology)  
Shengwu Xiong (Wuhan University of Technology)

**Unsupervised Quantized Prosody Representation for Controllable Speech Synthesis**

Yutian Wang (Communication University of China)  
Yuankun Xie (Communication University of China)  
Kun Zhao (Communication University of China)  
Hui Wang (Communication University of China)  
Qin Zhang (Communication University of China)

11:00-12:00

## **Oral Multimodal Analysis II**

### **Joint Visual Perception and Linguistic Commonsense for Daily Events Causality Reasoning**

Bole Ma (Beihang University)

Chao Tong (Beihang University)

### **Adaptive Multi-Feature Extraction Graph Convolutional Networks for Multimodal Target Sentiment Analysis**

Luwei Xiao (East China Normal University)

Ejian Zhou (East China Normal University)

Xingjiao Wu (East China Normal University)

Shuwen Yang (East China Normal University)

Tianlong Ma (East China Normal University)

Liang He (East China Normal University)

### **Few-Shot Multi-Modal Sentiment Analysis with Prompt-based Vision-Aware Language Modeling**

Yang Yu (Soochow University)

Dong Zhang (Soochow University)

### **CAT-MNER: Multimodal Named Entity Recognition with Knowledge-Refined Cross-Modal Attention**

Xuwu Wang (Fudan University)

Jiabo Ye (East China Normal University)

Zhixu Li (Fudan University)

Junfeng Tian (Alibaba Group)

Yong Jiang (Alibaba Group)

Ming Yan (Alibaba Group)

Ji Zhang (Alibaba Group)

Yanghua Xiao (Fudan University)

### **Towards Robust Video Text Detection with Spatio-Temporal Attention Modeling and Text Cues Fusion**

Long Chen (Nanjing University)

Feng Su (Nanjing University)

**Connect to the Past: Graph-Based Latent Estimation for Blind Super-Resolution**

Chang Liu (NVIDIA)

Rui Zhang (NVIDIA)

Junjie Lai (NVIDIA)

**Searching Nested Attention Models for Blind Super-Resolution**

Guanqun Liu (Institute of Information Engineering, Chinese Academy of Sciences)

Xin Wang (Institute of Information Engineering, Chinese Academy of Sciences)

Lei Wang (Institute of Information Engineering, Chinese Academy of Sciences)

Daren Zha (Institute of Information Engineering, Chinese Academy of Science)

Lin Zhao (Institute of Information Engineering, Chinese Academy of Sciences)

Zhe Kong (Institute of Information Engineering, Chinese Academy of Sciences)

Peng Qi (Institute of Computing Technology, Chinese Academy of Sciences)

**A Noise-Aware Framework for Blind Image Super-Resolution**

Guanqun Liu (Institute of Information Engineering, Chinese Academy of Sciences)

Xin Wang (Institute of Information Engineering, Chinese Academy of Sciences)

Lei Wang (Institute of Information Engineering, Chinese Academy of Sciences)

Daren Zha (Institute of Information Engineering, Chinese Academy of Science)

Lin Zhao (Institute of Information Engineering, Chinese Academy of Sciences)

Zhe Kong (Institute of Information Engineering, Chinese Academy of Sciences)

Peng Qi (Institute of Computing Technology, Chinese Academy of Sciences)

**PanFormer: A Transformer Based Model for Pan-Sharpening**

Huanyu Zhou (State Key Laboratory of Virtual Reality Technology and System, Beihang University, Beijing 100191, China)

Qingjie Liu (State Key Laboratory of Virtual Reality Technology and System, Beihang University, Beijing 100191, China)

Yunhong Wang (State Key Laboratory of Virtual Reality Technology and System, Beihang University, Beijing 100191, China)

**Self-Guided Video Super-Resolution Based on A Fast Deformable CONVGRU Model**

Jingming Chen (Shenzhen University)

Yuan Yuan (Shenzhen Institute of Artificial Intelligence and Robotics for Intelligence)

Jiawei Zhang (SenseTime Research)

Jianping Luo (Shenzhen University)



**Joint Learning of Object Graph and Relation Graph for Visual Question Answering**

Hao Li (Peking University)

Xu Li (Baidu Research)

Belhal Karimi (Ecole Polytechnique & INRIA)

Jie Chen (Peking University)

Mingming Sun (Baidu Research)

**Cross-Modal Attention Networks with Modality Disentanglement for Scene-Text VQA**

Zejin Fang (Wuhan University of Technology)

Lin Li (Wuhan University of Technology)

Zhongwei Xie (Wuhan University of Technology)

Jingling Yuan (Wuhan University of Technology)

**Question-Driven Graph Fusion Network for Visual Question Answering**

Yuxi Qian (Beijing University of Posts and Telecommunications)

Yuncong Hu (Beijing University of Posts and Telecommunications)

Ruonan Wang (Beijing University of Posts and Telecommunications)

Fangxiang Feng (Beijing University of Posts and Telecommunications)

Xiaojie Wang (Beijing University of Posts and Telecommunications)

**Towards Escaping from Language Bias and OCR Error: Semantics-Centered Text Visual Question Answering**

Chengyang Fang (Institute of Information Engineering, Chinese Academy of Sciences; School of Cyber Security, University of Chinese Academy of Sciences)

Gangyan Zeng (School of Information and Communication Engineering, Communication University of China)

Yu Zhou (Institute of Information Engineering, CAS; University of Chinese Academy of Sciences)

Daiqing Wu (Institute of Information Engineering, CAS); Can Ma (Institute of Information Engineering, CAS)

Dayong Hu (Heilongjiang Network Space Research Center, Harbin 150010, China)

Weiping Wang (Institute of Information Engineering, CAS, China)

**FHGN: Frame-level Heterogeneous Graph Networks for Video Question Answering**

Jinsheng Qi (Beijing University of Posts and Telecommunications)

Fangtao Li (Beijing University of Posts and Telecommunications)

Ting Bai (Beijing University of Posts and Telecommunications)

Chenyu Cao (Beijing University of Posts and Telecommunications)

Wei Song (Beijing University of Posts and Telecommunications)

Yibo Hu (Beijing University of Posts and Telecommunications)

Bin Wu (Beijing University of Posts and Telecommunications)

14:30-15:30

**SS on Deep Learning Based Object Detection and Tracking for Autonomous Driving: Network Model Design, Learning, and Compression**

**On-Road Pedestrian Tracking Across Multiple Moving Cameras**

Yanting Zhang (Donghua University)  
Shuanghong Wang (Donghua University)  
Qingxiang Wang (Donghua University)  
Qiubo Huang (Donghua University)  
Cairong Yan (Donghua University)

**LG-LSTM: Modeling LSTM-based Interactions for Multi-Agent Trajectory Prediction**

Hanbing Sun (Tsinghua University)  
Runfa Chen (Tsinghua University)  
Tianyu Liu (Tsinghua University)  
Haiwen Wang (Tsinghua University)  
Fuchun Sun (Tsinghua University)

**Learning to Mitigate Extreme Distribution Bias for Few-shot Object Detection**

Faming Wu (Sun Yat-sen University)  
Yanxu Hu (Sun Yat-sen University)  
Jinpeng Wang (National University of Singapore)  
Andy J Ma (Sun Yat-sen University)

**Model Compression Via Structural Pruning and Feature Distillation for Accurate Multi-Spectral Object Detection on Edge-Devices**

Egor Poliakov (National Yang Ming Chiao Tung University)  
Van-Tin Luu (Ho Chi Minh University of Technology and Education)  
Vu-Hoang Tran (Ho Chi Minh University of Technology and Education)  
Ching-Chun Huang (National Yang Ming Chiao Tung University)

**A General Data Augmentation Strategy for Siamese Object Tracking**

Chaolin Pan (Nanchang Hangkong University)  
Jun Chu (Nanchang Hangkong University)  
Kai Huang (Nanchang Hangkong University)  
Lu Leng (Nanchang Hangkong University)  
Jun Miao (Nanchang Hangkong University)

**Graph-Based Structural Attributes for Vehicle Re-Identification**

Rongbo Zhang (Wuhan University of Technology)  
Xian Zhong (Wuhan University of Technology)  
Xiao Wang (Wuhan University of Science and Technology)  
Wenxin Huang (Hubei University)  
Wenxuan Liu (Wuhan University of Technology)  
Shilei Zhao (Wuhan University of Technology)

**Visual-Aware Attention Dual-Stream Decoder for Video Captioning**

Zhixin Sun (Wuhan University of Technology)  
Shuqin Chen (Wuhan University of Technology)  
Luo Zhong (Wuhan University of Technology, China)

**Few-Shot Unsupervised Domain Adaptation via Meta Learning**

Wanqi Yang (Nanjing Normal University)  
Chengmei Yang (Nanjing Normal University)  
Shengqi Huang (Nanjing Normal University)  
Lei Wang (University of Wollongong, Australia)  
Ming Yang (Nanjing Normal University)

**ECL: Exclusive Curriculum Learning for Video Super-Resolution**

Sicheng Hu (Wuhan University)  
Zhongyuan Wang (Wuhan University)  
Peng Yi (Wuhan University)  
Zheng He (Wuhan University)  
Jinsheng Xiao (Wuhan University)  
Jing Xiao (Wuhan University)

**Domain Generalization via Adversarial Learned Novel Domains**

Zhe Yu (University of Tsukuba / RIKEN AIP)  
Kazuto Fukuchi (University of Tsukuba / RIKEN AIP)  
Youhei Akimoto (University of Tsukuba / RIKEN AIP)  
Jun Sakuma (University of Tsukuba / RIKEN AIP)

**Improving Image Paragraph Captioning with Dual Relations**

Yun Liu (Beijing University of Posts and Telecommunications)  
Yihui Shi (Beijing University of Posts and Telecommunications)  
Fangxiang Feng (Beijing University of Posts and Telecommunications)  
Ruifan Li (Beijing University of Posts and Telecommunications)  
Zhanyu Ma (Beijing University of Posts and Telecommunications)  
Xiaojie Wang (Beijing University of Posts and Telecommunications)

**GR-GAN: Gradual Refinement Text-to-Image Generation**

Bo Yang (Beijing University of Posts and Telecommunications)  
Fangxiang Feng (Beijing University of Posts and Telecommunications)  
Xiaojie Wang (Beijing University of Posts and Telecommunications)

**STDNet: Spatio-Temporal Decomposed Network for Video Grounding**

Yuanwu Xu (Fudan University)  
Yuejie Zhang (Fudan University)  
Rui Feng (Fudan University)  
Rui-Wei Zhao (Fudan University)  
Tao Zhang (Shanghai University of Finance and Economics)  
Xuequan Lu (Deakin University)  
Shang Gao (Deakin University)

**Semantic-Driven Saliency-Context Separation for Video Captioning**

Heming Jing (Fudan University)  
Yuejie Zhang (Fudan University)  
Rui Feng (Fudan University)  
Rui-Wei Zhao (Fudan University)  
Tao Zhang (Shanghai University of Finance and Economics)  
Xuequan Lu (Deakin University)  
Shang Gao (Deakin University)

**Semi-Supervised Generative Learning with Extended Distribution Matching for Class-Conditional Image Synthesis**

Xiaoyang Huo (South China University of Technology)  
Guangchang Deng (South China University of Technology)  
Si Wu (South China University of Technology)  
Zhiwen Yu (South China University of Technology)  
Peng Li (Zhile Company Limited)

14:30-15:30

## **Oral Semantic Segmentation**

### **Context Correlation Aware Network for Cardiac Segmentation**

Junchao Fan (Chongqing University of Posts and Telecommunications)

Jiawei Pei (Chongqing University of Posts and Telecommunications)

Xiuli Bi (Chongqing University of Posts and Telecommunications)

Bin Xiao (Chongqing University of Posts and Telecommunications)

Pietro Liò (University of Cambridge)

### **Domain Adaptive Semantic Segmentation via Regional Contrastive Consistency Regularization**

Qianyu Zhou (Shanghai Jiao Tong University)

Chuyun Zhuang (Shanghai Jiao Tong University)

Ran Yi (Shanghai Jiao Tong University)

Xuequan Lu (Deakin University)

Lizhuang Ma (Shanghai Jiao Tong University)

### **Self-Supervised Video Object Segmentation by Motion-Aware Mask Propagation**

Bo Miao (University of Western Australia)

Mohammed Bennamoun (University of Western Australia)

Yongsheng Gao (Griffith University)

Ajmal Mian (University of Western Australia)

### **Multi-Scale Transformer with Explicit Boundary Constraint for Semantic Segmentation**

Baotong Mi (Renmin University of China)

Xun Liang (Renmin University of China)

### **Change Detection Converter: Using Semantic Segmentation Models to Tackle Change Detection Task**

Ding Chen (BUPT)

Liqin Li (BUPT)

Bowei Ye (BUPT)

Zhicheng Zhao (BUPT)

14:30-15:30

## **Oral Unsupervised Learning**

### **Just Noticeable Learning for Unsupervised Anomaly Localization and Detection**

Ying Zhao (Ricoh Software Research Center (Beijing) Co.,Ltd.)

### **UNITS: Unsupervised Intermediate Training Stage for Scene Text Detection**

Youhui Guo (Institute of Information Engineering, Chinese Academy of Sciences)

Yu Zhou (Institute of Information Engineering, CAS; University of Chinese Academy of Sciences)

Xugong Qin (Institute of Information Engineering, Chinese Academy of Sciences)

Enze Xie (THU)

Weiping Wang (Institute of Information Engineering, CAS, China)

### **Camera-Aware Style Separation and Contrastive Learning for Unsupervised Person Re-Identification**

Xue Li (Beijing Jiaotong University)

Tengfei Liang (Beijing Jiaotong University)

Yi Jin (Beijing JiaoTong University)

Tao Wang (Beijing Jiaotong University)

Yidong Li (Beijing Jiaotong Univeristy, China)

### **Learning Multiple Granularity Features for Unsupervised Person Re-identification**

Shuai Wang (Beihang University)

Yufeng Cui (Beihang University)

Yimei Kang (Beihang University)

### **Improving GAN-Generated Image Detection Generalization Using Unsupervised Domain Adaptation**

Mingxu Zhang (Sichuan University)

Hongxia Wang (Sichuan University)

Peisong He (Sichuan University)

Asad Malik (Southwest Jiaotong University)

Hanqing Liu (Sichuan University)

**Skeletal Twins: Unsupervised Skeleton-Based Action Representation Learning**

Haoyuan Zhang (Tianjin University)

Yonghong Hou (Tianjin University)

Wenjing Zhang (Tianjin University)

**FRATCF: Feature-Residue Real-Time UAV Tracking Based on Automatic Spatio-Temporal Regularization Correlation Filter**

Yuan Yuan (Anhui University)

Yanming Chen (Anhui University)

Yueqing Jing (Anhui University)

Peng Zhou (Anhui University)

Yiwen Zhang (Anhui University)

**GLTA-GCN: Global-Local Temporal Attention Graph Convolutional Network for Unsupervised Skeleton-based Action Recognition**

Haoyue Qiu (Fudan University)

Yuan Wu (Fudan University)

Mengmeng Duan (Fudan University)

Cheng Jin (Fudan University)

**Turning to a Teacher for Timestamp Supervised Temporal Action Segmentation**

Yang Zhao (Nanjing University of Science and Technology)

Yan Song (Nanjing University of Science and Technology)

**DTE-Net: Dual Temporal Excitation Network for Video Violence Recognition**

Wenwei Yan (South China University of Technology)

Haoxiang Wang (South China University of Technology)

Jun Xuan (South China University of Technology)

Qing Liu (South China University of Technology)

Yuxuan Tang (South China University of Technology)

Aihua Mao (South China University of Technology)

**A2SC: Adversarial Attack on Subspace Clustering**

YiKun Xu (State Key Laboratory of Information Security (SKLOIS), Institute of Information Engineering, CAS)

Xingxing Wei (Beihang University)

**Invertible Image Dataset Protection**

Kejiang Chen (University of Science and Technology of China)

Xianhan Zeng (Fudan University)

Qichao Ying (Fudan University)

Sheng Li (Fudan University)

Zhenxing Qian (Fudan University)

Xinpeng Zhang (Fudan University)

**Towards Black-Box Adversarial Attacks on Interpretable Deep Learning Systems**

Yike Zhan (Wuhan University)

Baolin Zheng (Wuhan university)

Qian Wang (Wuhan University)

Ningping Mou (Wuhan University)

Binqing Guo (Wuhan University)

Qi Li (Tsinghua University)

Chao Shen (Xi'an Jiaotong University)

Cong Wang (City University of Hong Kong)

**Attention Based Adversarial Attacks with Low Perturbations**

Qingfu Huang (Nanjing University of Science And Technology)

Zhichao Lian (Nanjing University of Science and Technology)

Qianmu Li (Nanjing University of Science and Technology)

**Attention Distraction: Watermark Removal Through Continual Learning with Selective Forgetting**

Qi Zhong (Deakin University)

Leo Yu Zhang (Deakin University)

Shengshan Hu (Huazhong University of Science and Technology)

Longxiang Gao (Deakin University)

Jun Zhang (Swinburne University of Technology)

Yong Xiang (Deakin University)



**MTP: Multi-Task Pruning for Efficient Semantic Segmentation Networks**

Xinghao Chen (Huawei Noah's Ark Lab)

Yiman Zhang (Huawei Noah's Ark Lab)

Yunhe Wang (Huawei Technologies)

**MaskGroup: Hierarchical Point Grouping and Masking for 3D Instance Segmentation**

Min Zhong (Peking University)

Xinghao Chen (Huawei Noah's Ark Lab)

Xiaokang Chen (Peking University)

Gang Zeng (Peking University)

Yunhe Wang (Huawei Technologies)

**FBNet: Feature Balance Network for Urban-Scene Segmentation**

Lei Gan (BeiHang)

Huabin Huang (Megvii)

Banghui Li (Momenta)

Ye Yuan (Megvii)

**Context and Boundary Guided Multi-Scale Feature Fusion Network for Semantic Segmentation**

Baotong Mi (Renmin University of China)

Xun Liang (Renmin University of China)

**CENet: Toward Concise and Efficient LiDAR Semantic Segmentation for Autonomous Driving**

HuiXian Cheng (Southwest University)

Xian-Feng Han (Southwest University)

Guoqiang Xiao (Southwest University)

**Perceptual-Aware and Restorable Real-time Image Downscaling**

Yuzhen Niu (Fuzhou University)  
Luwei Zheng (Fuzhou University)  
Jiaqi Lin (Fuzhou University)  
Jianbin Wu (Fuzhou University)  
Wenxi Liu (Fuzhou University)

**Implicit Neural Representation Learning for Hyperspectral Image Super-Resolution**

Kaiwei Zhang (Shanghai Jiao Tong University)  
Dandan Zhu (Shanghai Jiao Tong University)  
Xionghuo Min (Shanghai Jiao Tong University)  
Guangtao Zhai (Shanghai Jiao Tong University)

**Video Super-Resolution with Spatial-Temporal Transformer Encoder**

Ruiqi Tan (Shenzhen University)  
Yuan Yuan (Shenzhen Institute of Artificial Intelligence and Robotics for Intelligence)  
Rui Huang (The Chinese University of Hong Kong, Shenzhen)  
Jianping Luo (Shenzhen University)

**Invertible Single Image Rescaling Via Steganography**

Mengxi China Guo (Bytedance)  
Shijie Zhao (Bytedance)

**Training Super-Resolution Network with Difficulty-Based Adaptive Sampling**

Jiajun Li (Hefei University of Technology)  
Zhong-Qiu Zhao (Hefei University of Technology)

**Quality-Oriented Feature Regression for Robust Image Similarity Metric**

Jingyu Guo (Tsinghua University)  
Qiqi Bao (Tsinghua university)  
Rui Zhu (City, University of London)  
Wenming Yang (Tsinghua University)  
Qingmin Liao (Tsinghua Univeristy)

**Deep Blind Image Quality Assessment Using Global Dual-Order Statistics**

Zihan Zhou (South China University of Technology)  
Yong Xu (South China University of Technology)  
Yuhui Quan (South China University of Technology)  
Ruotao Xu (South China University of Technology)

**Content Adaptive Compressed Screen Content Video Quality Enhancement**

Yu Liu (University of Electronic Science and Technology of China)  
Mao Ye (University of Electronic Science and Technology of China)  
Yanbo Gao (Shandong University)  
Shuai Li (Shandong University)  
Yu Zhao (University of Electronic Science and Technology of China)  
Xue Li (University of Queensland)

**Learning A Blind Quality Evaluator for UGC Videos in Perceptually Relevant Domains**

Bowen Li (Wuhan University)  
Weixia Zhang (Shanghai Jiao Tong University)  
Meng Tian (Wuhan University)  
Jiu Jiang (Wuhan University)  
Guangtao Zhai (Shanghai Jiao Tong University)  
Xianpei Wang (Wuhan University)

**CycleQA: Blind Image Quality Assessment via Cycle-Consistent Adversarial Networks**

Peiyun Zhang (Nanjing University of Information Science & Technology)  
Xiao Shao (Nanjing University of Information Science & Technology)  
Zihan Li (Nanjing University of Information Science and Technology)

**Continual Contrastive Learning for Image Classification**

ZhiWei Lin (Peking University)  
Yongtao Wang (Peking University)  
Hongxiang Lin (Dalian University of Technology)

**Localizing Semantic Patches for Accelerating Image Classification**

Chuanguang Yang (Institute of Computing Technology, Chinese Academy of Sciences)  
Zhulin An (Institute of Computing Technology, Chinese Academy of Sciences)  
Yongjun Xu (Institute of Computing Technology, Chinese Academy of Sciences)

**Channel-Wise and Spatial Feature Recalibration Network for Nuclear Cataract Classification**

Xiaoqing Zhang (Southern University of Science and Technology)  
Gelei Xu (Southern University of Science and Technology)  
Junyong Shen (Southern University of Science and Technology)  
Zunjie Xiao (SUSTech)  
Qiuyang Yan (Southern University of Science and Technology)  
Jin Yuan (Zhongshan Ophthalmic Center, Sun Yat-sen University)  
Risa Higashita (Tomey Corporation)  
Jiang Liu (Southern University of Science and Technology)

**Uncertainty-Based Network for Few-Shot Image Classification**

Minglei Yuan (Nanjing University)  
Qian Xu (Nanjing University)  
Chunhao Cai (SmartMore)  
Yin-Dong Zheng (Nanjing University)  
Tao Wang (Nanjing University)  
Tong Lu (Nanjing University)  
Wenbin Li (Nanjing University)

**Frequency-Dividing Downsampling Module of The Lifting Scheme for Image Classification**

Zhichao Wang (Wuhan University)  
Zishan Shi (Wuhan University)  
Dingwen Wang (Wuhan University)  
Chu He (Wuhan University)

### **Group Correspondence: A Statistical Perspective for Incomplete Multi-View Clustering Augmentation**

Tianyou Liang (Guangdong University of Technology)

Min Meng (Guangdong University of Technology)

Mengcheng Lan (Shenzhen Research Institute of Big Data, the Chinese University of Hong Kong (Shenzhen))

Jun Yu (HDU)

Jigang Wu (Guangdong University of Technology)

### **HDNet: A Hierarchically Decoupled Network for Crowd Counting**

Chenliang Gu (Tencent)

Changan Wang (Tencent)

Bin-Bin Gao (Tencent)

Jun Liu (Tencent)

Tianliang Zhang (Tencent)

### **Attention Interactive Graph Convolutional Network for Skeleton-based Human Interaction Recognition**

Feng Gao (Beijing University of Posts and Telecommunications)

Hailun Xia (Beijing University of Posts and Telecommunications)

Zhihao Tang (Beijing University of Posts and Telecommunications)

### **Causal Video Summarizer for Video Exploration**

Jia-Hong Huang (University of Amsterdam)

Chao-Han Huck Yang (Georgia Institute of Technology)

Pin-Yu Chen (IBM Research)

Andrew Brown (University of Amsterdam)

Marcel Worring (University of Amsterdam)

### **Context Gating with Multi-level Ranking Learning for Visual Dialog**

Tangming Chen (The University of Electronic Science and Technology of China)

Lianli Gao (The University of Electronic Science and Technology of China)

Xiangpeng Li (The University of Electronic Science and Technology of China)

Lei Zhao (The University of Electronic Science and Technology of China)

Jingkuan Song (The University of Electronic Science and Technology of China)

### **Region-Interactive Proposal Network and Class-interactive Feature Learning for Few-Shot Object Detection**

Yanxu Hu (Sun Yat-sen University)

Faming Wu (Sun Yat-sen University)

Jinpeng Wang (National University of Singapore)

Andy J Ma (Sun Yat-sen University)

### **Transferring Low-Frequency Features for Domain Adaptation**

Zhaowen Li (National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences)

Xu Zhao (Chinese Academy of Sciences)

Chaoyang Zhao (National Laboratory of Pattern Recognition, CASIA)

Ming Tang (Institute of Automation, Chinese Academy of Sciences)

Jinqiao Wang (Institute of Automation, Chinese Academy of Sciences)

### **Unsupervise Image-to-Image Translation with Patch Pyramid Dual Contrastive Learning for Cross Domain Detection**

Yunlong Meng (Shanghai Em-Data Technology Co., Ltd.)  
Lifan Zhao (Shanghai Em-Data Technology Co., Ltd.)  
Lin Xu (Shanghai Em-Data Technology Co., Ltd.)

### **CMS-LSTM: Context Embedding and Multi-Scale Spatiotemporal Expression LSTM for Predictive Learning**

Zenghao Chai (Tsinghua University)  
Zhengzhuo Xu (Tsinghua University)  
Yunpeng Bai (Tsinghua University)  
Zhihui Lin (Tsinghua University)  
Chun Yuan (Tsinghua university)

### **C<sup>3</sup>Net: A Cross-Channel Cross-Scale and Cross-Stage Network for Single Image Super-Resolution**

Wang Wei (GDUT)  
Yu Luo (Guangdong University of Technology)  
Jie Ling (Guangdong University of Technology)  
Youyi Song (The Hong Kong Polytechnic University)  
Teng Zhou (Shantou University)

### **Self-Mimic Mutual-Distillation for Cross-Modality Person Re-Identification**

Demao Zhang (Xiamen University)  
Ming Hong (Xiamen University)  
Zhou Ye (CLS Fintech)  
Zheng Wang (Wuhan University)  
Zhizhong Zhang (East China Normal University)  
Xiaotong Luo (Xiamen University)  
Yanyun Qu (XMU)  
Yuan Xie (East China Normal University)

### **LPGN: Language-Guided Proposal Generation Network for Referring Expression Comprehension**

Guoqing Wang (Hunan University)  
Chao Yang (Hunan University)  
Su Feng (Hunan University)  
Bin Jiang (Hunan University)

### **Learning to Generate Scene Graph from Head to Tail**

Chaofan Zheng (University of Electronic Science and Technology of China)  
Xinyu Lyu (University of Electronic Science and Technology of China)  
Yuyu Guo (University of Electronic Science and Technology of China)  
Pengpeng Zeng (University of Electronic Science and Technology of China)  
Jingquan Song (University of Electronic Science and Technology of China)  
Lianli Gao (The University of Electronic Science and Technology of China)

### **Dynamic Feature Pyramid Networks for Detection**

Kai Zhang (Hikvision Research Institute)  
Zheyang Li (Hikvision Research Institute)  
Haoji Hu (Zhejiang University, China)  
Bin Li (University of Science and Technology of China)  
Wenming Tan (Hikvision Research Institute)  
Haixian Lu (Hikvision Research Institute)  
Jun Xiao (Zhejiang University)  
Ye Ren (Hikvision Research Institute)  
Shiliang Pu (Hikvision Research Institute)

### **Generative Steganographic Flow**

Ping Wei (Fudan University)  
Ge Luo (Fudan University)  
Qi Song (Fudan University)  
Xinpeng Zhang (Fudan University)  
Zhenxing Qian (Fudan University)  
Sheng Li (Fudan University)

### **Discovering Implicit Classes Achieves Open Set Domain Adaptation**

Jingyu Zhuang (Sun Yat-sen University)  
Ziliang Chen (Sun Yat-sen University)  
Pengxu Wei (Sun Yat-sen University)  
Guanbin Li (Sun Yat-sen University)  
Liang Lin (Sun Yat-sen University)

### **Meta Descent Learning for Class Imbalanced Age Estimation**

Weiwei Cai (Ningxia University)  
Xin Dong (Ningxia University)  
Hao Liu (Ningxia University)

### **Cascade Vertical Federated Learning**

Wensheng Xia (Peking University)  
Ying Li (Peking University)  
Lan Zhang (Michigan Technological University)  
Zhonghai Wu (Peking University)  
Xiaoyong Yuan (Michigan Technological University)

### **Pattern Matters: Hierarchical-Correlated Strip Convolutional Network for Scene Text Recognition**

Chang Liu (NVIDIA)  
Junjie Lai (NVIDIA)

### **Synthesizing Audio and Video Bitrate Selections via Learning from Actual Requirements**

Weihe Li (The University of Edinburgh)  
Jiawei Huang (Central South University)  
Yu Liang (The University of Leeds)  
Jingling Liu (Central South University)  
Feng Gao (Central South University)

### **STAR-GNN: Spatial-Temporal Video Representation for Content-Based Retrieval**

Guoping Zhao (Renmin University of China)  
Bingqing Zhang (Renmin University of China)  
Mingyu Zhang (Renmin University of China)  
Yaxian Li (Renmin University of China)  
Jiajun Liu (CSIRO)  
Ji-Rong Wen (Renmin University of China)

### **Towards Proper Contrastive Self-Supervised Learning Strategies for Music Audio Representation**

Jeong Choi (NAVER)  
Seongwon Jang (NCSOFT)  
Hyunsouk Cho (Ajou University)  
Sehee Chung (NCSOFT)

### **Triple Disentangling Network for Unsupervised Domain Adaptation**

Zhuanghui Wu (Guangdong University of Technology)  
Tianyou Liang (Guangdong University of Technology)  
Min Meng (Guangdong University of Technology)  
Jigang Liu (Ping An Life Insurance Of China)  
Jun Yu (HDU)  
Jigang Wu (Guangdong University of Technology)

### **Propaganda Techniques Detection in Low-Resource Memes with Multi-Modal Prompt Tuning**

Hanqian Wu (Southeast University)  
Xinwei Li (Southeast university)  
Lu Li (Southeast University)  
Qipeng Wang (Southeast University)

### **Psychology Inspired Model for Hierarchical Image Aesthetic Attribute Prediction**

Leida Li (Xidian University)  
Jiachen Duan (Xidian University)  
Yuzhe Yang (OPPO Research Institute)  
Liwu Xu (OPPO Research Institute)  
Yaqian Li (OPPO Research Institute)  
Yandong Guo (OPPO Research Institute)

### **Local Spectral for Multiresolution Community Search in Attributed Graph**

Qingqing Li (Northwest Normal University)  
Huifang Ma (Northwest Normal University)  
Zhixin Li (Guangxi Normal University)  
Liang Chang (Guilin University of Electronic Technology)

### **HairGAN: Spatial-Aware Palette GAN for Hair Color Transfer**

Yifan Xie (Sun Yat-sen University)  
Yinjia Huang (New York University)  
Ricong Huang (Sun Yat-sen University)  
Zhengtao Wu (Sun Yat-sen University)  
Mingzhi Mao (Sun Yat-sen University)  
Guanbin Li (Sun Yat-sen University)

### **AugRmixAT: A Data Processing and Training Method for Improving Multiple Robustness and Generalization Performance**

Xiaoliang Liu (Nanjing University)  
Furao Shen (School of Artificial Intelligence, Nanjing University)  
Jian Zhao (School of Electronic Science and Engineering, Nanjing University)  
Changhai Nie (Nanjing University)

### **Efficient Algorithm and Hardware Architecture for Rate Estimation in Mode Decision of AVS3**

Yunyao Yan (Peking University)  
Guoqing Xiang (Peking university)  
Xiaodong Xie (Peking University)  
Huizhu Jia (Peking University)  
Yuan Li (Peking University)  
Peng Zhang (Peking University)  
Jie Chen (Peking University)

### **PSSTRNET: Progressive Segmentation-Based Scene Text Removal Network**

Guangtao Lyu (Wuhan University of Technology)  
Anna Zhu (Wuhan University of Technology)



### **Modality-Specific Multimodal Global Enhanced Network for Text-Based Visual Question Answering**

Zhi Yang (South China University of Technology)  
Jun Xuan (South China University of Technology)  
Qing Liu (South China University of Technology)  
Aihua Mao (South China University of Technology)

### **Projective Transformation Based Virtual Reference Frame Generation Scheme for Video Coding in Moving Camera**

Zheng Fang (Fuzhou University)  
Zhifeng Chen (Fuzhou University)  
Mingkui Zheng (Fuzhou University)  
Jingjing Yang (Fuzhou University)

### **Mel-Spectrogram Image-Based End-To-End Audio Deepfake Detection Under Channel-Mismatched Conditions**

Abderrahim Fathan (Computer Research Institute of Montreal (CRIM), Montreal, Quebec, Canada)  
Jahangir Alam (Computer Research Institute of Montreal (CRIM), Montreal (Quebec) Canada)  
Woo Hyun Kang (Computer Research Institute of Montreal)

### **TCA-VAD: Temporal Context Alignment Network for Weakly Supervised Video Anomaly Detection**

Shenghao Yu (Ningbo University)  
Chong Wang (Ningbo University)  
Lehong Xiang (Loctek Ergonomic Technology Corporation)  
Jiafei Wu (SenseTime Research)

### **GNC: Geometry Normal Consistency Loss For 3D Face Reconstruction and Dense Alignment**

Xing Zheng (Ningxia University)  
Yongrong Cao (Ningxia University)  
Lei Li (Tongji University)  
Zhiyuan Zhou (Ningxia University)  
Meining Jia (NingXia University)  
Suping Wu (Ningxia University)

### **Multi-Head Attention Fusion Network for Visual Question Answering**

Haiyang Zhang (Beijing University of Posts and Telecommunications)  
Ruoyu Li (Beijing University of Posts and Telecommunications)  
Liang Liu (Beijing University of Posts and Telecommunications)

**Detic-Track: Robust Detection and Tracking of Objects in Video**

Hannes Fassold (Joanneum Research)

**Deep Point Cloud Normal Estimation via Triplet Learning (Demonstration)**

Weijia Wang (Deakin University)

Xuequan Lu (Deakin University)

Dasith T de Silva Edirimuni (Deakin University)

Xiao Liu (School of Information Technology, Deakin University)

Antonio Robles-Kelly (Deakin University)

**Accelerating Brain Research Using Explainable Artificial Intelligence**

Jing-Lun Chou (National Yang Ming Chiao Tung University)

Ya Lin Huang (National Yang Ming Chiao Tung University)

Chia Ying Hsieh (National Yang Ming Chiao Tung University)

Huang Jian-Xue (National Yang Ming Chiao Tung University)

Chun-Shu Wei (National Yang Ming Chiao Tung University)

**PerSong: Multi-modality Driven Music Recommendation System**

Haonan Cheng (Communication University of China)

XiaoYing Huang (Communication University of China)

Ruyu Zhang (Communication University of China)

Long Ye (Communication University of China)

**DeMuSA: Demo for Multimodal Sentiment Analysis**

Soyeon Hong (Ajou University)

Jeonghoon Kim (Ajou University)

Donghoon Lee (Ajou University)

Hyunsouk Cho (Ajou University)

**Conditional Sentence Rephrasing Without Parallel Training Corpus**

Yen-Ting Lee (National Taiwan University)

Cheng-Te Li (National Cheng Kung University)

Shou-De Lin (National Taiwan University)

**Kinship Face Synthesis Evaluation Website with Gamified Mechanism**

Hsiu-Chieh Lee (National Taiwan University)

Che-Hsien Lin (Academia Sinica)

Li-Chen Cheng (National Taiwan University)

Shu-Chuan Hsu (National Taiwan University)

Jun-Cheng Chen (Academia Sinica)

Chih-Yu Wang (Academia Sinica)

**A Visually-Aware Food Analysis System for Diet Management**

Hang Wu (Shandong University)

Xi Chen (Shandong University)

Xuelong Li (Shandong University)

Haokai Ma (Shandong University)

Zheng Yuze (Shandong University)

Xiangxian Li (Shandong University)

Xiangxu Meng (Shandong University)

Lei Meng (Shandong University)

### **PressyCube: An Embeddable Pressure Sensor with Softy Prop for Limb Rehabilitation in Immersive Virtual Reality**

Chain Yi Chu (National Taipei University of Technology)  
Ho Yin Ng (National Taipei University of Technology)  
Chia Hui Lin (National Taipei University of Technology)  
Ping Hsuan Han (National Taiwan University)

### **Exploring Multisensory Feedback for Virtual Reality Relaxation**

Jing-Yuan Huang (National Taiwan University)  
Grace Theodore (National Taiwan University)  
You-Shin Tsai (National Taiwan University)  
Chin Han Jerry Goh (Ken Ichi Machine Co., Ltd.)  
Mu-Hang Lin (National Taiwan University)  
Kuan-Wei Tseng (National Taiwan University)  
Yi-Ping Hung (National Taiwan University)

### **Decentralized Federated Learning with Enhanced Privacy Preservation**

Sheng-Po Tseng (National Tsing Hua University)  
Jan-Yue Lin (National Tsing Hua University)  
Wei-Chien Cheng (National Tsing Hua University)  
Lo-Yao Yeh (National Central University)  
Chih-Ya Shen (National Tsing Hua University)

### **SmileVerse: A VR Experience**

Yi-Ping Hung (National Taiwan University)  
Chin Han Jerry Goh (Ken Ichi Machine Co., Ltd.)  
Yuan-An Chan (National Taiwan University)  
Hsiao-Yuan Chin (National Taiwan University)  
You-Shin Tsai (National Taiwan University)  
Chien-Hsin Ju (National Taiwan University)

## Technical Program: Thursday, July 21, 2022

10:00-11:00

### Oral Semantic Segmentation II

#### **Cross U-net: Reconstructing Cardiac MR Image for Segmentation**

Hong Zheng (College of Computer Science, Sichuan Normal University)

Lili Wang (Department of Cardiology, West China Hospital, Sichuan University)

Yucheng Chen (West China Hospital, Sichuan University)

Xiaoning Li (College of Computer Science, Sichuan Normal University)

#### **TC-Net: Transformer-Convolutional Networks for Road Segmentation**

Zhenyu Wu (Beijing University of Posts and Telecommunications)

Chaohui Song (Beijing University of Posts and Telecommunications)

Haibin Yan (Beijing University of Posts and Telecommunications)

#### **TransCoop: Cooperation of Transformers and CNNs for Camouflaged Object Segmentation**

Fucai Wu (Xiangtan University)

Xuanya Li (Baidu)

Yuan Zhang (Xiangtan University)

Kai Hu (Xiangtan University)

#### **Synthetic-to-Real Generalization for Semantic Segmentation**

Xinhui Li (Tianjin University)

Xiaojie Guo (Tianjin University)

Liang Li (Tianjin University)

#### **Boosting Video Object Segmentation Based on Scale Inconsistency**

Hengyi Wang (Queen Mary University of London)

Changjae Oh (Queen Mary University of London)

**"Zero-Shot" Point Cloud Upsampling**

Kaiyue Zhou (Wayne State University)  
Ming Dong (Wayne State University)  
Suzan Arslanturk (Wayne State University)

**Deep Geometry Post-Processing for Decompressed Point Clouds**

Xiaoqing Fan (Shenzhen Graduate School, Peking University)  
Ge Li (SECE, Shenzhen Graduate School, Peking University)  
Dingquan Li (Peng Cheng Laboratory)  
Yurui Ren (Shenzhen Graduate School, Peking University)  
Wei Gao (SECE, Shenzhen Graduate School, Peking University)  
Thomas H Li (Advanced Institute of Information Technology, Peking University)

**HFF-Net: Hierarchical Feature Fusion Network for Point Cloud Generation with Point Transformers**

Ben Fei (Fudan University)  
Weidong Yang (Fudan University)  
Wenming Chen (Fudan University)  
Lipeng Ma (Fudan University)  
Xing Hu (University of Shanghai for Science and Technology)

**Deep Point Cloud Normal Estimation via Triplet Learning**

Weijia Wang (Deakin University)  
Xuequan Lu (Deakin University)  
Dasith T de Silva Edirimuni (Deakin University)  
Xiao Liu (Deakin University)  
Antonio Robles-Kelly (Deakin University)

**Overlap-Guided Coarse-to-Fine Correspondence Prediction for Point Cloud Registration**

Guofeng Mei (University of Technology Sydney)  
Xiaoshui Huang (Shanghai AI Laboratory)  
Jian Zhang (University of Technology Sydney)  
Qiang Wu (University of Technology Sydney)

**Dual Reasoning Based Pairwise Representation Network for Document Level Relation Extraction**

Yile Li (Institute of Information Engineering, Chinese Academy of Sciences)  
Yijun Liu (Institute of Information Engineering, Chinese Academy of Sciences)  
Xiaoyan Gu (Institute of Information Engineering, Chinese Academy of Sciences)  
Yinliang Yue (Institute of Information Engineering, Chinese Academy of Sciences)  
Haihui Fan (Institute of Information Engineering, Chinese Academy of Sciences)  
Bo Li (Institute of Information Engineering, Chinese Academy of Sciences)

**Unsupervised Domain Adaptation Image Dehazing with Contrastive Nearest-Farthest Subspace Distance**

Xiaozhe Meng (Sun Yat-sen University)  
Yuxin Feng (Sun Yat-sen University)  
Zhuo Su (Sun Yat-sen University)  
Fan Zhou (Sun Yat-sen university)

**Self-Guided Network for Fine-Grained Object Localization Using Weakly Supervised Learning**

Xiangyu Qu (WuHan University)  
Zengmao Wang (Wuhan University)

**Locality-Aware Attention Network with Discriminative Dynamics Learning for Weakly Supervised Anomaly Detection**

Yujiang Pu (Communication University of China)  
Xiaoyu Wu (Communication University of China)

**Multi-Scale Continuity-Aware Refinement Network for Weakly Supervised Video Anomaly Detection**

Yiling Gong (Ningbo University)  
Chong Wang (Ningbo University)  
Xinmiao Dai (Ningbo University)  
Shenghao Yu (Ningbo University)  
Lehong Xiang (Loctek Ergonomic Technology Corporation)  
Jiafei Wu (SenseTime Research)

**SimViT: Exploring a Simple Vision Transformer with Sliding Windows**

Gang Li (Institute of Software Chinese Academy of Sciences)

Di Xu (Institute of Computing Technology Chinese Academy of Sciences)

Xing Cheng (University of Chinese Academy of Sciences)

Lingyu Si (Institute of Software Chinese Academy of Sciences)

Changwen Zheng (Institute of Software, Chinese Academy of Sciences)

**Dynamic Multi-scale for Dual-pixel Images Defocus Deblurring with Transformer**

Dafeng Zhang (Samsung Research China – Beijing (SRCB))

Xiaobing Wang (Samsung Research China-Beijing)

**Visual Grounding with Transformers**

Ye Du (Beihang University)

Zehua Fu (Beihang University)

Qingjie Liu (Beihang University)

Yunhong Wang (Beihang University)

**Dynamic Transformer for Image Captioning**

Tiantao Xian (Guangxi Normal University)

Zhixin Li (Guangxi Normal University)

Tianyu Chen (Guangxi Normal University)

Huifang Ma (Northwest Normal University)

**GaitTransformer: Multiple-Temporal-Scale Transformer for Cross-View Gait Recognition**

Yufeng Cui (Beihang University)

Yimei Kang (Beihang University)

**Building Trust for Postoperative Pain Estimation: Towards Explainable Machine-Learning Prediction Based on Multimodal Indicators**

Fuchang Han (Central South University)  
Jun Cheng (Central South University)  
Shenghui Liao (Central South University)  
Youwen Deng (Central South University)

**Multimodal Crowd Counting with Mutual Attention Transformers**

Zhengtao Wu (Sun Yat-sen University)  
Lingbo Liu (Hong Kong Polytechnic University)  
Yang Zhang (Sun Yat-Sen University)  
Mingzhi Mao (Sun Yat-sen University)  
Liang Lin (Sun Yat-sen University)  
Guanbin Li (Sun Yat-sen University)

**A Rolling Bearing Fault Diagnosis Method Using Multi-Sensor Data and Periodic Sampling**

Jianbo Zheng (Hunan university)  
Chao Yang (Hunan University)  
Fangrong Zheng (Hunan Institute of Engineering)  
Bin Jiang (Hunan University)

**Multi-Modal Adversarial Adaptive Network for Misinformation Detection on Social Media**

Lei Zhang (Institute of Information Engineering, Chinese Academy of Sciences)  
Peng Zhang (Institute of Information Engineering, Chinese Academy of Sciences)  
Xi Zhu (Institute of Information Engineering, Chinese Academy of Sciences, Beijing, China)  
Luchen Liu (Xiaomi AI Lab)  
Hongbo Xu (Institute of Information Engineering, Chinese Academy of Sciences, Beijing, China)

**Unified Multi-Modal Multi-Task Joint Learning for Language-Vision Relation Inference**

Wenjie Lu (Soochow University)  
Dong Zhang (Soochow University)



**Wavelet-based CNN for Robust and High-Capacity Image Watermarking**

Junxiang Lu (Sun Yet-sen University)  
Jiangqun Ni (Sun Yet-sen University)  
Wenkang Su (Sun Yet-sen University)  
Hao Xie (Sun Yet-sen University)

**Human vs. Automatic Detection of DeepFake Videos over Noisy Channels**

Swaroop Prasad (University of Stuttgart)  
Ofar Hadar (Ben Gurion University of the Negev)  
Ngoc Thang Vu (University of Stuttgart)  
Ilia Polian (University of Stuttgart)

**Multi-Definition Video Deepfake Detection via Semantics Reduction and Cross-Domain Training**

Chutian Wang (Tongji University)  
Cairong Zhao (Tongji University)  
Guosheng Hu (Oosto)

**Towards Intrinsic Common Discriminative Features Learning for Face Forgery Detection using Adversarial Learning**

Wanyi Zhuang (University of Science and Technology of China)  
Qi Chu (University of Science and Technology of China)  
Haojie Yuan (University of Science and Technology of China)  
Changtao Miao (University of Science and Technology of China)  
Bin Liu (University of Science and Technology of China)  
Nenghai Yu (University of Science and Technology of China)

**Watermark-Preserving Keypoint Enhancement for Screen-Shooting Resilient Watermarking**

Li Dong (Ningbo University)  
Jiale Chen (Ningbo university)  
Chengbin Peng  
Yuanman Li (Shenzhen University)  
Weiwei Sun (Alibaba Group)

### **Package Theft Detection from Smart Home Security Cameras**

Hung-Min Hsu (University of Washington)

Xinyu Yuan (Wyze Labs)

Baohua Zhu (University of Washington)

Zhongwei Cheng (Wyze Labs)

Lin Chen (Wyze Labs)

### **Watermarking Protocol for Deep Neural Network Ownership Regulation in Federated Learning**

Fangqi Li (Shanghai Jiaotong University)

Shilin Wang (SEIEE, Shanghai Jiaotong University)

Alan Liew (Griffith University)

### **High Performant AV1 for VOD Applications**

Yunqing Wang (Google Inc.)

Chi Yo Tsai (Google Inc.)

Jingning Han (Google Inc.)

Yaowu Xu (Google Inc.)

### **A Transformer-Based Approach for Metal 3D Printing Quality Recognition**

Weihao Zhang (Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences)

Jiapeng Wang (Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences)

Qi Zhang (Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences)

Honglin Ma (Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences)

Shuqian Fan (Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences)

### **Diversity-Based Social Search**

Parham Aarabi (University of Toronto)

### **OPSE: Online Per-Scene Encoding for Adaptive HTTP Live Streaming**

Vignesh V Menon (Alpen-Adria-Universität Klagenfurt)

Hadi Amirpour (University of Klagenfurt)

Christian Feldmann (Bitmovin)

Mohammad Ghanbari (University of Essex)

Christian Timmerer (Alpen-Adria-Universität Klagenfurt)

### **Non-Local Spatiotemporal Correlation Attention for Action Recognition**

Manh-Hung Ha (Phenikaa University)

Oscal T.-C. Chen (National Chung Cheng University)

### **Fire and Gun Detection Based on Sematic Embeddings**

Yunbin Deng (STR)

Ryan Campbell (STR)

### **Pixel-Wise Frame Scoring and Automated Media Asset Generation for Movies/TV Shows**

Honey Gupta (Amazon)

Prabhakar Gupta (Amazon)

### **FAIVConf: Face Enhancement for AI-based Video Conference with Low Bit-Rate**

Zhengang Li (Northeastern University)  
Sheng Lin (Tencent)  
Shan Liu (Tencent)  
Songnan Li (Tencent)  
Xue Lin (Northeastern University)  
Wei Wang (Alibaba Group US)  
Wei Jiang (Alibaba Group)

### **A Unified Video Summarization for Video Anomalies Through Deep Learning**

Kahlil Muchtar (Syiah Kuala University)  
Muhammad Rizky Munggaran (Nodeflux, Indonesia)  
Adhiguna Mahendra (Faculty of Engineering and Information Technology, Swiss German University, Indonesia)  
Khairul Anwar (Universitas Syiah Kuala)  
Chih-Yang Lin (Yuan Ze University)

### **Efficient Topology Coding and Payload Partitioning Techniques for Neural Network Compression (NNC) Standard**

Jaakko Laitinen (Tampere University)  
Alexandre MERCAT (Tampere University)  
Jarno Vanne (Tampere University)  
Hamed Rezazadegan Tavakoli (Nokia Technologies)  
Francesco Cricri (Nokia Technologies)  
Emre Aksu (Nokia Technologies)  
Miska Hannuksela (Nokia Technologies)

### **Multi-Augmentation for Efficient Self-Supervised Visual Representation Learning**

Tran Van Nhiem (Hon Hai Research Institute)  
Huang Chi-En (Hon Hai Research Institute)  
Liu Shen-Hsuan (Hon Hai Research Institute)  
Yang Kai-Lin (Hon Hai Research Institute)  
Ko Timothy (National Central University)  
Li Yung-Hui (Hon Hai Research Institute)

### **A Low-Cost Virtual 2D Spokes-Character Advertising Framework**

Jiarun Zhang (University of California San Diego)  
Zhao Li (Zhejiang University)  
Jialun Zhang (Zhejiang University)  
Zhiqiang Zhang (Zhejiang University)

### **Video Object Segmentation with Online Mask Refinement**

Tomoya Sawada (Mitsubishi Electric Corporation)  
Teng-Yok Lee (Mitsubishi Electric)  
Masahiro Mizuno (SBX inc.)

### **Intelligent Warning System Monitoring Vehicle Surrounding and Driver's Behavior**

Tomoya Sawada (Mitsubishi Electric Corporation)  
Mitsuki Nakamura (Mitsubishi Electric Corporation)

**Relation-Aware Prototype Network for Few-Shot Semantic Segmentation**

Fangyu Wu (Zhejiang University)  
Dongming Lu (Zhejiang University)  
Chaoyi Pang (Zhejiang University (NIT))  
Bailing Zhang (NingboTech University)

**Enhanced Semantic Head for Cascade Instance Segmentation**

Xuerong Huang (University of Chinese Academy of Sciences)  
Li Su (University of Chinese Academy of Sciences)  
Guorong Li (University of Chinese Academy of Sciences)  
Xinfeng Zhang (University of Chinese Academy of Sciences)  
Laiyun Qing (University of Chinese Academy of Sciences)  
Qingming Huang (University of Chinese Academy of Sciences)

**Tokenizing Features for Fast Video Object Segmentation**

Tianfang Meng (Fudan University)  
Wei Zhang (Fudan University)  
Wenqiang Zhang (Fudan University)

**Semi-Supervised 3D Medical Image Segmentation Using Shape-Guided Dual Consistency Learning**

Tao Lei (Shaanxi University of Science and Technology)  
Hulin Liu (Shaanxi University of science and technology)  
Qi Chen (Shannxi University of Science and Technology)  
Zexuan Wang (Shaanxi University of Science and Technology)  
Dong Zhang (Shaanxi University of Science and Technology)  
Xingwu Wang (Shaanxi University of Science and Technology)  
Xiaogang Du (Shaanxi University of Science and Technology)  
Bo Lu (Orca Data Technology (Xi'an) CO., LTD)

**FMP-NET: Fractal Multi-Gate Mixture-Of-Experts Panoramic Segmentation for Point Cloud**

Chengzhe Yang (XiaMen University)

**PDP-Net: Patch-based Dual-Path Network for Point Cloud Completion**

Qifeng He (Center for Future Media, the Department of Computer Science and Engineering, University of Electronic Science and Technology of China)

Ning Xie (Center for Future Media, the Department of Computer Science and Engineering, University of Electronic Science and Technology of China)

Zhenjiang Du (Center for Future Media, the Department of Computer Science and Engineering, University of Electronic Science and Technology of China)

Ke Ren (Center for Future Media, the Department of Information and Software Engineering, University of Electronic Science and Technology of China)

Jiale Dou (Center for Future Media, the Department of Computer Science and Engineering, University of Electronic Science and Technology of China)

**Fine-Grained Correlation Representation for Graph-based Point Cloud Attribute Compression**

Fei Song (Peking University Shenzhen Graduate School)

Ge Li (SECE, Shenzhen Graduate School, Peking University)

Xiaodong Yang (Peking University Shenzhen Graduate School)

Wei Gao (SECE, Shenzhen Graduate School, Peking University)

Thomas H Li (Advanced Institute of Information Technology, Peking University)

**TDRNet: Transformer-Based Dual-Branch Restoration Network for Geometry Based Point Cloud Compression Artifacts**

Xiaoyu Zhang (SECE, Shenzhen Graduate School, Peking University)

Guibiao Liao (SECE, Shenzhen Graduate School, Peking University)

Wei Gao (SECE, Shenzhen Graduate School, Peking University)

Ge Li (Peking University)

**A Novel Stereo Matching Pipeline with Robustness and Unfixed Disparity Search Range**

Jiazhi Liu (Institute of Information Engineering, CAS)

Feng Liu (Chinese Academy of Sciences)

**Omni-NeRF: Neural Radiance Field from 360° Image Captures**

Kai Gu (INRIA)

Thomas Maugey (INRIA)

Sebastian Knorr (Ernst-Abbe University of Applied Sciences Jena)

Christine Guillemot (INRIA)

**MITr: Multi-label Classification with Transformer**

Xing Cheng (University of Chinese Academy of Sciences)  
Hezheng Lin (Beijing University of Posts and Telecommunications)  
Xiangyu Wu (Kuaishou)  
Dong Shen (Zhejiang University)  
Fan Yang (Kuaishou)  
Honglin Liu (Kuaishou)  
Nian Shi (Aerospace Information Research Institute, Chinese Academy of Sciences)

**UFI: A Unified Feature Interaction Framework for Multi-Label Image Classification**

Zhuohua Li (1. Institute of Information Engineering, Chinese Academy of Sciences. 2. School of Cyber Security, University of Chinese Academy of Sciences)  
Weibo Zhang (1. Institute of Information Engineering, Chinese Academy of Sciences. 2. School of Cyber Security, University of Chinese Academy of Sciences)  
Ziang Yang (1. Institute of Information Engineering, Chinese Academy of Sciences; 2. School of Cyber Security, University of Chinese Academy of Sciences)  
Fuqing Zhu (1. Institute of Information Engineering, Chinese Academy of Sciences. 2. School of Cyber Security, University of Chinese Academy of Sciences)  
Jizhong Han (Institute of Information Engineering, Chinese Academy of Sciences)  
Songlin Hu (Institute of Information Engineering, Chinese Academy of Sciences)

**HGLNet: A Generic Hierarchical Global-Local Feature Fusion Network for Multi-Modal Classification**

Jiesheng Wu (Nankai University)  
Junan Zhao (Nankai University)  
Jing Xu (Nankai University)

**D2S: Dynamic Distribution Supervision Multi-Label Facial Expression Recognition**

Lijuan Wang (Nankai University)  
Xin Zhang (Nankai University)  
Ning Jiang (Mashang Consumer Finance Co., Ltd.)  
Haiying Wu (Mashang Consumer Finance Co., Ltd.)  
Jufeng Yang (Nankai University)

**AGCN: Augmented Graph Convolutional Network for Lifelong Multi-Label Image Recognition**

Kaile Du (Suzhou University of Science and Technology)  
Fan Lyu (College of Intelligence and Computing, Tianjin University)  
Fuyuan Hu (Suzhou University of Science and Technology)  
Linyan Li (Suzhou Institute of Trade&Commerce)  
Wei Feng (College of Intelligence and Computing, Tianjin University, China)  
Fenglei Xu (Suzhou University of Science and Technology)  
Qiming Fu (School of Electronics and Information Engineering, Suzhou University of Science and Technology)

**Relational Graph Reasoning Transformer for Image Captioning**

Xinyu Xiao (Tencent)  
Zixun Sun (Tencent)  
Tingtian Li (Tencent)  
Yipeng Yu (Tencent)

**Offline Signature Verification with Transformers**

Huan Li (Xi'an Jiaotong University)  
Ping Wei (Xi'an Jiaotong University)  
Zeyu Ma (Xi'an Jiaotong University)  
Changkai Li (Xi'an Jiaotong University)  
Nanning Zheng (Xi'an Jiaotong University)

**Diverse Instance Discovery: Vision-Transformer for Instance-Aware Multi-Label Image Recognition**

Yunqing Hu (Zhejiang University)  
Xuan Jin (Alibaba Group)  
Yin Zhang (Zhejiang University)  
Haiwen Hong (Zhejiang University)  
Jingfeng Zhang (Zhejiang University)  
Feihu Yan (Zhejiang University)  
Yuan He (Alibaba Group)  
Hui Xue (Alibaba Group)

**High-Quality Image Generation from Scene Graphs with Transformer**

Xin Zhao (Shandong University)  
Lei Wu (Shandong University)  
Xu Chen (School of Software, Shandong University)  
Bin Gong (Shan Dong University)

**HOIG: End-to-End Human-Object Interactions Grounding with Transformers**

Zeyu Ma (Xi'an Jiaotong University)  
Ping Wei (Xi'an Jiaotong University)  
Huan Li (Xi'an Jiaotong University)  
Nanning Zheng (Xi'an Jiaotong University)

### **An Attention-Guided Two-Stream Convolutional Neural Network for Few-Shot Learning**

Hui Zhu (Institute of Computing Technology, Chinese Academy of Sciences)

Xiaofang Zhao (Institute of Computing Technology, Chinese Academy of Sciences; Institute of Intelligent Computing Technology, Suzhou, CAS)

### **FPAR: Filter Pruning Via Attention and Rank Enhancement**

Yanming Chen (Anhui University)

Mingrui Shuai (Anhui University, Xiamen Institute of Data Intelligence)

Shubin Lou (Anhui University, Xiamen Institute of Data Intelligence)

Zhulin An (Institute of Computing Technology, Chinese Academy of Sciences)

Yiwen Zhang (Anhui University)

### **Salient Object Detection Via Bilateral Feature Fusion and Score Sorting Attention Mechanism**

Feng Qiu (Northeastern University)

Shuying Zhao (Northeastern University)

Yunzhou Zhang (Northeastern University)

Rong Ma (Beijing Simulation Center)

Yan Liu (Northeastern University)

Zhenyu Wang (Northeastern University)

Sonya Coleman (School of Computing and Intelligent Systems, University of Ulster)

### **Double Attention Network Based on Sparse Sampling**

ZhuBen Dong (Dalian University of Technology)

Yunheng Li (Dalian University of Technology)

Yiwei Sun (Dalian University of Technology)

Conghui Hao (Dalian University of Technology)

Kaiyuan Liu (Dalian University of Technology)

Tao Sun (Dalian University of technology)

Shenglan Liu (Dalian University of Technology)

### **Spatial Attention Guided Local Facial Attribute Editing**

Mingye Xie (Shanghai Jiao Tong University)

Feng Wang (Shanghai Jiao Tong University)

Suncheng Xiang (Shanghai Jiao Tong University)

Ting Liu (Shanghai Jiao Tong University)

Yuzhuo Fu (Shanghai Jiao Tong University)



**A Hybrid Alignment Loss for Temporal Moment Localization with Natural Language**

Chao Guo (Huazhong University of Science and Technology)

Daizong Liu (Peking University)

Pan Zhou (Huazhong University of Science and Technology)

**A Pair-Metamorphosis-Decouple Synthetic Data Scheme for Color Fundus Image Registration**

Zailiang Chen (Central South University)

Yuqi Liu (Central South University)

Hailan Shen (Central South University)

Tianhao Luo (Central South University)

Rongchang Zhao (Central South University)

**Arbitrary-Shaped Scene Text Detection with Scoring Mask Quality**

Xinyu Liu (Shandong University)

Xiaoqian Liu (Shandong University)

Bin Wang (Shandong University)

Xin Luo (Shandong University)

Xin-Shun Xu (Shandong University)

**A Progressive and Multi-Prior-Guided Network for Image Inpainting**

Bo Peng (Fudan University)

Yining Qiu (Fudan University)

Dong Wu (Fudan University)

Liren He (Fudan University)

Mingmin Chi (Fudan University)

**Adaptive Mean-Residue Loss for Robust Facial Age Estimation**

Ziyuan Zhao (Nanyang Technological University)

Peisheng Qian (I2R, A\*STAR)

Yubo Hou (Astar)

Zeng Zeng (Institute for Infocomm Research, Agency for Science, Technology and Research (A\*STAR))

**Generative Compression for Face Video: A Hybrid Scheme**

Anni Tang (Shanghai Jiao Tong University)  
Yan Huang (Shanghai Jiao Tong University)  
Jun Ling (Shanghai Jiao Tong University)  
Zhiyu Zhang (Shanghai Jiao Tong University)  
Yiwei Zhang (Shanghai Jiao Tong University)  
Rong Xie (Shanghai Jiao Tong University)  
Li Song (Shanghai Jiao Tong University)

**Causal Intervention for Generalizable Face Anti-Spoofing**

Yuchen Liu (Shanghai Jiao Tong University)  
Yabo Chen (Shanghai Jiao Tong University)  
Wenrui Dai (Shanghai Jiao Tong University)  
Chenglin Li (Shanghai Jiao Tong University)  
Junni Zou (Shanghai Jiao Tong University)  
Hongkai Xiong (Shanghai Jiao Tong University)

**Feature-Guided Blind Face Restoration with GAN Prior**

Zhengzhang Hou (Tianjin University)  
Xiaojie Guo (Tianjin University)  
Liang Li (Tianjin University)

**Source-ID-Tracker: Source Face Identity Protection in Face Swapping**

Yuzhen Lin (Shenzhen University)  
Han Chen (Shenzhen University)  
Emanuele Maiorana (Roma Tre University)  
Patrizio Campisi (Universita degli Studi Roma TRE)  
Bin Li (Shenzhen University)

**Federated Unsupervised Domain Adaptation for Face Recognition**

Weiming Zhuang (Nanyang Technological University)  
Xin Gan (Nanyang Technological University)  
Xuesen Zhang (SenseTime)  
Yonggang Wen (Nanyang Technological University)  
Shuai Zhang (SenseTime)  
Shuai Yi (SenseTime)

**CoLive: An Edge-Assisted Online Learning Framework for Viewport Prediction in 360° Live Streaming**

Mu Wang (Tsinghua University)  
Shuai Peng (Beijing University of Posts and Telecommunications)  
Xingyan Chen (Southwestern University of Finance and Economics)  
Yu Zhao (Southwestern University of Finance and Economics)  
Mingwei Xu (Tsinghua University)  
Changqiao Xu (Beijing University of Posts and Telecommunications)

**TS360: A Two-Stage Deep Reinforcement Learning System for 360-Degree Video Streaming**

Yongkai Huo (Shenzhen University)  
Hongye Kuang (Shenzhen University)

**A Multi-User Oriented Live Free-Viewpoint Video Streaming System Based on View Interpolation**

Jingchuan Hu (Shanghai Jiao Tong University)  
Shuai Guo (Shanghai Jiao Tong University)  
Kai Zhou (Shanghai Jiao Tong University)  
Yu Dong (Shanghai Jiao Tong University)  
Jun Xu (Shanghai Jiao Tong University)  
Li Song (Shanghai Jiao Tong University)

**Maxim: DRL-Based Cross-Camera Streaming Configuration for Real-Time Video Analytics**

Ruoyu Zhang (The Chinese University of Hong Kong, Shenzhen)  
Yutao Zhou (The Chinese University of Hong Kong, Shenzhen)  
Fangxin Wang (The Chinese University of Hong Kong, Shenzhen)  
Zhi Wang (Tsinghua University)

**MFVP: Mobile-Friendly Viewport Prediction for Live 360-Degree Video Streaming**

Lei Zhang (Shenzhen University)  
Weizhen Xu (Shenzhen University)  
Donghuan Lu (Tencent)  
Laizhong Cui (Shenzhen University)  
Jiangchuan Liu (Simon Fraser University)

**Multi-Scale Graph Attention Network for Scene Graph Generation**

Min Chen (University of Electronic Science and Technology of China)  
Xinyu Lyu (University of Electronic Science and Technology of China)  
Yuyu Guo (University of Electronic Science and Technology of China)  
Jingwei Liu (University of Electronic Science and Technology of China)  
Lianli Gao (The University of Electronic Science and Technology of China)  
Jingkuan Song (University of Electronic Science and Technology of China)

**DH-GCN: Saliency-Aware Complex Scene Graph Generation Using Dual-Hierarchy Graph Convolutional Network**

Jiale Lu (East China Normal University)  
Lianggangxu Chen (East China Normal University)  
Yiqing Cai (East China Normal University)  
Haoyue Guan (UC Davis)  
Changhong lu (East China Normal University)  
Changbo Wang (East China Normal University)  
Gaoqi He (East China Normal University)

**Location-Aware Feature Selection Network for Multi-Oriented Scene Text Detection**

Zengyuan Guo (Dalian University of Technology)  
Panliang Fang (Dalian University of Technology)  
Haojie Li (Dalian University of Technology)  
Zhihui Wang (Dalian University of Technology)  
Wen Gao (Peking University)

**DBCAN: Dual-Branch Cross-Attention Network for Scene Text Recognition**

Xinjian Gao (University of Science and Technology of China)  
Ye Pang (Ping An Technology (Shenzhen) Co., Ltd)  
Yuyu Liu (Ping An Technology (Shenzhen) Co., Ltd)  
Jun Yu (University of Science and Technology of China)  
Maokun Han (Ping An Technology (Shenzhen) Co., Ltd)  
Kai Hou (University of Science and Technology of China)  
Wei Wang (Ping An Technology (Shenzhen) Co., Ltd)

**Zero-Shot Scene Graph Generation with Knowledge Graph Completion**

Xiang Yu (Shanghai Jiao Tong University)  
Ruoxin Chen (Shanghai Jiao Tong University)  
Jie Li (Shanghai Jiao Tong University)  
Jiawei Sun (Shanghai Jiao Tong University)  
Shijing Yuan (Shanghai Jiao Tong University)  
Huxiao Ji (Shanghai Jiao Tong University)  
Xinyu Lu (Shanghai Jiao Tong University)  
Chentao Wu (Shanghai Jiao Tong University)

**Towards Adversarial Robust Representation Through Adversarial Contrastive Decoupling**

Peilun Du (Beijing University of Posts and Telecommunications)  
Xiaolong Zheng (Beijing University of Posts and Telecommunications)  
Mengshi Qi (Beijing University of Posts and Telecommunications)  
Liang Liu (Beijing University of Posts and Telecommunications)  
Huadong Ma (Beijing University of Posts and Telecommunications)

**Focus Your Distribution: Coarse-to-Fine Non-Contrastive Learning for Anomaly Detection and Localization**

Ye Zheng (Institute of Computing Technology, Chinese Academy of Sciences; University of Chinese Academy of Sciences)  
Xiang Wang (SenseTime Research); Rui Deng (University of California, Los Angeles)  
Tianpeng Bao (SenseTime Research)  
Rui Zhao (SenseTime Research)  
Liwei Wu (SenseTime Research)

**A Unified Two-Stage Group Semantics Propagation and Contrastive Learning Network for Co-Saliency Detection**

Zhenshan Tan (Fudan University)  
Cheng Chen (Fudan University)  
Keyu Wen (Fudan University)  
Yuzhuo Qin (Fudan University)  
Xiaodong Gu (Fudan University)

**Self-Supervised Video Representation Learning with Motion-Contrastive Perception**

Jinyu Liu (Fudan University)  
Ying Cheng (Fudan University)  
Yuejie Zhang (Fudan University)  
Rui-Wei Zhao (Fudan University)  
Rui Feng (Fudan University)

**Learning Robust Convolutional Neural Networks with Relevant Feature Focusing via Explanations**

Kazuki Adachi (NTT)  
Shin'ya Yamaguchi (NTT)

**Multi-Teacher Knowledge Distillation for Incremental Implicitly-Refined Classification**

Longhui Yu (Peking University)  
Zhenyu Weng (Peking University)  
Yuqing Wang (Peking University)  
Yuesheng Zhu (Peking University)

**Online Deep Metric Learning via Mutual Distillation**

Gao-Dong Liu (Xiamen University)  
Wan-Lei Zhao (Xiamen University)  
Jie Zhao (Boden.ai)

**FEDIC: Federated Learning on Non-IID and Long-Tailed Data via Calibrated Distillation**

Xinyi Shang (Xiamen University)  
Yang Lu (Xiamen University)  
Yiu-ming Cheung (Hong Kong Baptist University)  
Hanzi Wang (Xiamen University)

**Mask-Guided Self-Distillation for Visual Tracking**

LuMing Li (Qingdao University)  
Xiaowei Zhang (Qingdao University)  
Chenglizhao Chen (China University of Petroleum (East China))

**Pruning Dynamic Group Convolution with Static Substitute**

Jieyong Che (Ningbo University)  
Chong Wang (Ningbo University)  
Weiwei Chen (Ningbo University)  
Xinmiao Dai (Ningbo University)  
Jun Wang (China University of Mining and Technology)  
Jiafei Wu (SenseTime Research)

**DunhuangGAN: A Generative Adversarial Network for Dunhuang Mural Art Style Transfer**

Weining Wang (South China University of Technology)  
Yifan Li (South China University of Technology)  
Huan Ye (Guangzhou Academy of Fine Arts)  
Fenghua Ye (Guangdong University of Technology)  
Xiangmin Xu (South China University of Technology)

**Unpaired Motion Style Transfer with Motion-Oriented Projection Flow Network**

Yue Huang (Sun Yat-sen University)  
Haoran Mo (Sun Yat-sen University)  
Xiao Liang (Sun Yat-sen University)  
Chengying Gao (Sun Yat-sen University)

**N2D-GAN: A Night-to-Day Image-to-Image Translator**

Xiaopeng Li (Tianjin University)  
Jiawan Zhang (Tianjin University)  
Xiaojie Guo (Tianjin University)

**Discriminator Modification in GAN for Text-to-Image Generation**

Fei Fang (Wuhan University)  
Ziqing Li (Wuhan University)  
Fei Luo (Wuhan University)  
Chunxia Xiao (Wuhan University)

**PhraseGAN: Phrase-Boost Generative Adversarial Network for Text-to-Image Generation**

Fei Fang (Wuhan University)  
Ziqing Li (Wuhan University)  
Fei Luo (Wuhan University)  
Chengjiang Long (Meta Reality Labs)  
Shenghong Hu (Hubei University of Economics)  
Chunxia Xiao (Wuhan University)

**Neural Network Based In-Loop Filter with Constrained Memory**

Liqiang Wang (Tencent)

Xiaozhong Xu (Tencent)

Shan Liu (Tencent)

**Multi-Channel Adaptive Partitioning Network for Block-Based Image Compressive Sensing**

Chen Hui (Harbin Institute of Technology)

Shaohui Liu (Harbin Institute of Technology)

Feng Jiang (Harbin Institute of Technology)

Debin Zhao (Harbin Institute of Technology)

**Efficient CNN Architecture Design Guided by Visualization**

Liangqi Zhang (Huazhong University of Science and Technology)

Haibo Shen (Huazhong University of Science and Technology)

Yihao Luo (Huazhong University of Science and Technology)

Xiang Cao (Huazhong University of Science and Technology)

Leixilan Pan (Huazhong University of Science and Technology)

Tianjiang Wang (Huazhong University of Science and Technology)

Qi Feng (Huazhong University of Science and Technology)

**Deep Dictionary Learning with an Intra-class Constraint**

Xia Yuan (Jiangsu University)

Jianping Gou (Jiangsu University)

Baosheng Yu (The University of Sydney)

Jiali Yu (University of Electronic Science and Technology of China)

Zhang Yi (Sichuan University)

**Pruning Based Training-Free Neural Architecture Search**

Jiawang Zhou (Harbin Institute of Technology, Shenzhen)

Fanglin Chen (Harbin Institute of Technology, Shenzhen)

Guangming Lu (Harbin Institute of Technology, Shenzhen)



**Source Camera Identification with Multi-Scale Feature Fusion Network**

Chen Hui (Harbin Institute of Technology)  
Feng Jiang (Harbin Institute of Technology)  
Shaohui Liu (Harbin Institute of Technology)  
Debin Zhao (Harbin Institute of Technology)

**Background Matting via Recursive Excitation**

Junjie Deng (South China University of Technology)  
Yangyang Xu (South China University of Technology)  
Zeyang Zhou (South China University of Technology)  
Shengfeng He (South China University of Technology)

**Multi-Biometric Unified Network for Cloth-Changing Person Re-Identification**

Guoqing Zhang (Nanjing University of Information Science & Technology)  
Jie Liu (Nanjing University of Information Science and Technology)  
Yuhao Chen (Nanjing University of Information Science & Technology)  
Yuhui Zheng (Nanjing University of Information Science & Technology)  
Zhang Hongwei (Nanjing University of Information Science & Technology)

**HSGM: A Hierarchical Similarity Graph Module for Object Re-Identification**

Fei Shen (Nanjing University of Science and Technology)  
XiaoXiao Peng (Zhejiang Dahua Technology Co., Ltd.)  
Lisheng Wang (Zhejiang Dahua Technology Co., Ltd.)  
Xingmeng Hao (Zhejiang Dahua Technology Co., Ltd.)  
Mei Shu (Zhejiang Dahua Technology Co., Ltd.)  
Yajun Wang (Zhejiang Dahua Technology Co., Ltd.)

**Integrating Degradation Learning into Image Restoration**

Mingyu Ma (Tianjin University)  
Dongwei Ren (Harbin Institute of Technology)  
Yajun Yang (Tianjin University)

**Exploring Linear Feature Disentanglement for Neural Networks**

Tiantian He (Shandong University)  
Zhibin Li (CSIRO)  
Yongshun Gong (Shandong University)  
Yazhou Yao (Nanjing University of Science and Technology)  
Xiushan Nie (Shandong Jianzhu University)  
Yilong Yin (Shandong University)

**Discovering Domain Disentanglement for Generalized Multi-Source Domain Adaptation**

Zixin Wang (University of Queensland)  
Yadan Luo (University of Queensland)  
Peng-Fei Zhang (University of Queensland)  
Sen Wang (The University of Queensland)  
Zi Helen Huang (University of Queensland)

**Individual Property Inference Over Collaborative Learning in Deep Feature Space**

Haoxin Yang (Shenzhen University, DongGuan University of Technology)  
Yi Wang (Dongguan University of Technology)  
Bin Li (Shenzhen University)

**Multi-View Clustering Through Hypergraphs Integration on Stiefel Manifold**

Yu Hu (South China University of Technology)  
Hongmin Cai (South China University of Technology)

**CoNet: Co-Embedding by Reinforcing Graph Feature and Topology Information**

hui tang (Renmin University of China)  
Xun Liang (Renmin University of China)  
Yuhui Guo (Renmin University of China)  
Xiangping Zheng (Renmin University of China)  
Bo Wu (Renmin University of China)

**Efficient Shift Network in Denoising-Friendly Space for Real Noise Removal**

Lipeng Zhang (Hikvision Research Institute)  
Zheng Zhao (Hikvision Research Institute)  
Yuan Zhang (Hikvision Research Institute)  
Shuaitao Zhang (Hikvision Research Institute)  
Di Xie (Hikvision Research Institute)  
Shiliang Pu (Hikvision Research Institute)  
Hui Mao (Hikvision Research Institute)

**Mixed Color Channels (MCC): A Universal Module for Mixed Sample Data Augmentation Methods**

Yang Wei (Xidian University)  
Jianfeng Ma (Xidian University)  
Zhongyuan Jiang (Xidian University)  
Bin Xiao (Chongqing University of Posts and Telecommunications)

**Series Photo Selection via Multi-View Graph Learning**

Jin Huang (Shandong University)  
Lu Zhang (University of Queensland)  
Yongshun Gong (Shandong University)  
Jian Zhang (UTS)  
Xiushan Nie (Shandong Jianzhu University)  
Yilong Yin (Shandong University)

**Discretized Gaussian Mixture Hyperprior for Learned Image Compression with Mask Module**

Shengkai Wang (Tongji University)  
Hanli Wang (Tongji University)

**Evaluating the Effect of Cinematography on the Viewing Experience in Immersive Environment**

Feilin Han (Beijing Film Academy)  
Ying Zhong (Beijing Film Academy)  
Minxi Zhou (Beijing Film Academy)

**Multi-Scale Temporal-Frequency Attention for Music Source Separation**

Lianwu Chen (Beijing Kuaishou Technology Co., Ltd)  
Xiguang Zheng (Beijing Kuaishou Technology Co., Ltd)  
Chen Zhang (Beijing Kuaishou Technology Co., Ltd)  
Liang Guo (Beijing Kuaishou Technology Co., Ltd)  
Bing Yu (Beijing Kuaishou Technology Co., Ltd)

**RMLANet: Random Multi-Level Attention Network for Shadow Detection**

Leiping Jie (Hong Kong Baptist University)  
Hui Zhang (UIC)

**Object-Guided and Motion-Refined Attention Network for Video Anomaly Detection**

Wenhao Zhou (Zhejiang University)  
Yingxuan Li (Zhejiang University)  
Chunhui Zhao (Zhejiang University)

**End-to-End Image Compression via Attention-Guided Information-Preserving Module**

Wenhong Duan (Shanghai Jiao Tong University)  
Kai Lin (Peking University)  
Chuanmin Jia (Peking University)  
Xinfeng Zhang (University of Chinese Academy of Sciences)  
Siwei Ma (Peking University, China)  
Wen Gao (Peking University)

**Focus by Prior: Deepfake Detection Based on Prior-Attention**

Cai Yu (1. Institute of Information Engineering, Chinese Academy of Sciences. 2. School of Cyber Security, University of Chinese Academy of Sciences)  
Peng Chen (1. Institute of Information Engineering, Chinese Academy of Sciences. 2. School of Cyber Security, University of Chinese Academy of Sciences)  
Jiao Dai (Institute of Information Engineering, Chinese Academy of Sciences)  
Xi Wang (Institute of Information Engineering, Chinese Academy of Sciences)  
Weibo Zhang (1. Institute of Information Engineering, Chinese Academy of Sciences. 2. School of Cyber Security, University of Chinese Academy of Sciences)  
Jin Liu (1. Institute of Information Engineering, Chinese Academy of Sciences. 2. School of Cyber Security, University of Chinese Academy of Sciences)  
Jizhong Han (Institute of Information Engineering, Chinese Academy of Sciences)

**Improving Robustness of Speech Anti-Spoofing System Using Resnext with Neighbor Filters**

Zhenyu Zhang (Institute of Information Engineering, Chinese Academy of Sciences)  
Xianfeng Zhao (Institute of Information Engineering, Chinese Academy of Sciences)  
Xiaowei Yi (State Key Laboratory of Information Security, Institute of Information Engineering, Chinese Academy of Sciences)

**Improving Monaural Speech Enhancement with Dynamic Scene Perception Module**

Tian Lan (University of Electronic Science and Technology of China)  
Jiajia Li (University of Electronic Science and Technology of China)  
Wenxin Tai (University of Electronic Science and Technology of China)  
Cong Chen (University of Electronic Science and Technology of China)  
Jun Kang (University of Electronic Science and Technology of China)  
Qiao Liu (University of Electronic Science and Technology of China)

**Improving Deep Image Matting Via Local Smoothness Assumption**

Rui Wang (Renmin University of China)  
Jun Xie (Lenovo Co)  
Jiacheng Han (Beijing Institute of Technology)  
Dezhen Qi (Xiamen University)

**Temporal Up-Sampling for Asynchronous Events**

Xijie Xiang (Shanghai Jiao Tong University)  
Lin Zhu (Peking University)  
Jianing Li (Peking University)  
Yonghong Tian (Peking University)  
Tiejun Huang (Peking University)

**DPGIR: Sift Recovery from A Hazy Image**

Shan Huang (Xidian University)  
Hao Chang (Xidian University)  
Wei Wu (Xidian University)  
Zhu Li (University of Missouri, Kansas City)

**Alfie: Neural-Reinforced Adaptive Prefetching for Short Videos**

Jingzong Li (City University of Hong Kong)  
Hong Xu (City University of Hong Kong)  
Ming Ma (Beijing Kuaishou Technology Co., Ltd)  
Haopeng Yan (Tsinghua University)  
Chun Jason XUE (City University of Hong Kong)

**PAR: Improving Video Bitrate Adaptation Via Payload-Aware Throughput Prediction**

Jialiang Pei (Beijing University of Posts and Telecommunications)  
Congkai An (BUPT)  
Anfu Zhou (Beijing University of Posts and Telecommunications)  
Liang Liu (Beijing University of Posts and Telecommunications)  
Huadong Ma (Beijing University of Posts and Telecommunications)

**Towards Joint Loss and Bitrate Adaptation in Realtime Video Streaming**

Dayou Zhang (Chinese University of Hong Kong, Shenzhen)  
Kai Shen (Chinese University of Hong Kong, Shenzhen)  
Fangxin Wang (The Chinese University of Hong Kong, Shenzhen)  
Dan Wang (The Hong Kong Polytechnic University)  
Jiangchuan Liu (Simon Fraser University)

**Video Feature Compression for Machine Tasks**

Kiran Misra (Sharp)  
Tianying Ji (Sharp)  
Andrew Segall (Sharp)  
Frank Bossen (Sharp)

**Coverage Control for PTZ Camera Networks Using Scene Potential Map**

Liangliang Cai (Beihang University)  
Hanyuan Ma (Beihang University)  
Zhuocheng Liu (Beihang University)  
Zhaoxin Li (Institute of Computing Technology, Chinese Academy of Sciences)  
Zhong Zhou (Beihang University)

**MIRNET: A Robust RGBT Tracking Jointly with Multi-Modal Interaction and Refinement**

Ruichao Hou (Nanjing University)  
Tongwei Ren (Nanjing University)  
Gangshan Wu (Nanjing University)

**Mining Valuable Source Domain Instances for Privacy-Preserving Domain Adaptive Object Detection**

Jian Liu (Tianjin University)  
Jianqiao An (Tianjin University)  
Yahong Han (Tianjin University)

**Siamese Template Diffusion Networks for Robust Visual Tracking**

Yanjie Liang (Xiamen University; Peng Cheng Laboratory)  
Penghui Zhao (Xiamen University)  
Yifei Hao (Xiamen University)  
Hanzi Wang (Xiamen University)

**Structural Attention for Channel-Wise Adaptive Graph Convolution in Skeleton-Based Action Recognition**

Ruihao Qian (Tongji University)  
Jiewen Wang (Tongji University)  
Jianxiu Wang (Tongji University)  
Shuang Liang (Tongji University)

**Rank-Based Filter Pruning for Real-Time UAV Tracking**

Xucheng Wang (Guilin University of Technology)  
Dan Zeng (Southern University of Science and Technology)  
Qijun Zhao (Sichuan University)  
Shuiwang Li (Guilin University of Technology)

**DSE-NET: Artistic Font Image Synthesis Via Disentangled Style Encoding**

Xiang Li (Shandong University)  
Lei Wu (Shandong University)  
Xu Chen (Shandong University)  
Lei Meng (Shandong University)  
Xiangxu Meng (Shandong University)

**Learning Appearance-motion Normality for Video Anomaly Detection**

Yang Liu (Fudan University)  
Jing Liu (Fudan University)  
Mengyang Zhao (Fudan University)  
Dingkang Yang (Fudan University)  
Xiaoguang Zhu (Shanghai Jiao Tong University)  
Liang Song (Fudan University)

**Disentangled Visual Representations for Extreme Human Body Video Compression**

Ruofan Wang (Peking University)  
Qi Mao (Communication University of China)  
Shiqi Wang (City University of Hong Kong)  
Chuanmin Jia (Peking University)  
Ronggang Wang (Peking University)  
Siwei Ma (Peking University, China)

**TC-ShadowGAN: A Target-Consistency Generative Adversarial Network for Unpaired Shadow Removal**

Chao Tan (Chongqing University of Technology)  
Xin Feng (Chongqing University of Technology)  
Bin Chen (Chongqing University of Technology)  
Jianwu Long (Chongqing University of Technology)

**Text-Guided Image Manipulation Based on Sentence-Aware and Word-Aware Network**

Zhiqiang Zhang (Hosei University)  
Chen Fu (Hosei University)  
Man M. Ho (Hosei University)  
Jinjia Zhou (Hosei University)  
Ning Jiang (Southwest University of Science and Technology)  
Wenxin Yu (Southwest University of Science and Technology)



**Diverse Image Colorization via Deep Color Prior and Triplet Latent Regularization**

Bin Jiang (Hunan University)  
Jiawu Dai (Hunan University)  
Weiyuan Zeng (Hunan University)  
Renjun Wang (Hunan University)

**SEPL-Net: A Semantics-Enhanced Pseudo Labeling Network for Semi-Supervised Image Analysis**

Wenjing Xiao (Huazhong University of Science and Technology)  
Kai Hwang (The Chinese University of Hong Kong, Shenzhen)  
Min Chen (Huazhong University of Science and Technology)  
Xianzhi Li (Huazhong University of Science and Technology)

**Multi-Task Feature Decomposition Based Marginal Distribution for Person Search**

Yuanzhe Yang (State Key Laboratory of Virtual Reality Technology and Systems, Beihang University)  
Xin Zhang (State Key Laboratory of Virtual Reality Technology and Systems, Beihang University)  
Qichuan Geng (Capital Normal University)  
Chengxiang Chu (State Key Laboratory of Virtual Reality Technology and Systems, Beihang University)  
Zhong Zhou (State Key Laboratory of Virtual Reality Technology and Systems, School of Computer Science and Engineering, Beihang University)

**CAT: Cross Attention in Vision Transformer**

Hezheng Lin (Beijing University of Posts and Telecommunications)  
Xing Cheng (University of Chinese Academy of Sciences)  
Xiangyu Wu (Kuaishou)  
Dong Shen (Zhejiang University)

**Feature Decoupled Autoencoder: Semi-Supervised Learning for Image Dehazing**

JinDong Wang (University of Science and Technology of China)  
Fan Wang (University of Science and Technology of China)  
Dong Yin (University of Science and Technology of China)

**Unlabeled Backdoor Poisoning in Semi-Supervised Learning**

Le Feng (Fudan University)

Sheng Li (Fudan University)

Zhenxing Qian (Fudan University)

Xinpeng Zhang (Fudan University)

**Generalizing Factorization of GANs by Characterizing Convolutional Layers**

Yuehui Wang (Sun Yat-sen University)

Qing Wang (Sun Yat-Sen University)

Dongyu Zhang (Sun Yat-sen University)

**Learn Effective Representation for Deep Reinforcement Learning**

Yuan Zhan (Institute of Automation, Chinese Academy of Sciences)

Zhiwei Xu (Institute of Automation, Chinese Academy of Sciences)

Guoliang Fan (Institute of Automation, Chinese Academy of Sciences)

**Semantic-Related Feature Generation for Generalized Zero-Shot Learning**

Peirong Ma (Fudan University)

Wu Ran (Fudan University)

Hong Lu (Fudan University)

**Online Robust Specific and Consistent Hashing**

Haitao Lin (Guangdong University of Technology)

Min Meng (Guangdong University of Technology)

Jigang Wu (Guangdong University of Technology)

**Gradual Domain Adaptation with Sample Transferability Exploitation for Person Re-Identification**

Zong Guo (Institute of Computing Technology, Chinese Academy of Sciences)

Bingpeng MA (University of Chinese Academy of Sciences)

Hong Chang (Chinese Academy of Sciences)

Xilin Chen (Institute of Computing Technology, Chinese Academy of Sciences)

**A Lightweight Image-Entropy Divide-and-Conquer Network For Low-Light Image Enhancement**

Hongjun Wu (Sun Yat-sen University)

Haoran Qi (Sun Yat-sen University)

Jingzhou Luo (Sun Yat-sen University)

Yining Li (Sun Yat-sen University)

Zhi Jin (Sun Yat-sen University)

**Effective JPEG Steganalysis Using Non-Linear Pre-Processing and Residual Channel-Spatial Attention**

Qingliang Liu (Sun Yat-sen University)

Jiangqun Ni (Sun Yat-sen Univ.)

Jian Mengxin (Sun Yat-Sen University)

**SE-GAN: Skeleton Enhanced GAN-based Model for Brush Handwriting Font Generation**

Shaozu Yuan (JD AI Research)

Ruixue Liu (JD AI Research)

Meng Chen (JD AI Research)

Baoyang Chen (Faculty of School of Experimental Arts; Central Academy of Fine Arts)

Zhijie Qiu (Faculty of School of Experimental Arts; Central Academy of Fine Arts)

Xiaodong He (JD AI Research)

**Graph Convolution Network Based Representation for Multi-View Multi-Label Learning**

Canguang Ruan (Tianjin University)

Liu Yang (Tianjin University)

Hui Li (Tianjin University)