



# IEEE ICASSP 2025 Satellite Event in Suzhou

Suzhou, China  
May 23 to 25, 2025



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## Friday, May 23

### **TUT-1: Speech Synthesis with Discrete Speech Tokens**

**Room: Rm. 206**

**Type: Tutorial**

**May 23rd 13:00-15:00**

**Presenter: Kai Yu (Shanghai Jiao Tong University)\*; Shujie Liu (Microsoft Research Asia); Xie Chen (Shanghai Jiaotong University); Yiwei Guo (Shanghai Jiao Tong University)**

### **TUT-2: A Deep Dive into Recent Advances in Stochastic Approximation**

**Room: Rm. 107**

**Type: Tutorial**

**May 23rd 13:00-16:30**

**Presenter: Gersende Fort (CNRS); Eric Moulines (Ecole Polytechnique); Hoi-To Wai (Chinese University of Hong Kong)\***

### **ETON: AI for Barrier-free Human-Computer Interaction: Latest Advances in Multi-modal Cued Speech Recognition and Generation**

**Room: Rm. 206**

**Type: Tutorial**

**May 23rd 17:00-18:00**

**Presenter: Li Liu (Hong Kong University of Science and Technology, Guangzhou)**

**Dr. Li Liu** Assistant Professor at Hong Kong University of Science and Technology

**Abstract:** In today's world, where AI technology is rapidly evolving, ensuring that everyone can communicate effectively is more important than ever. This is especially true for the deaf and hard-of-hearing community. Our research focuses on enhancing communication through the development of Automatic Cued Speech (CS) systems. In this talk, I will first introduce the effective yet simple CS system, and then discuss our innovative cross-modal mutual-learning framework that uses a low-rank Transformer for improved CS recognition. This system significantly enhances language integration across different modalities through modality-independent codebook representations. Additionally, I will highlight our thought-chain prompt-based framework for CS video generation, which leverages large language models to accurately and diversely link textual descriptions with CS gesture features. Our efforts have led to the creation of the first large-scale multilingual Chinese CS video dataset, setting new standards in CS recognition and generation across languages like Chinese, French, and English. Besides, I will introduce personalized speech generation and face image synthesis, aligned with speech and visual cues. This research is paving the way for more inclusive and effective Human-Computer Interaction, ensuring that technology can truly be accessible to everyone.

**Biography:** Dr. Li Liu is an assistant professor at AI Thrust, Information Hub, Hong Kong University of Science and Technology (Guangzhou). She obtained her Ph.D. degree from Gipsa-lab, University Grenoble Alpes, France. Her main research interests include multi-modal audio-visual speech processing, AI robustness and AI for healthcare. As the first author or corresponding author, she has published about 50 papers in top journals and conferences in related fields, including IEEE TPAMI, IEEE TMM, IEEE TMI, NeurIPS, ICCV, ACM MM and ICASSP etc. She was Local Chair (China site) ICASSP 2022 and Area Chair of ICASSP 2024 and 2025. In 2017, she won the French Sephora Berribe Award for Female Scientists in Mathematics and Computer Science. She obtained several scientific research projects, including the NSFC General Project and Guangdong Provincial Natural Science Foundation-General Project etc. Her paper was awarded the Best Student Paper Nomination Award at the International Conference

on Social Robotics 2024, and four papers were selected as the Shenzhen Excellent Science and Technology Academic Papers in 2022 and 2023.

## Saturday, May 24

### IFS-O1: Information Forensics and Security

**Room: Rm. 103**

**Type: Oral**

**May 24th 10:30-12:00**

#### IFS-O1-1: Steering Large Language Models for Vulnerability Detection

Jiayuan Li (Institute of Information Engineering, Chinese Academy of Sciences); Lei Cui (Quancheng Lab); Jie Zhang (IIE,CAS); Haiqiang Fei (Institute of Information Engineering, Chinese Academy of Sciences); Yu Chen (Institute of Information Engineering, Chinese Academy of Sciences); Hongsong Zhu (Institute of information Engineering, CAS)

#### IFS-O1-2: ECG-guided individual identification via PPG

Riling Wei (Zhejiang Lab); Hanjie Chen (Hong Kong Centre for Cerebro-cardiovascular Health Engineering (COCHE)); Kelu Yao (Zhejiang Lab; Zhejiang University); Chuanguang Yang (Institute of Computing Technology, Chinese Academy of Sciences); Jun Wang (Zhejiang Lab); Chao Li (Zhejiang Lab)

#### IFS-O1-3: Imperceptible Transfer Attack on Large Vision-Language Models

Xiaowen Cai (Huazhong University of Science and Technology); Daizong Liu (Peking University); Runwei Guan (University of Liverpool); Pan Zhou (Huazhong University of Science and Technology)

#### IFS-O1-4: FairAdapter: Detecting AI-generated Images with Improved Fairness

Feng Ding (Nanchang University); Jun Zhang (Nanchang University); Xinan He (Nanchang University); Jianfeng Xu (Nanchang University)

#### IFS-O1-5: TSLA: A Multi-Task Time Series Language Model

Liri Fang (University of Illinois Urbana-Champaign); Yuncong Chen (NEC Laboratories America, Inc.); Wenchao Yu (UCLA); Yanchi Liu (NEC Labs America); Lu-An Tang (NEC Labs America); Vette Torvik (University of Illinois at Urbana-Champaign); Haifeng Chen (NEC Labs)

### GC-O1: Grand Challenge I

**Room: Rm. 104**

**Type: Oral**

**May 24th 10:30-12:00**

#### GC-O1-1: Mitigating Category Imbalance: Fosafer System for the Multimodal Emotion and Intent Joint Understanding Challenge

Honghong Wang (Beijing Yuanjian Technology Co., LTD); Yankai Wang (Beijing Fosafer Information Technology Co., Ltd.); Dejun Zhang (Beijing Fosafer Information Technology Co., Ltd.); Jing Deng (Beijing Fosafer Information Technology Co., Ltd.); Rong Zheng (Beijing Fosafer Information Technology Co., Ltd.)

#### GC-O1-2: Reliable Learning From LLM Features for Multimodal Emotion and Intent Joint Understanding

Xiaolin Xu (Southeast University); Cheng Lu (Southeast University); Zhaoyang Li (Southeast University); Yuyun Liu (Southeast University); Yinghao Ma (Southeast University); Jiahao Luo (Southeast University); Yuan Zong (Southeast University); Wenming Zheng (Southeast University)



**GC-O1-3: Multimodal Fusion for EEG Emotion Recognition in Music with a Multi-Task Learning Framework**

Shengyao Huang (East China University of Science and Technology); Zhishuo Jin (East China University of Science and Technology); Dongdong Li (East China University of Science and Technology); Jinchen Han (East China University of Science and Technology); Xie Tao (East China University of Science and Technology)

**SPCOM-O: Machine Learning-Driven Wireless Systems**

**Room: Rm. 105**

**Type: Oral**

**May 24th 10:30-12:00**

**SPCOM-O-1: Symbol-Level Precoding-Based Self-Interference Cancellation for ISAC Systems**

Shu Cai (Nanjing University of Posts and Telecommunications); Zihao Chen (Nanjing University of Posts and Telecommunications); Ya-Feng Liu (Chinese Academy of Sciences); Jun Zhang (Nanjing University of Posts and Telecommunications)

**SPCOM-O-2: Radio Map Estimation via Latent-Domain Plug-and-Play Denoisers**

Le Xu (Oregon State University); Lei Cheng (Zhejiang University); Junting Chen (The Chinese University of Hong Kong, Shenzhen); Wenqiang Pu (Shenzhen Research Institute of Big Data); Xiao Fu (Oregon State University)

**SPCOM-O-3: Cooperative Multi-Target Tracking Based on Multi-Detection TPD in MIMO-OFDM Systems**

Zhong Chen (Nanjing University); Tang Lan (Nanjing University); Liang Ying-Chang (University of Electronic Science and Technology of China)

**SPCOM-O-4: RIS-Enabled Self-Interference Elimination in Monostatic Full-Duplex DFRC Systems**

Linlong Wu (University of Luxembourg); Zichao Xiao (Dalian University of Technology); Bhavani Shankar Mysore Ramarao (University of Luxembourg); Bjorn Ottersten (SnT)

**SLP-O1: Speaker Diarization and Recognition**

**Room: Rm. 107**

**Type: Oral**

**May 24th 10:30-12:00**

**SLP-O1-1: Leveraging Self-Supervised Learning for Speaker Diarization**

Jiangyu Han (Brno University of Technology); Federico Landini (Brno University of Technology); Johan Rohdin (Brno University of Technology); Anna Silnova (Brno University of Technology); Mireia Diez (Brno University of Technology); Lukas Burget (Brno University of Technology)

**SLP-O1-2: SCDiar: a streaming diarization system based on speaker change detection and speech recognition**

Naijun Zheng (Huawei Technologies Co., Ltd.); Xucheng Wan (Huawei Technologies Co., Ltd.); Kai Liu (Huawei Technologies Co., Ltd.); Zhou Huan (AARC, Huawei Technologies Co., Ltd.)

**SLP-O1-3: SoCov: Semi-Orthogonal Parametric Pooling of Covariance Matrix for Speaker Recognition**

Rongjin Li (VoiceAI); Weibin Zhang (VoiceAI); Dongpeng Chen (VoiceAI); Jintao Kang (Ministry of Public Security); Xiaofen Xing (South China University of Technology)

**SLP-O1-4: Denoising Student Features with Diffusion Models for Knowledge Distillation in Speaker Verification**

Ze Zhong Jin (The Hong Kong Polytechnic University); Youzhi Tu (The Hong Kong Polytechnic University); Zhe Li (Hong Kong Polytechnic University); Huang Zilong (The Hong Kong Polytechnic University); Chong-Xin Gan (The Hong Kong Polytechnic University); Man-Wai Mak (The Hong Kong Polytechnic University)

**SLP-O1-5: Spectral-Aware Low-Rank Adaptation for Speaker Verification**

Zhe Li (Hong Kong Polytechnic University); Manwai Mak (The Hong Kong Polytechnic University); Mert Pilanci (Stanford University); Hung-Yi Lee (National Taiwan University); Helen Meng (The Chinese University of Hong Kong)

**AASP-O1: Audio Enhancement and Quality**

**Room: Rm. 108 & 109**

**Type: Oral**

**May 24th 10:30-12:00**

**AASP-O1-1: DeepPEM-AFC: An Improved Prediction-Error-Method-based Adaptive Feedback Cancellation with Deep Learning for Hearing Aids**

Xiaofan Zhan (Key Laboratory of Noise and Vibration Research, Institute of Acoustics, Chinese Academy of Sciences); Fengyuan Hao (Key Laboratory of Noise and Vibration Research, Institute of Acoustics, Chinese Academy of Sciences; University of Chinese Academy of Sciences); Xiaodong Li (Chinese Academy of Sciences); Chengshi Zheng (Chinese Academy of Science)

**AASP-O1-2: HAPG-SAQAM: Human Auditory Perception Guided Spatial Audio Quality Assessment Metric**

Yuanming Zheng (Wuhan University); Jiaxuan Yao (Wuhan University); Xiangyu Deng (Wuhan University); Yuhong Yang (Wuhan University); Ruiqi Liao (Wuhan University); Weiping Tu (Wuhan University); Cedar Lin (OPPO)

**AASP-O1-3: Augmenting Short Enrollment Speech via Synthesis for Target Speaker Extraction**

Zikang Huang (Tianjin University); Jingru Lin (National University of Singapore); Meng Ge (Tianjin University); Yu Jiang (Tianjin University); Xiaobao Wang (Tianjin University); Longbiao Wang (Tianjin University); Jianwu Dang (Tianjin University)

**AASP-O1-4: Audiogram-Informed End-to-End Noise Reduction and Wide Dynamic Range Compression for Hearing Aids**

Huiyong Zhang (Institute of Acoustics, Chinese Academy of Sciences); Brian Moore (University of Cambridge); Lingling Dai (Institute of Acoustics, Chinese Academy of Sciences); Fengyuan Hao (Key Laboratory of Noise and Vibration Research, Institute of Acoustics, Chinese Academy of Sciences; University of Chinese Academy of Sciences); Xiaodong Li (Institute of Acoustics, Chinese Academy of Sciences); Chengshi Zheng (Chinese Academy of Science)

**AASP-O1-5: DRCap: Decoding CLAP Latents with Retrieval-augmented Generation for Zero-shot Audio Captioning**

Xiquan Li (Shanghai Jiao Tong University); Wenxi Chen (Shanghai Jiao Tong University); Ziyang Ma (Shanghai Jiao Tong University); Xuenan Xu (Shanghai Jiao Tong University); Yuzhe Liang (Shanghai Jiaotong University); Zhisheng Zheng (Shanghai Jiao Tong University); Qiuqiang Kong (CUHK); Xie Chen (Shanghai Jiaotong University)

**MLSP-O1: Embedding and Representation Learning for Large-Scale Data**

**Room: Rm. 205**

**Type: Oral**

**May 24th 10:30-12:00**

**MLSP-O1-1: Towards Efficient Deep Hashing Retrieval: Condensing Your Data via Feature-Embedding Matching**

Tao Feng (Donghua university); Jie Zhang (ETH Zurich); Huashan Liu (Donghua University); Zhijie Wang (Donghua university); Shengyuan Pang (Zhejiang University)

**MLSP-O1-2: SPEA: Large-Scale Entity Alignment via Self-Partitioning**

Weiguo Chen (National University of Defense Technology); Changjian Wang (National University of Defense Technology); Kele Xu (National University of Defense Technology); Yuan Yuan (National University of Defense Technology); Wei Chen (College of Computer, National University of Defense Technology); Zixuan Dong (National University of Defense Technology)

**MLSP-O1-3: Out-of-Distribution Detectors: Not Yet Primed for Practical Deployment**

Changshun Wu (Université Grenoble Alpes); Wendi Ding (Université Grenoble Alpes); Xiaowei Huang (Liverpool University); Saddek Bensalem (University of Grenoble Alpes (UGA))

**IVMSP-P1: Machine Learning for Image and Video Processing I**

**Room: Rm. 206**

**Type: Poster**

**May 24th 10:30-12:00**

**IVMSP-P1-1: Dual-PST Dual-Branch SpatioTemporal-Planar Network for Video Forgery Detection**

Siyu Liu (Anhui University); Zhida Zhang (Institute of Automation, Chinese Academy of Sciences); Junxian Duan (National Laboratory of Pattern Recognition); Jie Cao (Institute of Automation, Chinese Academy of Sciences); Aihua Zheng (Anhui University)

**IVMSP-P1-2: CPA-Enhancer: Chain-of-Thought Prompted Adaptive Enhancer for Downstream Vision Tasks Under Unknown Degradations**

Yuwei Zhang (Tongji University); Yan Wu (Tongji University); Yanming Liu (Zhejiang University); Xinyue Peng (Southeast University)

**IVMSP-P1-3: Learning Adaptive Spatial-temporal Structured Correlation Filters for UAV Object Tracking**

Li Gong (Harbin Institute of Technology); Wei Zhao (Harbin Institute of Technology); Peng Liu (Harbin Institute of Technology); Xianglong Tang (Harbin Institute of Technology)

**IVMSP-P1-4: GMM-Based Bootstrap Prototype-Aware Learning For Weakly Supervised Semantic Segmentation**

Yahui Wu (SenseTime Group Inc)

**IVMSP-P1-5: Camouflaged Object Detection with CNN-Transformer Harmonization and Calibration**

Yilin Zhao (Shanghai Institute of Technology); Qing Zhang (Shanghai Institute of Technology); Yuetong Li (Shanghai Institute of Technology)

**IVMSP-P1-6: SDAFE: A dual-filter Stable Diffusion Data Augmentation Method for Facial Expression Recognition**

Minghua Zhao (Xi'an University of Technology); Yifei Chen (Xi'an University of technology); Jiahao Lyu (Xi'an University of Technology); Shuangli Du (Xi'an University of Technology); Zhiyong Lv (Xi'an University of Technology); Lin Wang (Xi'an University of Technology)

**IVMSP-P1-7: Uncertainty-aware Correspondence Distillation for Deep Image Clustering**

Luyao Chang (University of Electronic Science and Technology of China); Leiting Chen (School of Computer Science and Engineering, University of Electronic Science and Technology of China); Chuan Zhou (School of Computer Science and Engineering, University of Electronic Science and Technology of China)

**IVMSP-P1-8: DMKPN: Image Deblurring Under Multi-Factor Aliasing Diffusion Degradation**

Ying Zhang (Institute of Software Chinese Academy of Sciences); Xiongxin Tang (Institute of Software Chinese Academy of Sciences); Hanxiang Yang (Institute of Software, Chinese Academy of Sciences); Qiao Chen (Institute of Software, Chinese Academy of Sciences); Fanjiang Xu (Institute of Software, Chinese Academy of Sciences)

**IVMSP-P1-9: A Practical Gated Recurrent Transformer Network Incorporating Multiple Fusions for Video Denoising**  
Kai Guo (Samsung Electronics); Seungwon Choi (Samsung Electronics); Jongseong Choi (Samsung Electronics); Lae-Hoon Kim (Samsung Electronics)

**IVMSP-P1-10: Enhancing Change Detection in Remote Sensing: Integrating Synthetic Data with Semi-Supervised Learning**  
Yafei Luo (UNSW); Erik Meijering (University of New South Wales); Yang Song (University of New South Wales)

**IVMSP-P1-11: EP-SAM: An Edge-Detection Prompt SAM Based Efficient Framework for Ultra-Low Light Video Segmentation**  
Zhitao Wang (Tsinghua University); Jiangtao Wen (Research Institute of Tsinghua University in Shenzhen); Yuxing Han (Tsinghua University)

**IVMSP-P1-12: Context-Guided Active Domain Adaptation for Blended Target Domain**  
Yuwu Lu (South China Normal University); Yang Yihan (south china normal university)

**IVMSP-P1-13: Hierarchical Multimodal Decoupling-Fusion Framework for offline Multiple Appropriate Facial Reaction Generation**  
Qincheng Lv (Hohai University); Xiaofeng Liu (Hohai University); Jie Li (Nanjing Medical University); Rongrong Ni (Changzhou University); Pujun Xue (Hohai University); Siyang Song (University of Cambridge)

**IVMSP-P2: Machine Learning for Image and Video Processing II**

**Room: Rm. 206**

**Type: Poster**

**May 24th 10:30-12:00**

**IVMSP-P2-1: SFE-Net: Harnessing Biological Principles of Differential Gene Expression for Improved Feature Selection in Deep Learning Networks**  
Yuqi Li (Qifu Technology); Yuanzhong Zheng (Qifu Technology); Yaoxuan Wang (Qifu Technology); Jianjun Yin (Fudan University); Haojun Fei (QFin)

**IVMSP-P2-2: Harnessing Light Field Angular Cues and Spatial Geometries for Semantic Segmentation**  
Chen Jia (Tianjin University of Technology); Fan Shi (Tianjin University of Technology); Xu Cheng (Norwegian University of Science and Technology)

**IVMSP-P2-3: Rethinking Camouflaged Object Detection via Foreground-Background Interactive Learning**  
Chenxi Zhang (Shanghai Institute of Technology); Qing Zhang (Shanghai Institute of Technology); Jiayun Wu (Shanghai Institute of Technology)

**IVMSP-P2-4: Self-Supervised Image Harmonization via Holistic Feature Fusion**  
Chenyang Tian (Sun Yat-sen University); Qing Zhang (Sun Yat-sen University)

**IVMSP-P2-5: Gated Cross-Attention Network for Depth Completion**  
Xiaogang Jia (College of Computer, National University of Defense Technology); Songlei Jian (NUDT); Yusong Tan (College of Computer, National University of Defense Technology); Yonggang Che (College of Computer, National University of Defense Technology China jiansonglei@nudt.edu.cn Songlei Jian National University of Defense Technology); Wei Chen (College of Computer, National University of Defense Technology); Zhengfa Liang (Defense Innovation Institute)

**IVMSP-P2-6:  $M^2F^2$ Net: Multi-stage Mixed Feature Fusion Network For Remote Sensing Change Detection**

Gu Binhao (Southeast University); Youyong Kong (Southeast University)

**IVMSP-P2-7: Dynamic Routing and Calibration for Few-Shot Object Detection**

Jiaqi Wu (Zhejiang University of Technology); Jie Lei (Zhejiang University of Technology); Hao Tian (Zhejiang University of Technology); Xiaoqiang Liu (Zhejiang University of Technology); Zunlei Feng (Zhejiang University); Ronghua Liang (Zhejiang University of Technology)

**IVMSP-P2-8: MotionFlow: Joint Motion Priors and Appearance Enhancement for High-Accuracy Optical Flow Estimation**

Zixu Wang (Northwestern Polytechnical University); Congxuan Zhang (Nanchang Hangkong University); Zhen Chen (Nanchang Hangkong University); Hongye Chen (Nanchang Hangkong University); Liyue Ge (Nanchang Hangkong University); Ke Lu (University of Chinese Academy of Sciences)

**IVMSP-P2-9: Bilevel Learning for Low-Light Image Enhancement and Detection**

Wei Wang (School of Computer Science and Engineering, Northeastern University); Bojian Song (Shenyang institute of computing technology, Chinese academy of sciences); Xi Chen (He University); Yaxin Gao (Shenyang institute of computing technology, Chinese academy of sciences); Weimin Lei (School of Computer Science and Engineering, Northeastern University)

**IVMSP-P2-10: Boosting Lightweight Camouflaged Object Detection with Multi-Scale Context and Boundary Awareness**

Zihan Xu (Tianjin University); Zheng Wang (Tianjin University); Haoyu Wang (Tianjin University); Cheng Liu (Tianjin University); Yan Zhou (Tianjin University); Meijun Sun (Tianjin University)

**IVMSP-P3: Machine Learning for Image and Video Processing III**

**Room: Rm. 206**

**Type: Poster**

**May 24th 10:30-12:00**

**IVMSP-P3-1: A Fast Saturation Based Dehazing Framework with Accelerated Convolution and Attention Block**

Shuocheng Wang (Fudan University); Jiaming Liu (Fudan University); Yilian Zhong (Fudan University); Ruoxi Zhu (Fudan University); Jiazheng Lian (Fudan University); Hao Zhang (Fudan University); Yibo Fan (Fudan University)

**IVMSP-P3-2: RAPID: Recognition of Any-Possible DrIver Distraction via Multi-view Pose Generation Models**

Jingyu Lei (Zhejiang University); Shengyu Hao (Zhejiang University); Gaoang Wang (Zhejiang University); Der-Horng Lee (Zhejiang University)

**IVMSP-P3-3: PDTrack: Progressive Distance Association for Multiple Object Tracking**

Yeqiang Liu (China Agricultural University); Weiran Li (China Agricultural University); Yanhao Ding (China Agricultural University); Zhenbo Li (China Agricultural University)

**IVMSP-P3-4: Dual Multi-Scale GCN with Deformable Temporal Kernel for Skeleton-based Action Recognition**

Jianan Li (Xidian University); Yangtao Zhou (Xidian University); Hua Chu (Xidian University); Han Wang (Xidian University); Zhifu Zhao (Xidian University); Fei Li (Xidian University); Qingshan Li (Xidian University)

**IVMSP-P3-5: Sparse Generation: Making Pseudo Labels Sparse for Point Weakly Supervised Object Detection on Low Data Volume**

Chuyang Shang (Xi'an university of science and technology); Tian Ma (Xi'an University of Science and Technology); Wanzhu Ren (Xi'an university of science and technology); Yuancheng Li (Xi'an university of science and technology); Jiayi Yang (Xi'an university of science and technology)

**IVMSP-P3-6: BiMA: Bidimensional multi-level attention embedded network for single-frame infrared small target detection**

Deng He (Wuhan University of Science and Technology); Xiaojie Yin (Wuhan University of Science and Technology); Xianmin Lan (Wuhan University of Science and Technology)

**IVMSP-P3-7: One-Shot Face Avatar Generation in a Single Forward Pass with Identity Preservation**

Yingmao Miao (Xi'an Jiaotong University); Chenhao Lin (Xi'an Jiaotong University); Zhengyu Zhao (Xi'an Jiaotong University); Hang Wang (Xi'an Jiaotong University); Shuai Liu (Xi'an Jiaotong University); Chao Shen (Xi'an Jiaotong University); Xiaohong Guan (Xi'an Jiaotong University)

**IVMSP-P3-8: IOVS4NeRF: Incremental Optimal View Selection for Large-Scale NeRFs**

Jingpeng Xie (Hunan University); Shiyu Tan (Hunan University); Yuanlei Wang (Hunan University); Tianle Du (Nanchang University); Yifei Xue (Hunan University); Yizhen Lao (Hunan University)

**IVMSP-P3-9: pFedFace: Personalized Federated Learning for Face Recognition**

Ya Gao (Peking University); Anyang Su (Mininglamp Academy of Sciences, Mininglamp Technology); Chenxu Zhao (Mininglamp Technology); Jie Song (Peking University)

**IVMSP-P3-10: FR<sup>2</sup>ViT: Finetuning-free Token Reduction for Dense Prediction Through a Refinement-Reactivation Architecture**

Haipeng Fang (Institute of Computing Technology, Chinese Academy of Sciences; University of Chinese Academy of Sciences); Ziheng Wu (Alibaba Group); Xinyi Zou (Alibaba Group); Jun Huang (Alibaba Group); Juan Cao (Institute of Computing Technology, Chinese Academy of Sciences; University of Chinese Academy of Sciences); Sheng Tang (Institute of Computing Technology, Chinese Academy of Sciences)

**IVMSP-P3-11: TMANet: Triple Multi-Scale Attention based Network with Boundary Association Loss for Superpixel Segmentation**

Ziyi Zhang (Hainan University); Shijie Lian (Huazhong University of Science and Technology); Hua Li (Hainan University)

**IVMSP-P3-12: Spectral Enhancement and Pseudo-Anchor Guidance for Infrared-Visible Person Re-Identification**

Yiyuan Ge (Beijing Information Science & Technology University); Zhihao Chen (Beijing Information Science & Technology University); Ziyang Wang (University of Oxford); Jiaju Kang (School of Computer Science and Technology, Shandong Jianzhu University); Zhang Ming Ya (Nanjing University)

**IVMSP-P3-13: Enhancing Emotion Reasoning for Image Multi-Emotion Prediction**

Bingbing Wang (Harbin Institute of Technology, Shenzhen); Geng Tu (Harbin Institute of Technology, Shenzhen, China; Guangdong Provincial Key Laboratory of Novel Security Intelligence Technologies); Bin Liang (The Chinese University of Hong Kong; Harbin Institute of Technology (Shenzhen)); Zhixin Bai (Harbin Institute of Technology); Min Yang (Chinese Academy of Sciences); Xi Zeng (The 30th Research Institute of China Electronics Technology Group Corporation); Liang Yao (Tencent Inc.); Ruifeng Xu (Harbin Institute of Technology, Shenzhen, China; Peng Cheng Laboratory, Shenzhen, China; Guangdong Provincial Key Laboratory of Novel Security Intelligence Technologies)

**IVMSP-P3-14: Distilling Generative-Discriminative Representations for Very Low-Resolution Face Recognition**

Zhang Junzheng (Institute of Information Engineering, Chinese Academy of Sciences); Weijia Guo (Chinese Academy of Sciences); Bochao Liu (Chinese Academy of Sciences); Ruixin Shi (Chinese Academy of Sciences); Li Yong (Institute of Information Engineering, Chinese Academy of Sciences); Shiming Ge (Chinese Academy of Sciences)

**BISP-P1: Brain/BCI and Emerging Biomedical Processing Methods****Room: Rm. 206****Type: Poster****May 24th 10:30-12:00****BISP-P1-1: DepMamba: Progressive Fusion Mamba for Multimodal Depression Detection**

Jiaxin Ye (Fudan University); Junping Zhang (Fudan University); Hongming Shan (Fudan University)

**BISP-P1-2: Enhancing Continual Learning for Medical Imaging: Efficient Knowledge Transfer and Multi-Disease Prediction**

En Zhi Wang (Nankai University); Qicheng Li (Nankai University); Di Liu (Beijing Normal University); Bo Yang (AIFUTURE Lab)

**BISP-P1-3: KGD-GNN: A Knowledge-Guided Graph Neural Network for Myocardial Infarction Localization via 12-lead ECG**

Lin Guo (Big Data Institute, Central South University); Yingqi Wu (Big Data Institute, Central South University); Nan Ma (School of Design, Hunan University); Ying An (Big Data Institute, Central South University)

**BISP-P1-4: Unsupervised Search for Ethnic Minorities' Disc-Cup Segmentation Training Set**

Yixiao Chen (Northeastern University); Yue Yao (The Australian National University); Ruining Yang (Northeastern University); Md Zakir Hossain (The Australian National University); Ashu Gupta (Fiona Stanley Hospital); Tom Gedeon (Australian National University)

**BISP-P1-5: A Novel Audio-Visual Multimodal Semi-Supervised Model Based on Graph Neural Networks for Depression Detection**

Yaqin Li (Ningbo university); Chenjian Sun (Ningbo University); Yihong Dong (Ningbo University)

**BISP-P1-6: Enhancing Generalized EEG Classification with Decomposed Statistics-diverse Feature Augmentation**

Yubin He (South China University of Technology); C. L. Philip Chen (University of Macau); Bianna Chen (South China University of Technology); Tong Zhang (South China University of Technology)

**BISP-P1-7: Double Domain Converter Transformer For Improving EEG-Based Emotion Recognition from Video to Game Scenarios**

Jun-Yu Pan (Shanghai Jiao Tong University); Hao-Long Yin (Shanghai Jiao Tong University); Wei-Long Zheng (Shanghai Jiao Tong University)

**BISP-P1-8: SEE: Semantically Aligned EEG-to-Text Translation**

Yitian Tao (Shanghaitech University); Yan Liang (Shanghaitech University); Luoyu Wang (Shanghaitech University); Yongqing Li (Shanghaitech University); Qing Yang (Shanghaitech University); Han Zhang (ShanghaiTech University)

**BISP-P1-9: STGE-Former: Spatial-Temporal Graph-Enhanced Transformer for EEG-Based Major Depressive Disorder Detection**

Yu Chen (Southeast University); Chunfeng Yang (Southeast University)

**BISP-P1-10: A Novel Self-Supervised Contrastive Learning Framework for Masked EEG Motor Imagery Modeling**

Kunkun Zhang (Zhejiang University of Technology); Qianwei Zhou (zhejiang university of technology); Haigen Hu (Zhejiang University of Technology)

**BISP-P1-11: DARN: An Attention-Based Neural Network Using Residual Blocks for Sleep Micro-Events Detection**

Fei Wang (South China Normal University); Zhuorong Li (South China Normal University); Jingcong Li (South China Normal University)

**BISP-P1-12: A Novel Multimodal Method for Decoding Speech Perception from Brain Activities**

Aoke Zhang (Peking University); Bo Wang (Peking University); Xihong Wu (Peking University); Jing Chen (Peking University)

**BISP-P1-13: BID-Net: Balanced Incremental Distillation Network for Fair Dermatological Disease Diagnosis**

Yiqin Luo (Jinan University); Tianlong Gu (Jinan University); Fengrui Hao (Jinan University); Liang Chang (Guilin University of Electronic Technology)

**BISP-P1-14: MMFN: Multi-Feature Multi-Modal Fusion Network for Diagnosis of Superficial Lymph Node Disease**

Yuankun Wang (Shenzhen University); Cheng Zhao (shenzhen university); Yingxin Liu (Shenzhen Children's Hospital); Baiying Lei (Shenzhen University); Tianfu Wang (Shenzhen university); Luyao Zhou (Shenzhen Children's Hospital)

**BISP-P1-15: GLoG-CSUnet: Enhancing Vision Transformers with Adaptable Radiomic Features for Medical Image Segmentation**

Niloufar Eghbali Zarch (Michigan state university); Hassan Bagher Ebadian (HFHS); Tuka Alhanai (New York University Abu Dhabi); Mohammad Ghassemi (Michigan State University)

**AASP-P1: Music & Multimedia Audio: Analysis, Generation, Captioning, Retrieval**

**Room: Rm. 206**

**Type: Poster**

**May 24th 10:30-12:00**

**AASP-P1-1: LHQ-SVC: Lightweight and High Quality Singing Voice Conversion Modeling**

Yubo Huang (Southwest Jiaotong University); Xin Lai (Southwest Jiaotong University); Muyang Ye (Southwest Jiaotong University); Anran Zhu (Southwest Jiaotong University); Zixi Wang (Southwest Jiaotong University); Jingzehua Xu (Massachusetts Institute of Technology); Shuai Zhang (New Jersey Institute of Technology); Zhiyuan Zhou (southwest jiaotong university); New Wayj (Southwest Jiaotong University)

**AASP-P1-2: Hybrid Losses for Hierarchical Embedding Learning**

Haokun Tian (Queen Mary University of London); Stefan Lattner (Sony CSL); Brian Mcfee (New York University); Charalampos Saitis (Queen Mary University of London)

**AASP-P1-3: DSINet: Towards Real-Time Target Speaker Extraction with Dynamic Speaker Information Fusion**

Fengyuan Hao (Key Laboratory of Noise and Vibration Research, Institute of Acoustics, Chinese Academy of Sciences; University of Chinese Academy of Sciences); Andong Li (Institute of Acoustics, Chinese Academy of Sciences); Xiaodong Li (Institute of Acoustics, Chinese Academy of Sciences); Chengshi Zheng (Chinese Academy of Science)

**AASP-P1-4: LoVA: Long-form Video-to-Audio Generation**

Xin Cheng (Gaoling School of Artificial Intelligence); Xihua Wang (Renmin University of China); Yihan Wu (Renmin University of China); Yuyue Wang (Renmin University of China); Ruihua Song (Renmin University of China)



**AASP-P1-5: From Voices to Beats: Enhancing Music Deepfake Detection by Identifying Forgeries in Background**

Zhaolin Wei (Key Laboratory of Aerospace Information Security and Trusted Computing, Ministry of Education , School of Cyber Science and Engineering ,Wuhan University); Dengpan Ye (Key Laboratory of Aerospace Information Security and Trusted Computing, Ministry of Education , School of Cyber Science and Engineering ,Wuhan University); Jiacheng Deng (Key Laboratory of Aerospace Information Security and Trusted Computing, Ministry of Education , School of Cyber Science and Engineering ,Wuhan University); Yuhao Lin (Key Laboratory of Aerospace Information Security and Trusted Computing, Ministry of Education , School of Cyber Science and Engineering ,Wuhan University)

**AASP-P1-6: SYKI-SVC: Advancing Singing Voice Conversion with Post-Processing Innovations and an Open-Source Professional Testset**

Yiquan Zhou (xjtu); Wenyu Wang (Xi'an Jiaotong University); Hongwu Ding (Anhui University); Jiacheng Xu (bilibili); Jihua Zhu (Xi'an Jiaotong University); Xin Gao (Union Wheatland Culture and Media Ltd.); Shihao Li (Union Wheatland Culture & Media Ltd.)

**AASP-P1-7: AudioCache: Accelerate Audio Generation With Training-Free Layer Caching**

Qingyang Shi (Tsinghua University); Zhicheng Du (Tsinghua University); Jiasheng Lu (HUAWEI TECHNOLOGIES CO.LTD); Yingshan Liang (Tsinghua University); Xinyu Zhang (Tsinghua University); Yiran Wang (Tsinghua University); Jing Peng (Tsinghua University); Kehong Yuan (Tsinghua Shenzhen International Graduate School, Tsinghua University)

**AASP-P1-8: M2PAIR: A High-Quality Acoustic Impulse Response Computation Model**

Zhiyu Li (School of Information and Electronics, Beijing Institute of Technology); Xinpei Zhao (School of Information and Electronics, Beijing Institute of Technology); Jing Wang (Beijing Institute of Technology); Xinyuan Qian (USTB); Xiang Xie (Beijing Institute of Technology)

**AASP-P1-9: Map-Guided Few-Shot Audio-Visual Acoustics Modeling**

Diwei Huang (South China University of Technology); Kunyang Lin (South China University of Technology); Peihao Chen (South China University of Technology); Qing Du (South China University of Technology)

**AASP-P1-10: Smooth-Foley: Creating Continuous Sound for Video-to-Audio Generation Under Semantic Guidance**

Yaoyun Zhang (Shanghai Jiao Tong University); Xuenan Xu (Shanghai Jiao Tong University); Mengyue Wu (Shanghai Jiao Tong University)

**AASP-P1-11: Global Enhanced Frame Prompt Tuning for Sound Event Detection**

Yushi Yu (Jiangsu University); Lijian Gao (Jiangsu University); Qirong Mao (Jiangsu University)

**AASP-P1-12: Bridging the Modality Gap for Speech-image Retrieval with Text Supervision**

Yuting Yang (NetEase Yidun AI Lab); Lifeng Zhou (NetEase Yidun AI Lab); Yuke Li (NetEase Yidun AI Lab); Guodong Ma (NetEase Yidun AI Lab)

**AASP-P1-13: TAGMO: Temporal Control Audio Generation for Multiple Visual Objects Without Training**

Xinyu Zhang (Tsinghua University); Keyu Fan (Tsinghua University); Yiran Wang (Tsinghua University); Yingshan Liang (Tsinghua University); Jiasheng Lu (HUAWEI TECHNOLOGIES CO.LTD); Zhicheng Du (Tsinghua University); Qingyang Shi (Tsinghua University); Peiwu Qin (Tsinghua University)

**AASP-P1-14: A Novel Weighted Sparse Component Analysis for Underdetermined Blind Speech Separation**

Yudong He (The Hong Kong University of Science and Technology); Baek Hyun Woo (The Hong Kong University of Science and Technology); Richard So (HKUST)

**AASP-P1-15: LMFCA-Net: A Lightweight Model for Multi-Channel Speech Enhancement with Efficient Narrow-Band and Cross-Band Attention**

Yaokai Zhang (Wuhan University); Hanchen Pei (Wuhan University); Wanqi Wang (Wuhan University); Gongping Huang (Wuhan University)

**ASPS-P1: Neuromorphic and Quantum Signal Processing for Edge AI, IoT, and Autonomous Systems**

**Room: Rm. 206**

**Type: Poster**

**May 24th 10:30-12:00**

**ASPS-P1-1: Windowed quantum phase estimation: signal processing approach to a quantum algorithm**

Xue Wen (Samsung)

**ASPS-P1-2: Mixed Spiking NeRF: Towards a More Efficient Neural Radiance Fields**

Kaian Wang (Sustech); Longhao Zou (Peng Cheng Laboratory)

**ASPS-P1-3: Deep Model Pruning without Finetuning for Few Category Datasets**

Yuchen Huang (Soochow University); Jie Xie (Soochow University); Cheng Wu (Soochow University)

**ASPS-P1-4: Time-Graph Frequency Representation with Singular Value Decomposition for Neural Speech Enhancement**

Tingting Wang (Nanjing University of Posts and Telecommunications Nanjing); Tianrui Wang (Tianjin University); Meng Ge (Tianjin University); Qiquan Zhang (The University of New South Wales); Zirui Ge (Nanjing University of Posts and Telecommunications); Zhen Yang (Nanjing University of Posts and Telecommunication)

**ASPS-P1-5: Data Glove-based Personalized Continuous Gesture Segmentation**

Liufeng Fan (Harbin Institute of Technology); Zhan Zhang (Harbin Institute of Technology); Yiwei Wang (Harbin Institute of Technology); Decheng Zuo (Harbin Institute of Technology); Yinran Wang (Harbin Institute of Technology); Zhongyuan Chen (Harbin Institute of Technology)

**ASPS-P1-6: A Robust Distributed Recurrent Neural Network for Multi-Agent Consensus Control**

Yiwei Li (National University of Defense Technology); Jiaxin Liu (National University of Defense Technology); Lin Yang (National University of Defense Technology); Yating Zhang (National University of Defense Technology); Kunlin Liu (National University of Defense Technology); Ge Zhou (National University of Defense Technology); Liangze Yin (National University of Defense Technology); Wei Dong (National University of Defense Technology)

**ASPS-P1-7: USV-AUV Collaboration Framework for Underwater Tasks under Extreme Sea Conditions**

Jingzehua Xu (Tsinghua Shenzhen International Graduate School, Tsinghua University); Guanwen Xie (Tsinghua Shenzhen International Graduate School, Tsinghua University); Xinqi Wang (College of Information Science & Electronic Engineering, Zhejiang University); Yimian Ding (Tsinghua Shenzhen International Graduate School, Tsinghua University); Shuai Zhang (New Jersey Institute of Technology)

**ASPS-P1-8: TAME: Temporal Audio-based Mamba for Enhanced Drone Trajectory Estimation and Classification**

Zhenyuan Xiao (NUAA); Huanran Hu (NUAA); Guili Xu (NUAA); Junwei He (NUAA)

**ASPS-P1-9: AMSER: Accelerate Mobile Speech Emotion Recognition with Signal Compression**

Yu Lu (Shanghai Jiao Tong University); Ran Wang (Shanghai Jiao Tong University); Dian Ding (Shanghai Jiao Tong University); Han Zhang (Shanghai Jiao Tong University); Liyun Zhang (Shanghai Jiao Tong University); Lanqing Yang (Shanghai Jiao Tong University); Yi-Chao Chen (Shanghai Jiao Tong University); Guangtao Xue (Shanghai Jiao Tong University)

**ASPS-P1-10: Enhancing Large Language Model Inference Efficiency via Lookahead Cache Filtering**

Jie Ou (University of Electronic Science and Technology of China); Yueming Chen (University of Electronic Science and Technology of China); Shuaihong Jiang (University of Electronic Science and Technology of China); Tian Wenhong (University of Electronic Science and Technology of China)

**ASPS-P1-11: StrucFormer: Structural Prior Guided Transformer for Mobile Crowdsensing Data Inference**

Xu Kang (1. China University of Petroleum-Beijing at Karamay, 2. Yanshan University); Shouceng Tian (China University of Petroleum-Beijing at Karamay); Feifei Kou (Beijing University of Posts and Telecommunications); Lei Shi (1. Communication University of China, 2. Yangtze River Delta Research Institute of NPU); Jiadong Ren (Yanshan University)

**ASPS-P1-12: MULiving: Towards Real-time Multi-User Survival State Monitoring Using Wearable RFID Tags**

Shang Gao (University Of Science And Technology Of China); Dawei Yan (University of Science and Technology of China); Yubo Yan (USTC)

**ASPS-P1-13: MsT-HA: Multi-Modal Signal Fusion with Bayesian Optimization for Robust Industrial Robot Joint Health Assessment**

Haoyu Wang (Shanghai University Of Engineering Science); Zilong Yin (Shanghai University of Engineering Science); Bin Chen (University of Shanghai for Science and Technology); Xiyue Yan (University of Shanghai for Science and Technology); Chenyu Zhou (Xinjiang University); Beibei Zhang (University of Shanghai for Science and Technology); Xinyuan Li (University of Shanghai for Science and Technology); Guangmeng Xue (University of Shanghai for Science and Technology); Haichao Xu (University of Shanghai for Science and Technology)

**ASPS-P1-14: Exploring Large Language Models for Knowledge Graph Completion**

Liang Yao (Tencent Inc.); Jiazhen Peng (Tencent Inc.); Chengsheng Mao (Northwestern University); Yuan Luo (Northwestern University, IL)

**MLSP-P1: Robust and Trustworthy Machine Learning**

**Room: Rm. 206**

**Type: Poster**

**May 24th 10:30-12:00**

**MLSP-P1-1: Fioma: Towards Open-Set Semi-Supervised Specific Emitter Identification**

Qingyun Xu (1. The Institute of Software, Chinese Academy of Sciences; 2. University of Chinese Academy of Sciences); Lixiang Liu (1. The Institute of Software, Chinese Academy of Sciences; 2. University of Chinese Academy of Sciences); Xin Zhou (1. The Institute of Software, Chinese Academy of Sciences; 2. University of Chinese Academy of Sciences)

**MLSP-P1-2: HBRW: A Hardness-Based Re-Weighting Approach for Long-tailed Medical Image Classification**

Yongheng Xu (Sun Yat-Sen University); Hanjiang Lai (Sun Yat-Sen university)

**MLSP-P1-3: Exploiting the Relationship within the Unlabelled Samples by Set Matching for Generalized Category Discovery**

Qiubo Ma (Shanghai University); Hang Yu (Shanghai University); Yuan Shan (ACRE Coking & Refractory Engineering Consulting Corporation); Pinzhao Tian (Shanghai University)

**MLSP-P1-4: Robust and Efficient Adversarial Defense in SNNs via Image Purification and Joint Detection**

Weiran Chen (University of Science and Technology of China); Qi Xu (University of Science and Technology of China)

**MLSP-P1-5: A Progressive Local Variance-guided Strategy for Improving Data Augmentation Reliability**

Zheyuan Wang (shanghai jiao tong university); Ziyao Meng (Shanghai Jiao Tong University); Dezhi Wu (Shanghai JiaoTong University); Haoran Liao (Shanghai Jiao Tong University); Tianyi Wang (Shanghai JiaoTong University); Hao Shen (Shanghai JiaoTong University); Jiajia Li (Shanghai Jiao Tong University); Haitao Song (Shanghai Jiao Tong University)

**MLSP-P1-6: Can Quality Survive Scale? Toward an Equal-Quality Instance-Dependent Label Noise Model**

Haohao Song (Xiamen University); Qiao Xiang (Xiamen University); Jiwu Shu (Xiamen University)

**MLSP-P1-7: Distill To Detect: Amplifying Anomalies in Backdoor Models through Knowledge Distillation**

Chang Hu (Hangzhou Dianzi University); Xuyang Teng (Hangzhou Dianzi University); Wenpeng Xing (Zhejiang University); Han Chen (Hangzhou Dianzi University); Chenhao Ye (Hangzhou Dianzi University); Meng Han (Zhejiang University)

**MLSP-P1-8: VisTa: Visual-contextual and Text-augmented Zero-shot Object-level OOD Detection**

Bin Zhang (Huazhong University of Science and Technology); Xiaoyang Qu (Ping An Technology (Shenzhen) Co., Ltd); Guokuan Li (Huazhong University of Science and Technology); Jiguang Wan (Huazhong University of Science and Technology); Jianzong Wang (Ping An Technology (Shenzhen) Co., Ltd.)

**MLSP-P1-9: Prototypical Part Transformer for Interpretable Image Recognition**

Anni Yu (State Key Laboratory for Novel Software Technology, Nanjing University); Yu-Bin Yang (State Key Laboratory for Novel Software Technology, Nanjing University)

**MLSP-P1-10: LCE: A Framework for Explainability of Ultrasound Image Based on Concept Discovery**

Weiji Kong (Southwest Jiaotong University); Xun Gong (Southwest Jiaotong University); Juan Wang (The Third People's Hospital of Chengdu)

**MLSP-P1-11: Assessing Robustness of Multi-Modal Large Language Models in Image Classification through Hierarchical WordNet-Based Evaluation**

Chang Liu (Shanghai Jiaotong University); Hai Chen (School of Computer Science and Technology, Anhui University, Hefei,China); Boxiang Wang (Nanyang Technological University); Shibao Zheng (SJTU)

**MLSP-P1-12: Subdomain Uncertainty Optimization for Cross-Speed Fault Diagnosis**

Jianbo Zheng (Hunan university); Lida Huang (Hunan University); Tairui Zhang (Hunan University); Bin Jiang (Hunan University); Chao Yang (Hunan University)

**MLSP-P1-13: Dual-Frequency Spatio-Temporal Phase Unwrapping**

Shuo Du (Wuhan Univ MVR Lab); Qin Zou (Wuhan University); Chi Chen Chi Chen (Wuhan University); Bisheng Yang (Wuhan University)

**MLSP-P1-14: Learning with Partial Labels from Conflict-Free and Semi-Supervised Perspective**

Chen-Chen Zong (Nanjing University of Aeronautics and Astronautics); Sheng-Jun Huang (Nanjing University of Aeronautics and Astronautics)

**MLSP-P1-15: Disentangled Representation Learning for Chinese Handwriting Recognition**

Tianqi Zhao (Tsinghua University); Liangrui Peng (Tsinghua University); Gang Yao (Tsinghua University); Di Wu (Tsinghua University); Yao Tao (Noah's Ark Lab, Huawei Technologies)

**MLSP-P1-16: IOR: Inversed Objects Replay for Incremental Object Detection**

Zijia An (Institute of Computing, Chinese Academy of Sciences); Boyu Diao (Institute of Computing Technology, Chinese Academy of Sciences); Libo Huang (Institute of Computing Technology, Chinese Academy of Sciences); Ruiqi Liu (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)

**MLSP-P1-17: ChannelMixer: A Hybrid CNN-Transformer Framework for Enhanced Multivariate Long-Term Time Series Forecasting**

Erlei Zhang (Northwest A&F University); Wenxuan Yuan (Northwest A&F University); Xiangsen Liu (Northwest A&F University)

**MLSP-P1-18: SSRMamba: Efficient Visual State Space Model for Spectral Super-Resolution**

Baisong Li (Jilin University); Xingwang Wang (Jilin University); Haixiao Xu (Jilin University)

**MLSP-P1-19: Distribution Alignment Informed Thresholding for Semi-Supervised Curvilinear Structure Segmentation**

Yuhao Mo (无); Bo Peng (Southwest Jiaotong University); Bihan Wen (Nanyang Technological University); Xulei Yang (Institute for Infocomm Research (I2R), Astar); Ce Zhu (University of Electronic Science & Technology of China); Xun Xu (Institute for Infocomm Research, ASTAR)

**MLSP-P2: Deep and Meta/Federated Learning Models**

**Room: Rm. 206**

**Type: Poster**

**May 24th 10:30-12:00**

**MLSP-P2-1: BDCKD: Unlocking the Power of Brownian Distance Covariance in Knowledge Distillation**

Guoming Lu (University of Electronic Science and Technology of China); Heng Yin (University of Electronic Science and Technology of China); Zhiyong Shu (University of Electronic Science and Technology of China); Jielei Wang (University of Electronic Science and Technology of China); Guangchun Luo (University of Electronic Science and Technology of China)

**MLSP-P2-2: RestorMamba: An Enhanced Synergistic State Space Model for Image Restoration**

Zeyu Wang (Zhejiang Normal University); Chen Li (Zhejiang Normal University); Huiying Xu (Zhejiang Normal University); Xinzong Zhu (Zhejiang Normal University); Xiao Huang (Zhejiang Normal University); Hongbo Li (Beijing Geek+ Technology Co., Ltd China)

**MLSP-P2-3: MambaInst: Lightweight State Space Model for Real-Time Instance Segmentation**

Zeyu Wang (Zhejiang Normal University); Chen Li (Zhejiang Normal University); Huiying Xu (Zhejiang Normal University); Xinzong Zhu (Zhejiang Normal University); Xiao Huang (Zhejiang Normal University); Hongbo Li (Beijing Geek+ Technology Co., Ltd China)

**MLSP-P2-4: A Weakly Supervised Semantic Segmentation Model with Enhanced CLIP Feature Extraction**

Fanxuan Kong (Heilongjiang University); Jun Lu (Heilongjiang University)

**MLSP-P2-5: FasterGold-DETR: An Efficient End-to-End Fire Detection Model via Gather-and-Distribute Mechanism**

Chengming Liu (Zhengzhou University); Fan Wu (Zhengzhou University); Lei Shi (Zhengzhou University)

**MLSP-P2-6: Reduced Effectiveness of Kolmogorov-Arnold Networks on Functions with Noise**

Shen Haoran (School of Information Science and Engineering, Southeast University); Chen Zeng (Southeast University); Wang Jiahui (School of Economics and Management, Southeast University); Qiao Wang (School of Information Science and Engineering, Southeast University)

**MLSP-P2-7: Attention Augmented Structure-centric Bias Mitigation with Feature Disentanglement**

Xuege Hou (Tsinghua University); Ya-Li Li (Tsinghua University); Shengjin Wang (Tsinghua University)

**MLSP-P2-8: Frequency-enhanced Comprehensive Dependency Attention for Time Series Anomaly Detection**

Haonan Chen (National University of Defense Technology); Hongzuo Xu (Intelligent Game and Decision Lab (IGDL)); Songlei Jian (NUDT); Ruyi Zhang (National University of Defense Technology); Xingming Li (National University of Defense Technology); Zibo Yi (Information Research Center of Military Science, PLA Academy of Military Science)

**MLSP-P2-9: Test-time Alignment-Enhanced Adapter for Vision-Language Models**

Baoshun Tong (Sun Yat-Sen university); Kaiyu Song (Sun Yat-Sen university); Hanjiang Lai (Sun Yat-Sen university)

**MLSP-P2-10: Enhancing Few-Shot Out-of-Distribution Detection with Gradient Aligned Context Optimization**

Baoshun Tong (Sun Yat-Sen university); Kaiyu Song (Sun Yat-Sen university); Hanjiang Lai (Sun Yat-Sen university)

**MLSP-P2-11: Reliable Imputed-Sample Assisted Vertical Federated Learning**

Yaopei Zeng (Penn State University); Lei Liu (The Chinese University of Hong Kong, Shenzhen); Shaoguo Liu (alibaba group); Hongjian Dou (Alibaba Group); Baoyuan Wu (CUHK-SZ); Li Liu (The Hong Kong University of Science and Technology (Guangzhou))

**MLSP-P2-12: Lightweight Clustered Federated Learning via Feature Extraction**

Guanzhang Lao (South China University of Technology); Xinglin Zhang (South China University of Technology); Yun Li (University of Electronic Science and Technology of China); Yue-Jiao Gong (South China University of Technology)

**MLSP-P2-13: GradPFL: Gradient-Driven Adaptive Clustering in Personalized Federated Learning**

Shiyu Song (Central South University); Hao Zheng (Central South University); Zhigang Hu (Central South University); Meiguang Zheng (Central South University); Liu Yang (School of Computer Science and Engineering, Central South University); Aikun Xu (Central South University)

**MLSP-P2-14: Probabilistic Contrastive Test-Time Adaptation**

Linjing You (Institute of Automation, Chinese Academy of Sciences); Jiabao Lu (Jilin University); Xiayuan Huang (Institute of Automation, Chinese Academy of Sciences)

**MLSP-P2-15: Compressing a Flow-Based Privacy Protection Model via a Novel Joint Distilling and Pruning Method**

Xiaoxiao Wu (Shenzhen University); Zhicong Liang (ShenZhen University); Zehong Huang (Shenzhen University)

**MLSP-P2-16: Causal Feature Supervision Decoupling: A Novel Method for Clothes-Changing Person Re-identification Algorithm**

Wenxin Hu (Xiamen University); Caidan Zhao (School of Informatics Xiamen University); Chenxing Gao (Xiamen University); Zhiqiang Wu (PKU-WUHAN Institute for Artificial Intelligence, Wuhan, China)

**MLSP-P2-17: Towards Personalized Federated Learning via Contrastive-Augmented Local Memorization Retrieval**

Peifeng Zhang (Guangdong University of Technology); Jiahui Chen (Guangdong University of Technology)

**MMSP-O1: Vision Transformers and Semantic Retrieval**

**Room: Rm. 103**

**Type: Oral**

**May 24th 13:00-14:30**

**MMSP-O1-1: Subjective Fidelity Assessment of Audio- and Video-Driven Talking Head Generation Methods**

Anthony Trioux (Xidian University, School of Telecommunications Engineering, Xi'an China); Gao Yusong (Xidian University); Jiarun Song (Xidian University); Wenjie Wu (Xidian University, School of Telecommunications engineering, Xi'an, China); Faming Ma (Xidian University, School of Telecommunications engineering, Xi'an, China); Fuzheng Yang (Xidian University)

**MMSP-O1-2: Unsupervised Hierarchical Dynamic Similarity Hashing for Multimedia Retrieval**

Yunfei Chen (Central South University); Zhan Yang (Central South University); Jun Long (Central South University)

**MMSP-O1-3: CrossHash: Cross-scale Vision Transformer Hashing for Image Retrieval**

Weigang Wang (Ocean University of China); Zhongwen Guo (Ocean University of China); Wenxiang Jiang (Ocean University of China); Yujun Lan (Ocean University of China); Wentao Ma (Ocean University of China)

**MMSP-O1-4: Towards Maximizing Semantic Coverage for Image-Text Retrieval**

Junhao Xu (Shandong University); Zheng Liu (Shandong University of Finance and Economics); Zhumin Chen (Shandong University); Fei Shen (Nanjing University Of Science And Technology)

**MMSP-O1-5: Neural Adaptive Contextual Video Streaming**

Jianchao Yang (Shanghai Jiao Tong University); Mufan Liu (Shanghai Jiao Tong University); Puyue Hou (Shanghai Jiao Tong University); Yiling Xu (Shanghai Jiao Tong University); Jun Sun (SJTU)

**GC-O2: Grand Challenge II**

**Room: Rm. 104**

**Type: Oral**

**May 24th 13:00-14:30**

**GC-O2-1: SpecWav-Attack: Leveraging Spectrogram Resizing and Wav2Vec 2.0 for Attacking Anonymized Speech**

Yuqi Li (Qifu Technology); Yuanzhong Zheng (Qifu Technology); Zhongtian Guo (Fudan University); Yaoxuan Wang (Qifu Technology); Jianjun Yin (Fudan University); Haojun Fei (Qifu Technology)

**GC-O2-2: Attacking Voice Anonymization Systems with Augmented Feature and Speaker Identity Difference**

Yanzhe Zhang (Harbin Engineering University); Zhonghao Bi (Harbin Institute of Technology); Feiyang Xiao (Harbin Engineering University); Xuefeng Yang (Harbin Engineering University); Qiaoxi Zhu (University of Technology Sydney); Jian Guan (Harbin Engineering University)

**GC-O2-3: Spectral-Temporal Fusion Representation for Person-in-Bed Detection**

Xuefeng Yang (Harbin Engineering University); Shiheng Zhang (Harbin Engineering University); Jian Guan (Harbin Engineering University); Feiyang Xiao (Harbin Engineering University); Wei Lu (Harbin Engineering University); Qiaoxi Zhu (University of Technology Sydney)

**IVMSP-O1: Machine Learning for Image and Video Processing I**

**Room: Rm. 105**

**Type: Oral**

**May 24th 13:00-14:30**

**IVMSP-O1-1: SSDViT: Exploring Siamese and Self Distillation in ViTs for Generalizable Person Re-identification**

Jieru Jia (Shanxi University); Jianchao Yang (Shanxi University)

**IVMSP-O1-2: Uncertainty-Participation Context Consistency Learning for Semi-supervised Semantic Segmentation**

Jianjian Yin (Nanjing Normal University); Yi Chen (Nanjing Normal University); Zhichao Zheng (Nanjing Normal University); Junsheng Zhou (Nanjing Normal University); Yanhui Gu (Nanjing Normal University)

**IVMSP-O1-3: VLIMNET: A VISIBLE LIGHT AND INFRARED IMAGE MATCHING NETWORK BASED ON SEGMENT ANYTHING MODEL AND SUPERPOINT**

Zhongyuan Chen (Harbin Institute of Technology); Zhan Zhang (Harbin Institute of Technology); Decheng Zuo (Harbin Institute of Technology); Ning Wang (Jiangnan University); Liufeng Fan (Harbin Institute of Technology); Zhiwei Liu (Harbin Institute of Technology)

**IVMSP-O1-4: Char-SAM: Turning Segment Anything Model into Scene Text Segmentation Annotator with Character-level Visual Prompts**

Enze Xie (Institute of Information Engineering, CAS); Jiahao Lyu (Institute of Information Engineering, CAS); Daiqing Wu (Institute of Information Engineering, CAS); Huawei Shen (Institute of Information Engineering, Chinese Academy of Sciences, Beijing, China); Yu Zhou (Nankai University; Also with IIE, CAS)

**IVMSP-O1-5: DCFormer: Divide-and-Conquer in 3D Human Pose Estimation Tasks**

Tianyi Ma (Beijing University of Posts and Telecommunications); Muqing Wu (Beijing University of Posts and Telecommunications); Zijian Zhang (Beijing University of Posts and Telecommunications)

**SLP-O2: Low-Resource & Lightweight Speech Processing**

**Room: Rm. 107**

**Type: Oral**

**May 24th 13:00-14:30**

**SLP-O2-1: Hybrid Pseudo-Labeling for Semi-Supervised Automatic Speech Recognition**

Lin Zheng (University of Chinese Academy of Sciences; Institute of Acoustics, Chinese Academy of Sciences); Han Zhu (University of Chinese Academy of Sciences); Chengxu Yang (University of Chinese Academy of Sciences; Institute of Acoustics, Chinese Academy of Sciences); Xuyang Wang (Institute of Acoustics, Chinese Academy of Sciences); Gaofeng Cheng (Institute of Acoustics, Chinese Academy of Sciences); Ta Li (Institute of Acoustics, Chinese Academy of Sciences)

**SLP-O2-2: Enhancing Low-Resource ASR through Versatile TTS: Bridging the Data Gap**

Guanrou Yang (Shanghai Jiao Tong University); Fan Yu (Speech Lab of DAMO Academy, Alibaba Group); Ziyang Ma (Shanghai Jiao Tong University); Zhihao Du (Speech Lab of DAMO Academy, Alibaba Group); Zhifu Gao (alibaba); Shiliang Zhang (Alibaba Group); Xie Chen (Shanghai Jiaotong University)

**SLP-O2-3: Fast and High-Quality Auto-Regressive Speech Synthesis via Speculative Decoding**

Bohan Li (MoE Key Lab of Artificial Intelligence, AI Institute, X-LANCE Lab Department of Computer Science and Engineering, Shanghai Jiao Tong University); Hankun Wang (Shanghai Jiao Tong University); Situo Zhang (Shanghai Jiao Tong University); Yiwei Guo (Shanghai Jiao Tong University); Kai Yu (Shanghai Jiao Tong University)

**SLP-O2-4: Anchored Monotonic Alignment and Representation Substitution for Rare Spontaneous Behaviors in Spontaneous Speech Synthesis**

Ning-Qian Wu (University of Science and Technology of China); Ya-Jun Hu (iFLYTEK Co. Ltd.); Liping Chen (University of Science and Technology of China); Zhen-Hua Ling (University of Science and Technology of China)

**SLP-O2-5: Class-wise Adaptive Logits Distillation with Meta-Learning**

Xiao Huang (Southwest University); Wu Chen (College of Computer & Information Science, Southwest University); Wei Zhou (Chongqing University)



**AASP-O2: Bioacoustic & Biomedical Signal Methods****Room: Rm. 108 & 109****Type: Oral****May 24th 13:00-14:30****AASP-O2-1: Attention Weighting and Conditional Entropy-driven Quantization Loss for Neural Audio Codecs**

Huiyu Zhang (Wuhan University); Weiping Tu (Wuhan University); Yuhong Yang (Wuhan University); Xinmeng Xu (Wuhan University); Yanzhen Ren (Computer School of Wuhan University); Rong Zhu (Wuhan University)

**AASP-O2-2: AudioComposer: Towards Fine-grained Audio Generation with Natural Language Description**

Yuanyuan Wang (The Chinese University of Hong Kong); Hangting Chen (Tencent ASSP OTeam); Dongchao Yang (The Chinese University of Hong Kong); Zhiyong Wu (Tsinghua University); Xixin Wu (The Chinese University of Hong Kong)

**AASP-O2-3: Advances in Microphone Array Processing and Multichannel Speech Enhancement**

Gongping Huang (Wuhan University); Jesper Rindom Jensen (Aalborg University); Jingdong Chen (Northwestern Polytechnical University); Jacob Benesty (INRS); Mads Christensen (Aalborg University); Akihiko Sugiyama (Damas.cus); Gary Elko (mh acoustics); Tomas Gaensler (mh acoustics LLC)

**AASP-O2-4: Quality and Complexity Tradeoffs for DNN-Based Binaural Speech Enhancement in Hearing Aids**

Parth Mishra (Starkey Laboratories, Inc.); Deepak Kadedtotad (Starkey Laboratories, Inc.); Eric Durant (Starkey Hearing Technologies); Terence Betlehem (Starkey Laboratories, Inc); Martin McKinney (Starkey Laboratories, Inc)

**MLSP-O2: Robust Machine Learning for Temporal and Speech Applications****Room: Rm. 205****Type: Oral****May 24th 13:00-14:30****MLSP-O2-1: Adapting Large Language Model for Spatio-Temporal Understanding in Next Point-of-Interest Prediction**

Qiuhan Han (Tokyo Institute of Technology); Atsushi Yoshikawa (Kanto Gakuin); Masayuki Yamamura (Tokyo Institute of Technology)

**MLSP-O2-2: Dysarthric Speech Conformer: Adaptation for Sequence-to-Sequence Dysarthric Speech Recognition**

Qianli Wang (University of Auckland); Zihan Zhong (University of Auckland); Satwinder Singh (University of Auckland); Clarion Mendes (University of Illinois); Mark Hasegawa-Johnson (University of Illinois); Waleed Abdulla ("University of Auckland, New Zealand"); Seyed Reza Shahamiri (University of Auckland)

**MLSP-O2-3: Variational Perturbation Personalized Federated Learning via Prior-Posterior Distance**

Hefeng Zhou (Shanghai Jiao Tong University); Wang Yuanbin (Shanghai Jiao Tong University); Jun Wang (University of Warwick); Jiong Lou (Shanghai Jiao Tong University); Wugedele Bao (Hohhot Minzu College); Chentao Wu (Shanghai Jiao Tong University); Jie Li (Shanghai Jiao Tong University)

**MLSP-O2-4: Node-Centric Meta Structure Search on Heterogeneous Graphs**

Xiaou Zhang (Institute of Information Engineering, Chinese Academy of Sciences); Yang Gao (Zhejiang University); Yang Liu (Academy of Mathematics and Systems Science); Yujia Zhu (Institute of Information Engineering, Chinese Academy of Sciences); Chuan Zhou (Chinese Academy of Sciences); Peng Zhang (Guangzhou University); Yong Ding (Institute of Information Engineering, Chinese Academy of Sciences); Qingyun Liu (Institute of Information Engineering, Chinese Academy of Sciences); Hongyang Chen (Zhejiang Lab)

**MLSP-O2-5: HyperSMOTE: A Hypergraph-based Oversampling Approach for Imbalanced Node Classifications**

Ziming Zhao (University of Michigan); Tiehua Zhang (Tongji University); Zijian Yi (Wuhan University of Technology); Zhishu Shen (Wuhan University of Technology)

**IVMSP-O5: Image and Video Synthesis and Rendering**

**Room: Rm. 207**

**Type: Oral**

**May 24th 13:00-14:30**

**IVMSP-O5-1: Gaussian-Face: Talking Head Generation with Hybrid Density via 3D Gaussian Splatting**

Guanwen Feng (Xidian University); Yilin Zhang (Xidian University); Yunan Li (Xidian University); Jin Siyu (Xidian University); Qiguang Miao (Xidian University)

**IVMSP-O5-2: Sign-Mamba: Advanced Mamba-Based Sign Language Generation**

Guanwen Feng (Xidian University); Yilin Zhang (Xidian University); Yunan Li (Xidian University); Liu An (Xidian University); Qiguang Miao (Xidian University)

**IVMSP-O5-3: First-order State Space Model for Lightweight Image Super-resolution**

Yujie Zhu (East China Normal University); Xinyi Zhang (East China Normal University); Yekai Lu (East China Normal University); Guang Yang (East China Normal University); Faming Fang (East China Normal University); Guixu Zhang (East China Normal University)

**IVMSP-O5-4: MS-RainMamba: Learning Multi-Scale State Space Models for Single Image Deraining**

Haibo Li (Tianjin University of Science and Technology); Zhanshuo Liu (Tianjin University of Science and Technology); Tuo Zhao (Tianjin University of Science and Technology); Tingting Zhao (Tianjin University of Science and Technology); Yarui Chen (Tianjin University of Science and Technology); Ning Xie (Center for Future Media, the Department of Computer Science and Engineering, University of Electronic Science and Technology of China)

**MLSP-P3: Deep Models and Reinforcement Learning**

**Room: Rm. 206**

**Type: Poster**

**May 24th 13:00-14:30**

**MLSP-P3-1: Edge-Aware Laplacian Pyramid Network for Efficient Image Deblurring**

Zhe Xu (ZTE Corporation); Zhipei Lei (ZTE Corporation); Dingyong Gou (ZTE Corporation); Yanlin Wu (ZTE Corporation); Liwen Zhang (ZTE); Li Cong (ZTE)

**MLSP-P3-2: Multi-source Data Lossless Compression via Parallel Expansion Mapping and xLSTM**

Huidong Ma (Nankai University); Hui Sun (Nankai University); Liping Yi (Nankai University); Liu Xiaoguang (Nankai University); Wang Gang (Nankai University)

**MLSP-P3-3: A Distillation-based Future-aware Graph Neural Network for Stock Trend Prediction**

Zhipeng Liu (Northeastern University); Peibo Duan (Northeastern University); Mingyang Geng (National University of Defense Technology); Bin Zhang (Northeastern University, China)

**MLSP-P3-4: Tribe Graph Enhanced Bidirectional Mamba for Multivariate Time Series Forecasting**

Yingqi Zhao (Nankai University); Haiwei Zhang (Nankai University); Jiaqi Ye (Nankai University); Shubao Zhao (Digital Research Institute, ENN Group); Chengyi Yang (ENN Group); Zengxiang Li (ENN Group)

**MLSP-P3-5: OLN++: Improved Object Localization Network for Open-world Object Detection**

Haonan Mai (ShanghaiTech University; Institute of Computing Technology, Chinese Academy of Sciences); Libo Huang (Institute of Computing Technology, Chinese Academy of Sciences); Zhulin An (Institute of Computing Technology, Chinese Academy of Sciences); Jiarui Zhao (Institute of Computing Technology, Chinese Academy of Sciences); Chuanguang Yang (Institute of Computing Technology, Chinese Academy of Sciences); Erhu Zhao (Institute of Computing Technology, Chinese Academy of Sciences; Shanghai Innovation Center for Processor Technologies); Yongjun Xu (Institute of Computing Technology, Chinese Academy of Sciences)

**MLSP-P3-6:  $R^2$ -SAC: A Relaxation-and-Refinement SAC Agent for Stock Portfolio Trading**

Xiaoyun Han (Hithink Flush Information Network Co., Ltd.); Jun Wang (Hithink Flush Information Network Co., Ltd.)

**MLSP-P3-7: Diverse Collaboration in Multi-Agent Reinforcement Learning via Self-Adaptive Method**

Xiang Xue (School of Computer Science and Technology, Soochow University); Quan Liu (School of Computer Science and Technology, Soochow University); Meilong Shi (School of Computer Science and Technology, Soochow University); Yuchao Jin (School of Computer Science and Technology, Soochow University)

**MLSP-P3-8: A Ranking Scheme for Trust Region Multi-agent Reinforcement Learning**

Ruichen Gao (Harbin Institute of Technology); Yi Hu (Harbin Institute of Technology); Deqin Zheng (Harbin Institute of Technology); Mengxuan Shao (Harbin Institute of Technology); Haiqi Zhu (Harbin Institute of Technology Faculty of Life Sciences and Medicine); Chenyue Song (Harbin Institute of Technology); Wei Zhang (Harbin Institute of Technology); Feng Jiang (Harbin Institute of Technology, Harbin)

**MLSP-P3-9: KAN v.s. MLP for Offline Reinforcement Learning**

Haihong Guo (School of Information, Renmin University of China); Fengxin Li (Renmin University of China); Jiao Li (institute of medical information); Hongyan Liu ("Tsinghua University, China")

**MLSP-P3-10: Active Visual Learning for Robots with Dueling Deep Q-Networks and Transformer Encoders**

Hongliang Zeng (South China University of Technology); Zhang Ping (South China University of Technology); Fang Li (South China University of Technology); Qinpeng Yi (South China University of Technology); Jiahua Wang (South China University of Technology); Tingyu Ye (South China University of Technology)

**MLSP-P3-11: Multi-Agent Hierarchical Graph Attention Actor-Critic Reinforcement Learning**

Tongyue Li (Academy of Military Science); Dianxi Shi (National Innovation Institute of Defense Technology; Peking University; Tianjin Artificial Intelligence Innovation Center); Songchang Jin (National Innovation Institute of Defense Technology); Zhen Wang (Intelligent Game and Decision Lab); Huanhuan Yang (National University of Defense Technology); Yang Chen (Peking University)

**MLSP-P3-12: LSU-NET: Lightweight Automatic Organs Segmentation Network for Medical Images**

Yujie Ding (Shandong University of Science and Technology); Shenghua Teng (Shandong University of Science and Technology); Zuoyong Li (Minjiang University); Xiao Chen (Minjiang University)

**MLSP-P3-13: PB-UAP: Hybrid Universal Adversarial Attack For Image Segmentation**

Yufei Song (Huazhong University of Science and Technology); Ziqi Zhou (Huazhong University of Science and Technology); Minghui Li (Huazhong University of Science and Technology); Xianlong Wang (Huazhong University of Science and Technology); Hangtao Zhang (Huazhong University of Science and Technology); Menghao Deng (Huazhong University of Science and Technology); Wei Wan (Huazhong University of Science and Technology); Shengshan Hu (Huazhong University of Science and Technology); Leo Yu Zhang (Griffith University)

**MLSP-P3-14: Offline Reinforcement Learning via Conservative Smoothing and Dynamics Controlling**

Haihong Guo (School of Information, Renmin University of China); Fengxin Li (Renmin University of China); Jiao Li (institute of medical information); Hongyan Liu ("Tsinghua University, China")

**MLSP-P3-15: Improved Techniques for Offline Reinforcement Learning: Advantage Value Estimation and Layernorm**  
 Xiaosong Liu (School of Computer Science and Technology, Soochow University); Quan Liu (School of Computer Science and Technology, Soochow University); Lan Wu (School of Computer Science and Technology, Soochow University)

**MLSP-P3-16: A Novel Decision-Making Model for Playing Board Game Combining Planning and Opponent Behaviors**  
 Jiajing Zhang (Institute of Automation, Chinese Academy of Sciences); Jiamei Jiang (Institute of Automation Chinese Academy of Sciences); Linjing Li (Institute of Automation, Chinese Academy of Sciences); Daniel Zeng (Institute of Automation, Chinese Academy of Sciences; University of Arizona)

**MLSP-P3-17: Conservative Offline Meta-Reinforcement Learning with Task Similarity Measurement**  
 Haorui Li (Institute of Automation, Chinese Academy of Sciences); Jiaqi Liang (Institute of Automation, Chinese Academy of Sciences); Linjing Li (Institute of Automation, Chinese Academy of Sciences); Daniel Zeng (Institute of Automation, Chinese Academy of Sciences; University of Arizona)

**MLSP-P4: Deep Models and BigData/Wireless Applications**

**Room: Rm. 206**

**Type: Poster**

**May 24th 13:00-14:30**

**MLSP-P4-1: ECBANet: Exploiting Complementary Information for Efficient Burst Super-Resolution**  
 Liwen Zhang (ZTE); Dingyong Gou (ZTE Corporation); Li Cong (ZTE); Yanlin Wu (ZTE Corporation); Changjiang Xie (ZTE); Ke Ren (ZTE); Zhe Xu (ZTE Corporation)

**MLSP-P4-2: LLM-GAN: Construct Generative Adversarial Network Through Large Language Models For Explainable Fake News Detection**  
 Yifeng Wang (Fudan University); Zhouhong Gu (Fudan University); Siwei Zhang (Fudan University); Suhang Zheng (Alibaba); Tao Wang (Alibaba); Tianyu Li (Alibaba); Hongwei Feng (Fudan University); Yanghua Xiao (Fudan University)

**MLSP-P4-3: PUNCTUATION RESTORATION: A CASE STUDY OF BERT-BASED MODELS' TASK-SPECIFIC EXCELLENCE**  
 Qishuai Zhong (Nanyang Technological University); Aixin Sun (Nanyang Technological University)

**MLSP-P4-4: FBI-Net: Frequency Band Integration Network for Infrared Small Target Segmentation**  
 Biqiao Xin (northwestern polytechnical university); Qiang Li (northwestern polytechnical university); Qianchen Mao (northwestern polytechnical university); Jinbao Wang (Shenzhen University); Bingshu Wang (Northwestern Polytechnical University)

**MLSP-P4-5: Fresh-CL: Feature Realignment through Experts on Hypersphere in Continual Learning**  
 Zhongyi Zhou (East China Normal University); Yaxin Peng (Department of Mathematics, School of Science, Shanghai University); Pin Yi (Shanghai University); Zhu Minjie (East China Normal University); Chaomin Shen (East China Normal University)

**MLSP-P4-6: Soft Augmentation for Graph Classification**  
 Weihuang Zheng (Southeast University); Xiaotong Zhang (Southeast University); Rui Dong (Southeast University); Youyong Kong (Southeast University)

**MLSP-P4-7: Enhancing Graph-based Fraud Detection by Adversarial Confidence Reweighting**  
 Jianqi Gao (Shanghai Jiao Tong University); Jian Cao (Shanghai Jiao Tong University); Shiyu Qian (Shanghai Jiao Tong University); Wei Guan (Shanghai Jiao Tong University)

**MLSP-P4-8: SFADNet: Spatio-temporal Fused Graph based on Attention Decoupling Network for Traffic Prediction**

Mei Wu (Hangzhou Dianzi University); Wenchao Weng (Zhejiang University of Technology); Jun Li (Hangzhou Dianzi University); Yiqian Lin (Hangzhou Dianzi University); Jing Chen (Hangzhou Dianzi University); Dewen Seng (Hangzhou Dianzi University)

**MLSP-P4-9: MHGNet: Multi-Heterogeneous Graph Neural Network for Traffic Prediction**

Mei Wu (Hangzhou Dianzi University); Yiqian Lin (Hangzhou Dianzi University); Tianfan Jiang (Hangzhou Dianzi University); Wenchao Weng (Zhejiang University of Technology)

**MLSP-P4-10: Learning from Reconstruction: A Two-Stage Global-to-Local Framework for Temporal Knowledge Graph Completion**

Wenjie Xu (School of Computer Science, Wuhan University); Kai Liu (School of Computer Science, Wuhan University); Zihao Jiang (Wuhan University); Mengting Song (School of Computer Science, Wuhan University); Boyi Zhang (Wuhan University); Min Peng (Wuhan University)

**MLSP-P4-11: Transfer Learning with Transformer and LSTM for Digital Pre-distortion of Terahertz/mmWave Transceiver**

Gouheng Zhao (Shanghai Jiao Tong University); Kai Ying (Shanghai Jiao Tong University); Qingsong Wen (Squirrel AI); Junwen Zhang (Fudan University); Lin Gui (Shanghai Jiao Tong University)

**MLSP-P4-12: COAST: Contrastive Learning with Augmented Spatio-Temporal Encoding for Next POI Recommendation**

Bada Xin (School of Cyber Security, University of Chinese Academy of Sciences); Xin Wan (National Computer Network Emergency Response Technical Team/Coordination Center of China); Zhuojun Jiang (Institute of Information Engineering, Chinese Academy of Sciences); Faqiang Liu (National Computer Network Emergency Response Technical Team/Coordination Center of China); Su Chen (National Computer Network Emergency Response Technical Team/Coordination Center of China); Rong Yang (Institute of Information Engineering, Chinese Academy of Sciences); Qingyun Liu (Institute of Information Engineering, Chinese Academy of Sciences)

**MLSP-P4-13: YOLO-KED: A Novel Framework for Rotated Object Detection in Complex Environments**

Zhuang Zhaoyu (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences; University of Chinese Academy of Sciences); Jun Cheng (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences); Xu Dejie (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences); Liu Penglei (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences)

**MLSP-P4-14: MTMDC-GAN: Self-Attention Driven Multi-Scale Temporal Synthesis with Multi-Domain Analysis and Contrastive Learning**

Weihai Zhi (South China University of Technology); Kejing He (South China University of Technology)

**MLSP-P4-15: Pyramid Attention Enhancement Network for Nighttime UAV Tracking**

Xiaomin Huang (Northwestern Polytechnical University); Zhenhua Wu (Northwestern Polytechnical University); Ying Li (Northwestern Polytechnical University); Changjing Shang (Aberystwyth University); Qiang Shen (Aberystwyth University)

**SLP-P1: Voice and Speaker Modeling: Conversion, Recognition, and Evaluation**

**Room: Rm. 206**

**Type: Poster**

**May 24th 13:00-14:30**

### **SLP-P1-1: ZSVC: Zero-shot Style Voice Conversion with Disentangled Latent Diffusion Models and Adversarial Training**

Xinfa Zhu (Northwestern Polytechnical University); Lei He (Microsoft Cloud and AI); Yujia Xiao (The Chinese University of Hong Kong); Xi Wang (Microsoft Cloud and AI); Xu Tan (Microsoft Research Asia); Sheng Zhao (Microsoft); Lei Xie (NWPU)

### **SLP-P1-2: Streaming Keyword Spotting Boosted by Cross-layer Discrimination Consistency**

Yu Xi (Shanghai Jiao Tong University); Haoyu Li (Shanghai Jiao Tong University); Xiaoyu Gu (aispeech); Hao Li (AISpeech Ltd, Suzhou China); Yidi Jiang (National University of Singapore); Kai Yu (Shanghai Jiao Tong University)

### **SLP-P1-3: NTC-KWS: Noise-aware CTC for Robust Keyword Spotting**

Yu Xi (Shanghai Jiao Tong University); Haoyu Li (Shanghai Jiao Tong University); Hao Li (AISpeech Ltd, Suzhou China); Jiaqi Guo (AISpeech Ltd, Suzhou China); Xu Li (aispeech); Wen Ding (NVIDIA); Kai Yu (Shanghai Jiao Tong University)

### **SLP-P1-4: Universal Low-Resource Speech Synthesis Via Phoneme Fusion Coordinating Low-Rank Decomposition**

Yanliang Li (Kunming University of Science and Technology); Zhengtao Yu (Kunming University of Science and Technology); Linqin Wang (Kunming University of Science and Technology); Shengxiang Gao (Kunming University of Science and Technology); Ling Dong (Kunming University of Science and Technology); Wenjun Wang (Kunming University of Science and Technology)

### **SLP-P1-5: Self-supervised Prosody Learning at Phoneme-level with Momentum Contrast for Speech Synthesis**

Zhaoci Liu (University of Science and Technology of China); Ya-Jun Hu (iFLYTEK Research); Liping Chen (University of Science and Technology of China); Zhen-Hua Ling (University of Science and Technology of China)

### **SLP-P1-6: ATP-TTS: Adaptive Thresholding Pseudo-Labeling for Low-Resource Multi-Speaker Text-to-Speech**

Feng Li (Donghua university); Shen Chen (Donghua University); Hanjin Yang (Donghua University); Shupef Yuan (Donghua University)

### **SLP-P1-7: Voice Conversion via Structural Entropy**

Linqin Wang (Kunming University of Science and Technology); Zhengtao Yu (Kunming University of Science and Technology); Shengxiang Gao (Kunming University of Science and Technology); Cunli Mao (Kunming University of Science and Technology); Yuxin Huang (Kunming University of science and technology); Ling Dong (Kunming University of Science and Technology)

### **SLP-P1-8: Enhancing Expressive Voice Conversion with Discrete Pitch-Conditioned Flow Matching Model**

Jialong Zuo (Zhejiang University); Shengpeng Ji (Zhejiang University); Minghui Fang (zhejiang university); Ziyue Jiang (Zhejiang University); Xize Cheng (Zhejiang University); Qian Yang (ZheJiang University); Wenrui Liu (Zhejiang University); Guangyan Zhang (Search Results Web result with site links The Chinese University of Hong Kong); Zehai Tu (Tencent); Yiwen Guo (Independent Researcher); Zhou Zhao (Zhejiang University)

### **SLP-P1-9: Binary Representation Learning for Discriminative Acoustic Unit Discovery**

Rui Niu (Tsinghua University); Jie Chen (Tencent); Long Ma (Tencent); Changhe Song (Tsinghua University); Weihao Wu (Tsinghua University); Zhiyong Wu (Tsinghua University)

### **SLP-P1-10: DiffCSS: Diverse and Expressive Conversational Speech Synthesis with Diffusion Models**

Weihao Wu (Tsinghua University); Zhiwei Lin (Tsinghua University); Yixuan Zhou (Tsinghua University); Jingbei Li (Stepfun); Rui Niu (Tsinghua University); Qinghua Wu (Tencent); Songjun Cao (Tencent); Long Ma (Tencent); Zhiyong Wu (Tsinghua University)

**SLP-P1-11: GNCL: A Graph Neural Network with Consistency Loss for Segment-Level Spoofed Speech Detection**

Zirui Ge (Nanjing University of Posts and Telecommunications); Xinzhou Xu (Nanjing University of Posts and Telecommunications); Haiyan Guo (Nanjing University of Posts and Telecommunications); Zhen Yang (Nanjing University of Posts and Telecommunication); Bjorn Schuller (Imperial College London)

**SLP-P1-12: CA-MHFA: A Context-Aware Multi-Head Factorized Attentive Pooling for SSL-Based Speaker Verification**

Junyi Peng (Brno University of Technology); Ladislav Mosner (Brno University of Technology); Lin Zhang (Brno University of Technology); Plchot Oldich (Brno University of Technology); Themis Stafylakis (Omilia - Conversational Intelligence); Luká Burget (Brno University of Technology); Jan Honza Cernocky (Brno University of Technology)

**SLP-P1-13: BLR-MoE: Boosted Language-Routing Mixture of Experts for Domain-Robust Multilingual E2E ASR**

Guodong Ma (NetEase Yidun AI Lab); Wenxuan Wang (NetEase Yidun AI Lab); Lifeng Zhou (NetEase Yidun AI Lab); Yuting Yang (NetEase Yidun AI Lab); Yuke Li (NetEase Yidun AI Lab); Binbin Du (NetEase Yidun AI Lab)

**SLP-P1-14: DetailTTS: Learning Residual Detail Information for Zero-shot Text-to-speech**

Cong Wang (Beijing University of Posts and Telecommunications); Yichen Han (Beijing University of Posts and Telecommunications); Yizhong Geng (Beijing University of Posts and Telecommunications); Yingming Gao (Beijing University of Posts and Telecommunications); Fengping Wang (Beijing University of Posts and Telecommunications); Bingsong Bai (Beijing University of Posts and Telecommunications); Qifei Li (Beijing University of Posts and Telecommunications); Jinlong Xue (Beijing University of Posts and Telecommunications); Yayue Deng (Beijing University of Posts and Telecommunications); Zhengqi Wen (Tsinghua University); Ya Li (Beijing University of Posts and Telecommunications)

**SLP-P1-15: Mixture of Experts Fusion for Fake Audio Detection Using Frozen wav2vec 2.0**

Zhiyong Wang (University of Chinese Academy of Sciences); Ruibo Fu (Institute of Automation, Chinese Academy of Sciences); Zhengqi Wen (Tsinghua University); Jianhua Tao (Tsinghua University); Xiaopeng Wang (UCAS); Yuankun Xie (Communication University of China); Xin Qi (University of Chinese Academy of Sciences); Shuchen Shi (Shanghai Polytechnic University); Yi Lu (State Key Laboratory of Multimodal Artificial Intelligence Systems, Institute of Automation, Chinese Academy of Sciences); Yukun Liu (UCAS); Chenxing Li (Tencent AI Lab); Xuefei Liu (Qiyuan Lab); Guanjun Li (Institute of Automation, Chinese Academy of Sciences)

**SLP-P1-16: Integrating Spectro-Temporal Cross Aggregation and Multi Scale Dynamic Learning for Audio Deepfake Detection**

Yunqi Hao (Xinjiang university); Minqiang Xu (iFLYTEK CO.LTD); Yihao Chen (iFLYTEK CO.LTD); Yanyan Liu (Xinjiang University); Liang He (Tsinghua University); Lei Fang (Hefei iFlytek Digital Technology Co., Ltd); Lin Liu (University of Science and Technology of China)

**SLP-P1-17: AudioTime: A Temporally-aligned Audio-text Benchmark Dataset**

Zeyu Xie (Shanghai Jiao Tong University); Xuenan Xu (Shanghai Jiao Tong University); Zhizheng Wu (Chinese University of Hong Kong, Shenzhen); Mengyue Wu (Shanghai Jiao Tong University)

**SLP-P1-18: Enhancing Zero-Shot Emotional Voice Conversion via Speaker Adaptation and Duration Prediction**

Shiyan Wang (Southeast University); Tianhua Qi (Southeast University); Cheng Lu (Southeast University); Zhaojie Luo (Southeast University); Wenming Zheng (Southeast University)

**SLP-P1-19: VALL-T: Decoder-Only Generative Transducer for Robust and Decoding-Controllable Text-to-Speech**

Chenpeng Du (Shanghai Jiao Tong University); Yiwei Guo (Shanghai Jiao Tong University); Hankun Wang (Shanghai Jiao Tong University); Yifan Yang (Shanghai Jiao Tong University); Zhikang Niu (Shanghai Jiao Tong University); Shuai Wang (Shenzhen Research Institute of Big Data, Chinese University of Hong Kong (Shenzhen)); Hui Zhang (AISpeech); Xie Chen (Shanghai Jiaotong University); Kai Yu (Shanghai Jiao Tong University)

**SLP-P1-20: Disentangling Speakers in Multi-talker Speech Recognition with Speaker-Aware CTC**

Jiawen Kang (The Chinese University of Hong Kong); Lingwei Meng (The Chinese University of Hong Kong); Mingyu Cui (The Chinese University of Hong Kong); Yuejiao Wang (The Chinese University of Hong Kong); Xixin Wu (The Chinese University of Hong Kong); Xunying Liu (The Chinese University of Hong Kong); Helen Meng (The Chinese University of Hong Kong)

**SLP-P1-21: Elevating Robust ASR By Decoupling Multi-Channel Speaker Separation and Speech Recognition**

Yufeng Yang (The Ohio State University); Hassan Taherian (The Ohio State University); Vahid Ahmadi Kalkhorani (The Ohio State University); Deliang Wang (Ohio State University)

**SLP-P2: Speech Enhancement, Emotion Recognition, and Music Generation**

**Room: Rm. 206**

**Type: Poster**

**May 24th 13:00-14:30**

**SLP-P2-1: ZipEnhancer: Dual-Path Down-Up Sampling-based Zipformer for Monaural Speech Enhancement**

Haoxu Wang (Speech Lab, Alibaba Group); Biao Tian (Speech Lab, Alibaba Group)

**SLP-P2-2: Hybrid Contrastive Learning Decoupling Speech Emotion Recognition**

Chenyu Li (School of Artificial Intelligence, Xidian University); Yu Gu (School of Artificial Intelligence, Xi'dian University); He Zhang (Northwest University); Linsong Liu (School of Artificial Intelligence, Xi'dian University); Haixiang Lin (Delft Institute of Applied Mathematics, Delft University of Technology); Shuang Wang (Xidian University)

**SLP-P2-3: TDMER: A Task-Driven Method for Multimodal Emotion Recognition**

Qian Xu (School of Artificial Intelligence, Xidian University); Yu Gu (School of Artificial Intelligence, Xi'dian University); Chenyu Li (School of Artificial Intelligence, Xidian University); He Zhang (Northwest University); Hai-Xiang Lin (Delft Institute of Applied Mathematics, Delft University of Technology); Linsong Liu (School of AI, Xidian University)

**SLP-P2-4: PEDE: Enhance Multi-modal Sarcasm Detection in Videos via Prompted Emotion Distributions**

Xiaoqiang Zhang (China Agricultural University); Ying Chen (China Agricultural University); Guangyao Li (Tsinghua University); Buwen Liang (University of Copenhagen)

**SLP-P2-5: Enhancing Multimodal Emotion Recognition through Multi-Granularity Cross-Modal Alignment**

Xuechen Wang (Nankai University); Shiwan Zhao (Nankai University); Haoqin Sun (Nankai University); Hui Wang (Nankai University); Jiaming Zhou (Nankai University); Yong Qin (Nankai University)

**SLP-P2-6: Exploiting Wavelet Scattering Transform & Squeeze-Excitation Blocks with Cross-Modal Attention for Multi-modal Emotion Recognition**

Junchen Liu (The University of Auckland); Jesin James (The University of Auckland); Karan Nathwani (Indian Institute of Technology, Jammu)

**SLP-P2-7: Reducing the Gap Between Pretrained Speech Enhancement and Recognition Models Using a Real Speech-Trained Bridging Module**

Zhongjian Cui (Tianjin University); Chenrui Cui (Tianjin University); Tianrui Wang (Tianjin University); Mengnan He (DiDi Chuxing); Hao Shi (Kyoto University); Meng Ge (Tianjin University); Caixia Gong (DiDi Chuxing); Longbiao Wang (Tianjin University); Jianwu Dang (Tianjin University)



**SLP-P2-8: Leveraging Joint Spectral and Spatial Learning with MAMBA for Multichannel Speech Enhancement**

Wenze Ren (National Taiwan University); Haibin Wu (National Taiwan University); Yi-Cheng Lin (National Taiwan University); Xuanjun Chen (National Taiwan University); Rong Chao (National Taiwan University); Kuo-Hsuan Hung (Academia Sinica); You-Jin Li (National Taiwan University); Wen-Yuan Ting (Academia Sinica); Hsin-Min Wang (Academia Sinica); Yu Tsao (Academia Sinica)

**SLP-P2-9: Singing Voice Conversion with Accompaniment Using Self-Supervised Representation-Based Melody Features**

Wei Chen (Tsinghua University); Binzhu Sha (Tsinghua University); Jing Yang (Huawei 2012 Labs); Zhuo Wang (Huawei Technologies Co., Ltd.); Fan Fan (Huawei); Zhiyong Wu (Tsinghua University)

**SLP-P2-10: Editing Music with Melody and Text: Using ControlNet for Diffusion Transformer**

Siyuan Hou (Tsinghua University); Shansong Liu (Tencent PCG ARC); Ruibin Yuan (CMU); Wei Xue (The Hong Kong University of Science and Technology); Ying Shan (Tencent); Mangsuo Zhao (Tsinghua University); Chao Zhang (Tsinghua University)

**SLP-P2-11: Enhancing Emotion Recognition in Incomplete Data: A Novel Cross-Modal Alignment, Reconstruction, and Refinement Framework**

Haoqin Sun (Nankai University); Shiwan Zhao (Nankai University); Shaokai Li (Yantai University); Xiangyu Kong (University of Exeter); Xuechen Wang (Nankai University); Jiaming Zhou (Nankai University); Aobo Kong (Nankai University); Yong Chen (Lingxi (Beijing)technology Co., Ltd.); Wenjia Zeng (Lingxi (Beijing)technology Co., Ltd.); Yong Qin (Nankai University)

**SLP-P2-12: SPSinger: Multi-Singer Singing Voice Synthesis with Short Reference Prompt**

Junchuan Zhao (National University of Singapore); Chetwin Low (National University of Singapore); Ye Wang (National University of Singapore)

**SLP-P2-13: Improved Feature Extraction Network for Neuro-Oriented Target Speaker Extraction**

Cunhang Fan (Anhui Provincial Key Laboratory of Multimodal Cognitive Computation, School of Computer Science and Technology, Anhui University); Youdian Gao (School of Computer Science and Technology, Anhui University); Zexu Pan (Alibaba group); Jingjing Zhang (Anhui University); Hongyu Zhang (Anhui University School of Computer Science and Technology); Jie Zhang (University of Science and Technology of China (USTC)); Zhao Lv (anhui university)

**SLP-P2-14: Joint Semantic Knowledge Distillation and Masked Acoustic Modeling for Full-band Speech Restoration With Improved Intelligibility**

Xiaoyu Liu (Dolby Laboratories); Xu Li (Dolby Laboratories); Joan Serrà (Sony AI); Santiago Pascual (Dolby Laboratories)

**SLP-P2-15: Leveraging Out-of-Domain Noise for Unsupervised Domain Adaptation in Speech Enhancement**

Yu Liao (Shanghai Normal University); Haixin Guan (University of Science and Technology of China; Unisound AI Technology Co., Ltd); Shuang Wei (Shanghai Normal University); Yanhua Long (Shanghai Normal University)

**SLP-P2-16: Multi-modal Entity Alignment under Imbalanced Visual Modality Information**

Xin Zhang (Dalian University of Technology); Yu Liu (Dalian University of Technology); Shimin Shan (Dalian University of Technology)

**SLP-P2-17: Improving zero-shot Chinese English code-switching asr with kNN-CTC and gated monolingual datastores.**

Jiaming Zhou (Nankai University); Shiwan Zhao (Nankai University); Hui Wang (Nankai University); Tian-Hao Zhang (University of Science and Technology Beijing); Haoqin Sun (Nankai University); Xuechen Wang (Nankai University); Yong Qin (Nankai University)

**SLP-P2-18: High-Resolution Speech Restoration with Latent Diffusion Model**

Tushar Dhyani (University of Stuttgart); Florian Lux (University of Stuttgart); Michele Mancusi (Sony Europe); Giorgio Fabbro (Sony); Fritz Hohl (Sony Europe); Ngoc Thang Vu (University of Stuttgart)

**MMSP-P1: 3D Media and Human-Centric Analysis: Motion, Pose, and Identity**

**Room: Rm. 206**

**Type: Poster**

**May 24th 13:00-14:30**

**MMSP-P1-1: A Hierarchical Compression Technique for 3D Gaussian Splatting Compression**

He Huang (Shanghai Jiao Tong University); Wenjie Huang (SJTU); Qi Yang (University of Missouri - Kansas City); Yiling Xu (Shanghai Jiao Tong University); Zhu Li (University of Missouri-Kansas City)

**MMSP-P1-2: generating customized 4d motions from text inputs using spatial-temporal slicing approaches**

Zhichao Zhang (National University of Defense Technology); Chen Hui (National University of Defense Technology); Placeholder (Ming Xu); Deng Jinsheng (Ming Xu); Xingshen Song (National University of Defense Technology)

**MMSP-P1-3: Two-in-One: Unified Multi-Person Interactive Motion Generation by Latent Diffusion Transformer**

Boyuan Li (Renmin University of China); Xihua Wang (Renmin University of China); Ruihua Song (Renmin University of China); Wenbing Huang (Tsinghua University)

**MMSP-P1-4: DEGSTalk: Decomposed Per-Embedding Gaussian Fields for Hair-Preserving Talking Face Synthesis**

Kaijun Deng (Shenzhen University); Dezhi Zheng (Shenzhen University); Jindong Xie (Shenzhen University); Jinbao Wang (Shenzhen University); Weicheng Xie (Shenzhen University); Linlin Shen (Shenzhen University); Siyang Song (University of Cambridge)

**MMSP-P1-5: SwapTalk: Audio-Driven Talking Face Generation with One-Shot Customization in Latent Space**

Zeren Zhang (Peking University); Haibo Qin (Youdao AI); Jiayu Huang (Youdao AI); Jo-Ku Cheng (Peking University); Yixin Li (Youdao AI); Hui Lin (Youdao AI); Yitao Duan (Youdao AI); Jinwen Ma (Peking University)

**MMSP-P1-6: Follow-Your-MultiPose: Tuning-Free Multi-Character Text-to-Video Generation via Pose Guidance**

Beiyuan Zhang (Chongqing University); Yue Ma (Hong Kong University of Science and Technology); Chunlei Fu (Chongqing University); Xinyang Song (Institute of Automation, Chinese Academy of Science); Zhenan Sun (Chinese Academy of Sciences); Ziqiang Li (Shanghai Jiao Tong University)

**MMSP-P1-7: PointActionCLIP: Preventing Transfer Degradation in Point Cloud Action Recognition with a Triple-Path CLIP**

Wei Tao (Huazhong University of Science and Technology); Shenglin He (Huazhong University of Science and Technology); Xiaoyang Qu (Ping An Technology (Shenzhen) Co., Ltd); Jiguang Wan (Huazhong University of Science and Technology); Jianzong Wang (Ping An Technology (Shenzhen) Co., Ltd.)

**MMSP-P1-8: Identity-aware Feature Decoupling Learning for Clothing-change Person Re-identification**

Haoxuan Xu (Beihang University); Bo Li (Beihang University); Guanglin Niu (Beihang University)

**MMSP-P1-9: PAIR: Complementarity-guided Disentanglement for Composed Image Retrieval**

Zhiheng Fu (Shandong University); Zixu Li (Shandong University); Zhiwei Chen (Shandong University); Chunxiao Wang (Shandong Computer Science Center (National Supercomputer Center in Jinan)); Xuemeng Song (Shandong University); Yupeng Hu (Shandong University); Liqiang Nie (Harbin Institute of Technology (Shenzhen))

**MMSP-P1-10: MEDIAN: Adaptive Intermediate-grained Aggregation Network for Composed Image Retrieval**

Qinlei Huang (Shandong University); Zhiwei Chen (Shandong University); Zixu Li (Shandong University); Chunxiao Wang (Shandong Computer Science Center (National Supercomputer Center in Jinan)); Xuemeng Song (Shandong University); Yupeng Hu (Shandong University); Liqiang Nie (Harbin Institute of Technology (Shenzhen))

**MMSP-P1-11: Frequency-Domain Popularity Forecasting with Shape-Based Retrieval**

Canhua Guan (Tianjin University); Zongxia Xie (Tianjin University); Haoyu Wang (Fudan University); Haoyu Xing (Tianjin University)

**MMSP-P1-12: Improving Multimodal Human Pose Estimation by Adversarial Modality Enhancement**

Jiangnan Xia (Zhejiang University); Qilong Wu (Zhejiang University); Yanyin Guo (Zhejiang University); Yi Li (Zhejiang University); Jianghan Cheng (Zhejiang University); Junwei Li (Zhejiang University); Zhiyuan Zhang (Zhejiang University)

**MMSP-P1-13: ChangeChat: An Interactive Model for Remote Sensing Change Analysis via Multimodal Instruction Tuning**

Pei Deng (Beijing Foreign Studies University); Wenqian Zhou (Beijing Foreign Studies University); Hanlin Wu (Beijing Foreign Studies University)

**MMSP-P1-14: XDGesture: an xLSTM-based diffusion model for co-speech gesture generation**

Zixing Zhang (Hunan University); Jiajun Li (College of Computer Science and Electronic Engineering, Hunan University, China); Bin Wang (Hunan University); Yiming Liu (Hunan University); Huan Zhao (Hunan University); Bjorn Schuller (Imperial College London)

**MMSP-P1-15: Reenvisioning Skeleton-based Action Recognition Through the Lens of NLP**

Cao Long (Guangxi University); Huai Shuo (Guangxi University); Jingyao Gai (Guangxi University)

**MMSP-P1-16: CMGait: Enhancing Cross-Modality Gait Recognition between LiDAR and RGB through Contrastive Identity-consistent Feature Aggregation**

Yubo Wang (University of Science and Technology of China); Bin Liu (University of Science and Technology of China); Zhiwei Zhao (University of Science and Technology of China); Jixiang Niu (University of Science and Technology of China); Qi Chu (University of Science and Technology of China); Nenghai Yu (University of Science and Technology of China)

**MMSP-P1-17: Dynamic SRM Curriculum for Trustworthy Multi-modal Classification**

Jian Zhu (Zhejiang Lab); Yu Cui (zhejianglab); Xin Zou (China University of Geosciences); Zhangmin Huang (Zhejiang Lab); Chenshu Hu (Zhejiang Lab); Jun Sun (Zhejiang Lab); Bo Lyu (Zhejiang Lab); Lei Liu (University of Science and Technology of China); Chang Tang (China University of Geosciences); Lirong Dai (University of Science and Technology of China)

**MMSP-P1-18: Minimizing Disparities between Real and Pseudo Queries for Unsupervised Visual Grounding**

Hui Jiang (Fudan University); Changkai Ji (Fudan University); Jilan Xu (Fudan University); Yanhao Zhu (Fudan University); Yuejie Zhang (Fudan University); Rui Feng (Fudan University); Tao Zhang (Shanghai University of Finance and Economics); Shang Gao (Deakin University)

**IFS-P1: Machine Learning and Synthetic Realities: DeepFakes, Malwares, and Security Attacks**

**Room: Rm. 206**

**Type: Poster**

**May 24th 13:00-14:30**

**IFS-P1-1: MPAM-3DGS: Multi-Parametric Adversarial Manipulation for 3D Gaussian Splatting**

Wenxiang Jiang (Ocean University of China); Hanwei Zhang (Institute of Intelligent Software, Guangzhou); Weigang Wang (Ocean University of China); Zhongwen Guo (Ocean University of China); Tianao Zhang (Ocean University of China); Hao Wang (Xidian University)

**IFS-P1-2: TSCheater: Generating High-Quality Tibetan Adversarial Texts via Visual Similarity**

Xi Cao (Minzu University of China); Quzong Gesang (Tibet University); Yuan Sun (Minzu University of China); Nuo Qun (School of information Science and Technology, Tibet University); Collaborative Innovation Center for Tibet Informatization by MOE and Tibet Autonomous Region); Tashi Nyima (Tibet University)

**IFS-P1-3: Robust Deepfake Detection via Perturbation Domain Alignment**

Lin Lu (Beihang University); Yunhong Wang (State Key Laboratory of Virtual Reality Technology and System, Beihang University, Beijing 100191, China); Liang Zhang (None, Freelancer); Yuanfang Guo (Beihang University)

**IFS-P1-4: MallmgDA: Diffusion-based Data Augmentation for Long-tailed Malware Family Classification**

Yang Gang (National University of Defense Technology); Jun He (National University of Defense Technology); Bo Wu (National University of Defense Technology); Tao Xia (National University of Defense Technology); Linna Fan (National University of Defense Technology); Lin Ni (National University of Defense Technology)

**IFS-P1-5: Knocking on IP: Unveiling Websites through Cache-Aware Fingerprinting**

Yu Liu (Chinese Academy of Science); Yifei Cheng (Institute of Information Engineering, Chinese Academy of Sciences); Yujia Zhu (Institute of Information Engineering, Chinese Academy of Sciences); Yong Ding (Institute of Information Engineering, Chinese Academy of Sciences); Yong Sun (Institute of Information Engineering, Chinese Academy of Sciences); Xiaou Zhang (Institute of Information Engineering, Chinese Academy of Sciences)

**IFS-P1-6: Identity-Agnostic Learning for Deepfake Face Detection**

Xuan Zhou (Sichuan University); Zongyong Deng (Sichuan University); Qijun Zhao (Sichuan University)

**IFS-P1-7: Adaptive Password Guessing Framework Using Various Datasets**

Wenbo Zhang (Peking University); Haibo Cheng (Peking University); Mingli Zheng (Peking University); Jiahong Yang (Peking University); Ping Wang (Peking University)

**IFS-P1-8: RobNAS: Robust Neural Architecture Search for Point Cloud Adversarial Defense**

Shuoyang Sun (Harbin Institute of Technology, Shenzhen); Kaiwen Zhang (Harbin Institute of Technology, Shenzhen); Hao Fang (Tsinghua University); Bin Chen (Harbin Institute of Technology, Shenzhen); Jiawei Li (Tsinghua University); Enze Huo (Huawei Technology); Shu-Tao Xia (Tsinghua University)

**IFS-P1-9: Targeted Password Guessing Using Neural Language Models**

Jiahong Yang (Peking University); Wenting Li (Peking University); Haibo Cheng (Peking University); Ping Wang (Peking University)

**IFS-P1-10: To Learn Better Character Embeddings in Generative Models for Password Attack**

Mingli Zheng (Peking University); Jiahong Yang (Peking University); Ping Wang (Peking University); Wenbo Zhang (Peking University)

**IFS-P1-11: PNetGPT: Proprietary Protocol Network Traffic Generation with Pre-trained Transformer**

Zedong Li (Institute of Information Engineering, Chinese Academy of Sciences); Shijie Li (Institute of Information Engineering, Chinese Academy of Sciences); Dongliang Fang (Institute of Information Engineering, Chinese Academy of Sciences); Xin Chen (Institute of Information Engineering, Chinese Academy of Sciences); Zhanwei Song (Institute of Information Engineering, Chinese Academy of Sciences); Zhi Li (Institute of Information Engineering, Chinese Academy of Sciences); Shichao Lv (Institute of Information Engineering, Chinese Academy of Sciences); Limin Sun (Institute of Information Engineering, Chinese Academy of Sciences)

**IFS-P1-12: LoRATEE: A Secure and Efficient Inference Framework for Multi-Tenant LoRA LLMs Based on TEE**

Zechao Lin (Institute of Information Engineering, Chinese Academy of Sciences); Sisi Zhang (Institute of Information Engineering, Chinese Academy of Sciences); Xingbin Wang (Institute of Information Engineering, Chinese Academy of Sciences); Yulan Su (Key Laboratory of Cyberspace Security Defense, Institute of Information Engineering, CAS); Yan Wang (Institute of Information Engineering, Chinese Academy of Sciences); Rui Hou (State Key Laboratory of Information Security, Institute of Information Engineering, CAS); Dan Meng (Institute of Information Engineering, CAS)

**IFS-P1-13: LossControl: Defending Membership Inference Attacks by Controlling the Loss**

Bo Yang (Harbin Institute of Technology); Hongwei Yang (Harbin Institute of Technology); Renhao Lu (Harbin Institute of Technology); Hui He (Harbin Institute of Technology); Weizhe Zhang (Harbin Institute of Technology, China); Haoyu He (Monash University); Rahul Yadav (Harbin Engineering University)

**IFS-P1-14: Jack of All Trades, Master of None: PMP-Guided Adaptive Multi-Teacher Distillation with Meta-Learning**

Sisi Zhang (Institute of Information Engineering, Chinese Academy of Sciences); Zechao Lin (Institute of Information Engineering, Chinese Academy of Sciences); Yulan Su (Key Laboratory of Cyberspace Security Defense, Institute of Information Engineering, CAS); Xingbin Wang (Institute of Information Engineering, Chinese Academy of Sciences); Yan Wang (Institute of Information Engineering, Chinese Academy of Sciences); Rui Hou (State Key Laboratory of Information Security, Institute of Information Engineering, CAS); Dan Meng (Institute of Information Engineering, CAS)

**IFS-P1-15: Partial Reconstruction Error for Deepfake Detection**

Yufei Zhang (Beijing University of Posts and Telecommunications); Zheling Meng (Institute of Automation, Chinese Academy of Sciences); Bo Peng (Institute of Automation, Chinese Academy of Sciences); Jing Dong (Chinese Academy of Sciences); Beilin Chu (Beijing University of Posts and Telecommunications); Wei Wang (Center for Research on Intelligent Perception and Computing, National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences)

**IFS-P1-16: MIFAE-Forensics: Masked Image-Frequency AutoEncoder for DeepFake Detection**

Hanyi Wang (Shanghai Jiao Tong University); Zihan Liu (Shanghai Jiao Tong University); Shilin Wang (SEIEE, Shanghai Jiaotong University)

**BISP-P2: Bioinformatics, Neural Signals, and Biological Image Analysis**

**Room:** Rm. 206

**Type:** Poster

**May 24th 13:00-14:30**

**BISP-P2-1: Adaptive Lossless Compression for Genomics Data by Multiple (s, k)-mer Encoding and XLSTM**

Hui Sun (Nankai University); Yanfeng Ding (Nankai University); Liping Yi (Nankai University); Huidong Ma (Nankai University); Haonan Xie (Guangxi University); Wang Gang (Nankai University); Liu Xiaoguang (Nankai University)

**BISP-P2-2: Exploring the Distribution of Cell Subpopulations in Pancreatic Ductal Adenocarcinoma Slides by Joint Spatial Transcriptomics and Pathology Data**

Yaqi Deng (Southwest University of Science and Technology); Wenjie Cai (University of Science and Technology of China); Bentao Song (Southwest University of Science and Technology); Bin Yang (Southwest University of Science and Technology); Lingming Kong (The First Affiliated Hospital of USTC, Division of Life Sciences and Medicine, University of Science and Technology of China); Qingfeng Wang (Southwest University of Science and Technology); Jun Huang (Southwest University of Science and Technology)

**BISP-P2-3: Low-rank Adaptation Method for Respiratory Sound Classification: A necessary road towards Large Models**

Gaoyang Dong (Nanchang University); Yufei Shen (Nanchang University); Jianhong Wang (Nanchang University); Shunwang Xie (Nanchang University); Zhang Minghui (Nanchang University); Ping Sun (Nanchang University)

**BISP-P2-4: EfficientSleepNet: A Novel Lightweight End-to-End Model for Automated sleep Staging on Single-Channel EEG**

Fei Wang (South China Normal University); Zekun Zheng (South China Normal University); Bangshun Hu (South China Normal University); Xiaodong Yang (South China Normal University); Maolin Tang (South China Normal University); Haiyun Huang (South China Normal University)

**BISP-P2-5: STAR: A Spatial-Temporal Autoencoder for EEG Restoration in Emotion Recognition**

Hao-Long Yin (Shanghai Jiao Tong University); Wei-Long Zheng (Shanghai Jiao Tong University); Bao-Liang Lu (Shanghai Jiao Tong University)

**BISP-P2-6: GATomics: A Novel Multi-Omics Graph Attention Network Model for Cancer Driver Gene Detection**

Ge Kong (Inner Mongolia University); Jiao Wang (Inner Mongolia University); Juan Wang (Inner Mongolia University)

**BISP-P2-7: TriFP-NGram: Integrating Three Complementary Fingerprint and N-Gram Features for Enhanced Drug-Target Affinity Prediction**

Jiao Wang (Inner Mongolia University); Ge Kong (Inner Mongolia University); Juan Wang (Inner Mongolia University)

**BISP-P2-8: Hierarchical Spatiotemporal Attention Network for Fine-grained Brain Cognitive State Recognition**

Yike Wu (Southeast University); Ning An (Southeast University); Zixuan Zeng (Southeast University); Youyong Kong (Southeast University)

**BISP-P2-9: SUFT: Sparse and Uncertain Fusion Transformers for Multi-Atlas Brain Network Analysis**

Zhan Su (Nantong University); Jiashuang Huang (Nantong University); Shu Jiang (Nantong University); Mingliang Wang (Nanjing University of Aeronautics and Astronautics); Weiping Ding (Nantong University)

**BISP-P2-10: Enhanced Corneal Endothelial Cell Segmentation via Frequency-Selected Residual Fourier Diffusion Models**

Tianyang Wang (Xi'an Jiaotong-Liverpool University); Xiaofei Nan (zhengzhou university); Yunze Wang (University of Edinburgh); Yuhang Yan (Xi'an Jiaotong-Liverpool University); Zhenkai Gao (Xi'an Jiaotong-Liverpool university); Jingxin Liu (Xi'an Jiaotong-Liverpool University)

**BISP-P2-11: Microtitre Plate Image Augmentation with Generative Adversarial Networks**

Ru Li (Harbin Institute of Technology); Tingting Chai (HIT); Samaneh Kouchaki (University of Surrey); David Clifton (University of Oxford); Yang Yang (School of Public Health, Shanghai Jiao Tong University School of Medicine; University of Oxford)

**BISP-P2-12: YOLO-TCT: An Effective Network For Long-Tailed Cervical Cell Detection**

Di Lv (College of Computer Science, Chongqing University); Yi Lin (Chongqing Key Laboratory of Translational Research for Cancer Metastasis and Individualized Treatment, Chongqing University Cancer Hospital); Li Liu (Department of Digital Medicine, School of Biomedical Engineering and Medical Imaging, Third Military Medical University); Yuze Chen (College of Computer Science, Chongqing University); Xin Chen (College of Computer Science, Chongqing University); Ran Liu (Chongqing university)

**GC-P & SW-P: Grand Challenge & Satellite Workshop: SALMA: Speech and Audio Language Models –Architectures, Data Sources, and Training Paradigms**

**Room: Rm. 206**

**Type: Poster**

**May 24th 13:00-14:30**

**GC-P-1: Enhancing Convolutional Models for Indoor Radio Mapping via Ray Marching**

Mengfan Wu (Huawei Technologies Duesseldorf GmbH); Marco Skocaj (Huawei Technologies Duesseldorf GmbH); Mate Boban (Huawei Technologies Duesseldorf GmbH)

**GC-P-2: Enhancing Task-Specific Feature Learning with LLMs for Multimodal Emotion and Intent Joint Understanding**

Zhaoyang Li (Southeast University); Cheng Lu (Southeast University); Xiaolin Xu (Southeast University); Kaifei Zhang (Southeast University); Yujia Gu (Southeast University); Banghua Li (Southeast University); Yuan Zong (Southeast University); Wenming Zheng (Southeast University)

**GC-P-3: Discrete Unit-based Low-latency Multi-lingual Speech Synthesis for LIMMITS'25 Challenge**

Yu Jiang (Tianjin University); Cheng Gong (Institute of Artificial Intelligence (TeleAI), China Telecom); Tianrui Wang (Tianjin University); Chunyu Qiang (Tianjin University); Haoyu Wang (Tianjin University); Qiuyu Liu (Tianjin University); Yuheng Lu (Tianjin University); Xiaobao Wang (Tianjin University); Xiaolei Zhang (Institute of Artificial Intelligence (TeleAI), China Telecom); Longbiao Wang (Tianjin University); Jianwu Dang (Tianjin University)

**GC-P-4: The USTC System for EEG-Music Emotion Recognition Challenge**

Jiaxin Chen (University of Science and Technology of China); Yiming Wang (University of Science and Technology of China); Yin-Long Liu (University of Science and Technology of China); Rui Feng (University of Science and Technology of China); Jiahong Yuan (University of Science and Technology of China); Zhen-Hua Ling (University of Science and Technology of China)

**SW-P-1: StableTTS: Towards Efficient Denoising Acoustic Decoder for Text to Speech Synthesis with Consistency Flow Matching**

Zhiyong Chen (Shanghai University); xinnuo Li (New York University); shuhang Wu (Shanghai University); Zhi Yang (Shanghai University); Zhiqi Ai (Shanghai University); Shugong Xu (Shanghai University)

**SW-P-2: Musimple: A Simplified Music Generation System With Diffusion Transformer**

Zheqi Dai (The Chinese University of Hong Kong), Haolin He (The Chinese University of Hong Kong), Qiuqiang Kong (The Chinese University of Hong Kong)

**SPS Activity: IEEE SPS Membership Benefits and Volunteer Opportunities****Room: Rm. 208****Type: SPS Activity****May 24th 15:00-16:00****Presenter: Prof. Kin-Man (Kenneth) Lam**

**Abstract:** In this session, Prof. Lam will present the benefits of SPS membership and highlight the various activities organized by the society for its members. The session will provide valuable insights for students and professionals looking to enhance their careers through active involvement in the Signal Processing Society.

**Biography:** Prof. Kin-Man Lam received his Associateship in Electronic Engineering with distinction from the Hong Kong Polytechnic University (formerly called Hong Kong Polytechnic) in 1986. He won the S.L. Poa Education Foundation Scholarship for overseas studies and was awarded an M.Sc. degree in communication engineering from the Department of Electrical Engineering, Imperial College of Science, Technology and Medicine, England, in 1987. In August 1993, he undertook a Ph.D. degree program in the Department of Electrical Engineering at the University of Sydney, Australia, and won an Australia Postgraduate Award for his studies. He completed his Ph.D. studies in August 1996 and was awarded the IBM Australia Research Student Project Prize.

From 1990 to 1993, Prof. Lam was a lecturer at the Department of Electronic Engineering of The Hong Kong Polytechnic University. He joined the Department of Electronic and Information Engineering, The Hong Kong Polytechnic University again as an Assistant Professor in October 1996. He became an Associate Professor in 1999 and has been a professor since 2010. Currently, he is also an Associate Dean of the Faculty of Engineering. He was actively involved in professional activities. He has been a member of the organizing committee or program committee of many international conferences. In particular, he was the Secretary of the 2003 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP'03), the Technical Chair of the 2004 International Symposium on Intelligent Multimedia, Video and Speech Processing (ISIMP 2004), a Technical Co-Chair of the 2005 International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS 2005), a secretary of the 2010 International Conference on Image Processing (ICIP 2010), a Technical Co-Chair of 2010 Pacific-Rim Conference on Multimedia (PCM 2010), and a General Co-Chair of the 2012 IEEE International Conference on Signal Processing, Communications, & Computing (ICSPCC 2012), APSIPA Annual and Summit 2015, and 2017 IEEE International Conference on Multimedia and Expo IICME 2017), which were held in Hong Kong in August 2012, December 2015, and July 2017, respectively. Prof. Lam was the Chairman of the IEEE Hong Kong Chapter of Signal Processing between 2006 and 2008. In addition, he was a Guest Editor for the Special Issue on Biometric Signal Processing, EURASIP Journal on Applied Signal Processing. He received an Honorable Mention of the Annual Pattern Recognition Society Award for an outstanding contribution to the Pattern Recognition Journal in 2004. In 2008, he also received the Best Paper Award at the International Conference on Neural Networks and Signal Processing.

Prof. Lam was the Director-Student Services and the Director-Membership Services of the IEEE Signal Processing Society between 2012 and 2014, and between 2015 and 2017, respectively. He was also the VP-Member Relations and Development and VP-Publications of the Asia-Pacific Signal and Information Processing Association (APSIPA) between 2014 and 2017, and between 2017 and 2021, respectively. He was an Associate Editor of IEEE Trans. on Image Processing between 2009 and 2014, and Digital Signal Processing between 2014 and 2018. He was also an Editor of HKIE Transactions between 2013 and 2018, and an Area Editor of the IEEE Signal Processing Magazine between 2015 and 2017. Between 2022 and 2024, he was the Member-at-Large of APSIPA. Currently, he is the IEEE SPS VP-Membership. Prof. Lam serves as a Senior Editorial Board member of APSIPA Trans. on Signal and Information Processing, and an Associate editor of EURASIP International Journal on Image and Video Processing. His current research interests include human face analysis and recognition, image and video processing, computer vision, and 3D reconstruction.



**Workshop: Safer AI: Beyond Definitions to Implementation****Room: Rm. 108 & 109****Type: Workshop****May 24th 15:00-15:45****Presenter: Robert Zhou (Director, AI, DataForce)****MMSP-O2: Human-Centered Multimodal Perception and Pose****Room: Rm. 103****Type: Oral****May 24th 15:00-16:30****MMSP-O2-1: LV-ReID: Large Language-Vision Alignment Model for Text-based Person Re-identification**

Yinghui Xia (HKUST(GZ)); Chao Wang (Wuhan University); Jinsong Yang (AutoAgents.ai)

**MMSP-O2-2: Robust Low-Light Human Pose Estimation through Illumination-Texture Modulation**

Feng Zhang (Nanjing University of Posts and Telecommunications); Ze Li (Nanjing University of Posts and Telecommunications); Xiatian Zhu (University of Surrey); Lei Chen (Nanjing University of Posts and Telecommunications)

**MMSP-O2-3: AgentPose: Progressive Distribution Alignment via Feature Agent for Human Pose Distillation**

Feng Zhang (Nanjing University of Posts and Telecommunications); Jinwei Liu (Nanjing University of Posts and Telecommunications); Xiatian Zhu (University of Surrey); Lei Chen (Nanjing University of Posts and Telecommunications)

**MMSP-O2-4: Textual and Visual Prompt Fusion for Image Editing via Step-Wise Alignment**

Zhanbo Feng (Shanghai Jiao Tong University); Zenan Ling (Huazhong University of Science and Technology); Xinyu Lu (Shanghai Jiao Tong University); Ci Gong (Huazhong University of Science and Technology); Feng Zhou (Renmin University of China); Wugedele Bao (Hohhot Minzu College); Jie Li (Shanghai Jiao Tong University); Fan Yang (Shanghai Jiao Tong University); Robert Qiu (Huazhong University of Science and Technology)

**MMSP-O2-5: Density-aware and Depth-aware Visual Representation for Zero-Shot Object Counting**

Fang Nan (Xi'an Jiaotong University); Feng Tian (Xi'an Jiaotong University); Ni Zhang (Northwestern Polytechnical University); Nian Liu (Mohamed bin Zayed University of Artificial Intelligence); Haonan Miao (Xi'an Jiaotong University); Guang Dai (State Grid Corporation of China); Mengmeng Wang (Zhejiang University)

**OA-O: Other Applications of Machine Learning for Signal Processing****Room: Rm. 104****Type: Oral****May 24th 15:00-16:30****OA-O-1: PGD-Imp: Rethinking and Unleashing Potential of Classic PGD with Dual Strategies for Imperceptible Adversarial Attacks**

Jin Li (Sun Yat-Sen University); Zitong Yu (Great Bay University); Ziqiang He (Sun Yat-Sen University); Z. Jane Wang (University of British Columbia); Xiangui Kang (Sun Yat-Sen University)

**OA-O-2: Object-Based Video Tampering Localization via Trace Consistency Analysis**

Pengfei Pei (Institute of Information Engineering, School of Cyber Security, University of Chinese Academy of Sciences, Beijing 100085, China); Yun Cao (Institute of Information Engineering, Chinese Academy of Sciences); Jinchuan Li (Institute of Information Engineering, Chinese Academy of Sciences); Zeyu Zhang (Institute of Information Engineering); Yuqi Pang (Institute of Information Engineering, Chinese Academy of Sciences)

**OA-O-3: Situational awareness based resource allocation for multi-target tracking in distributed radar network**

Mushen Lin (School of Information Science and Engineering, Harbin Institute of Technology at Weihai); Fenggang Yan (Harbin Institute of Technology); Lingda Ren (The University of Hong Kong); Xiangtian Meng (Harbin Institute of Technology); Maria Greco (University of Pisa); Fulvio Gini (University of Pisa); Ming Jin (Harbin Institute of Technology)

**OA-O-4: MHSDB: A Comprehensive Benchmark for Multimodal Humor and Sarcasm Detection Leveraging Foundation Models**

Zhongren Dong (Hunan University); Donghao Wang (Hunan University); Ciqiang Chen (Hunan University); Dong-Yan Huang (UBTech Robotics Corpora); Zixing Zhang (Hunan University)

**OA-O-5: Codec-ASV: Exploring Neural Audio Codec For Speaker Representation Learning**

Yuke Lin (Wuhan University); Fulin Zhang (China Mobile Research Institute); Yingying Gao (China Mobile Research Institute); Shilei Zhang (China Mobile Research Institute); Ming Li (Wuhan University)

**IVMSP-O2: Machine Learning for Image and Video Processing II**

**Room: Rm. 105**

**Type: Oral**

**May 24th 15:00-16:30**

**IVMSP-O2-1: Adaptive Receptive Field Convolution for Top-view Fisheye Images Segmentation**

Wenwei Lin (Sun Yat-sen University); Gang Chen (Sun Yat-sen University); Changcai Li (Sun Yat-sen University)

**IVMSP-O2-2: M2R-Whisper: Multi-stage and Multi-scale Retrieval Augmentation for Enhancing Whisper**

Jiaming Zhou (Nankai University); Shiwan Zhao (Nankai University); Jiabei He (Nankai University); Hui Wang (Nankai University); Wenjia Zeng (Lingxi (Beijing)technology Co., Ltd.); Yong Chen (Lingxi (Beijing)technology Co., Ltd.); Haoqin Sun (Nankai University); Aobo Kong (Nankai University); Yong Qin (Nankai University)

**IVMSP-O2-3: Leveraging Visual Captions for Enhanced Zero-Shot HOI Detection**

Yanqing Zeng (University of Science and Technology of China); Yunyao Mao (University of Science and Technology of China); Zhenbo Lu (Institute of Artificial Intelligence, Hefei Comprehensive National Science Center); Wengang Zhou (University of Science and Technology of China); Houqiang Li (University of Science and Technology of China)

**IVMSP-O2-4: Enhancing Visual Forced Alignment with Local Context-Aware Feature Extraction and Multi-Task Learning**

Yi He (Shanghai Jiao Tong University); Lei Yang (Shanghai Jiao Tong University); Shilin Wang (SEIEE, Shanghai Jiaotong University)

**IVMSP-O2-5: Seg-diffusion: Text-to-Image Diffusion Model for Open-Vocabulary Semantic Segmentation**

Shuo Zhang (East China Normal University); Jiaming Huang (huolala); Yan Wu (Huolala); Tao Hu (Huolala); Wenbing Tang (Nanyang Technological University); Jing Liu (East China Normal University)

**SLP-O3: Voice Conversion & ASR Personalization****Room: Rm. 107****Type: Oral****May 24th 15:00-16:30****SLP-O3-1: SLIDE: Integrating Speech Language Model with LLM for Spontaneous Spoken Dialogue Generation**

Haitian Lu (Institute of Acoustics); Gaofeng Cheng (Key Laboratory of Speech Acoustics and Content Understanding, Institute of Acoustics); Liuping Luo (Guangdong Provincial Public Security Department, Guangzhou, China); Leying Zhang (Shanghai Jiao Tong University); Yanmin Qian (Shanghai Jiao Tong University); Pengyuan Zhang (Institute of Acoustics, Chinese Academy of Sciences)

**SLP-O3-2: AudioEditor: A Training-Free Diffusion-Based Audio Editing Framework**

Yuhang Jia (Nankai University); Yang Chen (Nankai University); Jinghua Zhao (Nankai University); Shiwan Zhao (Nankai University); Wenjia Zeng (Lingxi (Beijing)technology Co., Ltd.); Yong Chen (Lingxi (Beijing)technology Co., Ltd.); Yong Qin (Nankai University)

**SLP-O3-3: HDMoLE: Mixture of LoRA Experts with Hierarchical Routing and Dynamic Thresholds for Fine-Tuning LLM-based ASR Models**

Bingshen Mu (Northwestern Polytechnical University); Kun Wei (School of Computer Science, Northwestern Polytechnical University); Qijie Shao (Northwestern Polytechnical University); Yong Xu (Tencent); Lei Xie (NWPU)

**SLP-O3-4: Self-Distillation Prototypes Network: Learning Robust Speaker Representations without Supervision**

Yafeng Chen (Speech Lab, Alibaba Group); Siqi Zheng (Alibaba Group); Hui Wang (Speech Lab, Alibaba Group); Luyao Cheng (Alibaba Group); Qian Chen (Alibaba Group); Chong Deng (Alibaba inc); Shiliang Zhang (Alibaba Group); Wen Wang (Alibaba Group)

**MLSP-O3: Distributed and Quantized Learning under Constraints****Room: Rm. 205****Type: Oral****May 24th 15:00-16:30****MLSP-O3-1: PQNAS: Mixed-precision Quantization-aware Neural Architecture Search with Pseudo Quantizer**

Tianxiao Gao (AntGroup); Li Guo (Ant Group); Shihao Wang (Ant Group); Shuai Zhu (Ant Group); Dajiang Zhou (Ant Group)

**MLSP-O3-2: Single-Loop Variance-Reduced Stochastic Algorithm for Nonconvex-Concave Minimax Optimization**

Xia Jiang (The Chinese University of Hong Kong); Linglingzhi Zhu (The Chinese University of Hong Kong); Taoli Zheng (The Chinese University of Hong Kong); Anthony Man-Cho So (The Chinese University of Hong Kong)

**MLSP-O3-3: A Two timescale Primal dual Algorithm for Decentralized Optimization with Compression**

Haoming Liu (The Chinese University of Hong Kong); Chung-Yiu Yau (The Chinese University of Hong Kong); Hoi-To Wai (Chinese University of Hong Kong)

**MLSP-O3-4: GS-PT: Exploiting 3D Gaussian Splatting for Comprehensive Point Cloud Understanding via Self-supervised Learning**

Keyi Liu (Fudan University); Yeqi Luo (Fudan University); Weidong Yang (Fudan University); Jingyi Xu (Fudan University); Zhijun Li (University of Science and Technology of China); Wen-Ming Chen (Fudan University); Ben Fei (Chinese University of Hong Kong)

**MLSP-O3-5: CEMSSL: Conditional Embodied Self-Supervised Learning is All You Need for High-precision Multi-solution Inverse Kinematics of Robot Arms**

Weiming Qu (Peking University); Tianlin Liu (Peking University); Du Jiawei (Peking University); Dingsheng Luo (Peking University)

**IVMSP-O6: Generative Models and Visual Information Security**

**Room: Rm. 207**

**Type: Oral**

**May 24th 15:00-16:30**

**IVMSP-O6-1: ICIMG-Net: Inject Context Information to Motion Generation for Optical Flow Estimation**

Wenbo Yin (Nanchang Hangkong University); Congxuan Zhang (Nanchang Hangkong University); Zhen Chen (Nanchang Hangkong University); Cheng Feng (Beihang University); Liyue Ge (Beihang University); Zige Wang (Nanchang Hangkong University)

**IVMSP-O6-2: DTR: Dynamic Tree-Ring Watermarking Framework for Diffusion-Based Video Generation**

Shunyang Zeng (Sichuan University); Linlin Yang (Communication University of China); Jin Yang (Sichuan University); Yezhen Wang (National University of Singapore); Tianyu Gao (National University of Singapore)

**IVMSP-O6-3: Semantic to Structure: Learning Structural Representations for Infringement Detection**

Chuanwei Huang (Peking University); Zexi Jia (Tencent); Hongyan Fei (Peking University); Yesuang Zhu (Tencent); Zhiqiang Yuan (Tencent); Jinchao Zhang (Tencent); Jie Zhou (Tencent)

**IVMSP-O6-4: WebSurfer: Enhancing LLM Agents with Web-Wise Feedback for Web Navigation**

Die Hu (Institute of Information Engineering, Chinese Academy of Sciences); Jingguo Ge (iie, cas); Weitao Tang (Institute of Information Engineering, Chinese Academy of Sciences); Guoyi Li (Institute of Information Engineering, Chinese Academy of Sciences); Liangxiong Li (Institute of information engineering, Chinese Academy of Sciences); Bingzhen Wu (Institute of Information Engineering, Chinese Academy of Sciences)

**SLP-P3: Speech Recognition and Low-Resource ASR**

**Room: Rm. 206**

**Type: Poster**

**May 24th 15:00-16:30**

**SLP-P3-1: AER-LLM: Ambiguity-aware Emotion Recognition leveraging Large Language Models**

Xin Hong (The University of Melbourne); Yuan Gong (Massachusetts Institute of Technology); Vidhyasaharan Sethu (University of New South Wales); Ting Dang (University of Melbourne)

**SLP-P3-2: Unified Audio Event Detection**

Yidi Jiang (National University of Singapore); Ruijie Tao (National University of Singapore); Wen Huang (Shanghai Jiao Tong University); Qian Chen (Alibaba Group); Wen Wang (Alibaba Group)

**SLP-P3-3: Efficient Extreme Large-Scale Speaker Verification: Dynamic Active Sub Fully-Connected Layers for Faster Training and Memory Optimization**

Fulin Zhang (China Mobile Research Institute); Chenguang Hu (chinamobile); Yao Shen (chinamobile); Yingying Gao (chinamobile); Shilei Zhang (chinamobile); Junlan Feng (China Mobile Research)

**SLP-P3-4: Grouped Knowledge Distillation with Adaptive Logit Softening for Speaker Recognition**

Chong-Xin Gan (The Hong Kong Polytechnic University); Youzhi Tu (The Hong Kong Polytechnic University); Zezhong Jin (The Hong Kong Polytechnic University); Manwai Mak (The Hong Kong Polytechnic University); Kong Aik Lee (The Hong Kong Polytechnic University)

**SLP-P3-5: Improving Generated and Retrieved Knowledge Combination Through Zero-shot Generation**

Xinkai Du (Sunshine Insurance Group); Quanjie Han (Sunshine Insurance Group); Chao Lv (Sunshine Insurance Group); Yan Lu (Sunshine Insurance Group); Yalin Sun (Sunshine Insurance Group); Hao Shu (Tsinghua University); Hongbo Shan (Tsinghua University); Maosong Sun (Tsinghua University)

**SLP-P3-6: A Label Co-occurrence Transformation Network for Joint Empathy Detection and Empathy Intent Classification**

Liting Jiang (Xinjiang University); Di Wu (Xinjiang University); Haoxiang Su (Xinjiang University); Xiaoyong Guo (Xinjiang University); Shuangyong Song (China Telecom Corporation Ltd); Yanbing Li (Xinjiang University)

**SLP-P3-7: Curriculum Learning aided Audio-Visual Speech Recognition with Arbitrary Speaker Number**

Yuxiao Lin (Zhejiang University); Tao Jin (Zhejiang University); Xize Cheng (Zhejiang University); Zhou Zhao (Zhejiang University); Fei Wu (Zhejiang University, China)

**SLP-P3-8: Intent-driven In-context Learning for Few-shot Dialogue State Tracking**

Zihao Yi (Sun Yat-sen University); Zhe Xu (Sun Yat-sen University); Ying Shen (Sun Yat-Sen University)

**SLP-P3-9: A Study of Multi-Scale Feature Learning From Pre-Trained Models on Speaker Verification**

Shengyu Peng (University of Science and Technology of China); Wu Guo (University of Science and Technology of China); Jie Zhang (University of Science and Technology of China (USTC)); Zuoliang Li (University of Science and Technology of China); Yu Guan (University of Science and Technology of China); Bin Gu (University of Science and Technology of China); Yang Ai (University of Science and Technology of China)

**SLP-P3-10: Temporal-Frequency State Space Duality: An Efficient Paradigm for Speech Emotion Recognition**

Jiaqi Zhao (Anhui University); Fei Wang (Hefei University of Technology); Kun Li (Zhejiang University); Yanyan Wei (Hefei University of Technology); Shengeng Tang (Hefei University of Technology); Shu Zhao (Anhui University); Xiao Sun (HeFei University of Technology)

**SLP-P3-11: UPCS: Unbiased Persona Construction for Dialogue Generation**

Kuiyun Chen (Shandong University); Yanbin Wei (Hong Kong University of Science and Technology)

**SLP-P3-12: Adaptive Decoding for Efficient Automatic Speech Recognition**

Xiangnan Ma (Northeastern University); Peizhuo Liu (The Chinese University of Hong Kong, Shenzhen); Yuhao Zhang (The Chinese University of Hong Kong (Shenzhen)); Kou Kaiqi (Northeastern University); Chenghao Gao (Northeastern University); Tong Xiao (Northeastern University); Jingbo Zhu (Northeastern University, China)

**SLP-P3-13: Aligning Noisy-Clean Speech Pairs at Feature and Embedding Levels for Learning Noise-Invariant Speaker Representations**

Zuoliang Li (University of Science and Technology of China); Yang Ai (University of Science and Technology of China); Jie Zhang (University of Science and Technology of China (USTC)); Shengyu Peng (University of Science and Technology of China); Yu Guan (University of Science and Technology of China); Bin Gu (University of Science and Technology of China); Wu Guo (University of Science and Technology of China)

**SLP-P3-14: 3D-Speaker-Toolkit: An Open-Source Toolkit for Multimodal Speaker Verification and Diarization**

Yafeng Chen (Speech Lab, Alibaba Group); Siqi Zheng (Alibaba Group); Hui Wang (Speech Lab, Alibaba Group); Luyao Cheng (Alibaba Group); Tinglong Zhu (Carnegie Mellon University); Rongjie Huang (Zhejiang University); Chong Deng (Alibaba inc); Qian Chen (Alibaba Group); Shiliang Zhang (Alibaba Group); Wen Wang (Alibaba Group); Xihao Li (University of North Carolina at Chapel Hill)

**SLP-P3-15: Recursive Feature Learning from Pre-Trained Models for Spoofing Speech Detection**

Yu Guan (University of Science and Technology of China); Yang Ai (University of Science and Technology of China); Zuoliang Li (University of Science and Technology of China); Shengyu Peng (University of Science and Technology of China); Wu Guo (University of Science and Technology of China)

**SLP-P3-16: Improved Cross-Lingual Speaker Verification Using Speaker Sensitive Feature Guidance and Fine-grained Phonetic Information**

Yongtai Ji (xinjiang university); Guangxing Li (xinjiang university); Hao Huang (Xinjiang University); Yanbing Li (Xinjiang University); Wushour Slamu (xinjiang university)

**SLP-P4: Language Understanding and Efficient NLP Models**

**Room: Rm. 206**

**Type: Poster**

**May 24th 15:00-16:30**

**SLP-P4-1: Can Automated Speech Recognition Errors Provide Valuable Clues for Alzheimer's Disease Detection?**

Yin-Long Liu (University of Science and Technology of China); Rui Feng (University of Science and Technology of China); Ye-Xin Lu (University of Science and Technology of China); Jiaxin Chen (University of Science and Technology of China); Yang Ai (University of Science and Technology of China); Jiahong Yuan (University of Science and Technology of China); Zhen-Hua Ling (University of Science and Technology of China)

**SLP-P4-2: Improving Knowledge Base Question Answering via Retrieval Enhancement and Stepwise Reasoning**

Dian Huang (Shanghai University); Jianqi Gao (Shanghai Jiao Tong University); Xiangfeng Luo (Shanghai University); Hao Wu (Shanghai University)

**SLP-P4-3: Bridging Neural and Symbolic Reasoning: A Dual-System Framework for Interpretable Question Answering**

Jihao Shi (Harbin Institute of Technology); Xiao Ding (Harbin Institute of Technology); Hengwei Zhao (Harbin Institute of Technology); Ting Liu (Harbin Institute of Technology); Bing Qin (Harbin Institute of Technology)

**SLP-P4-4: Enhancing Extrapolation Reasoning on Temporal Knowledge Graphs with Logic Rules and Queries**

Tingxuan Chen (Central South University); Liu Yang (School of Computer Science and Engineering, Central South University); Zidong Wang (School of Computer Science and Engineering, Central South University); Shuai Luo (Central South University); Jun Long (Central South University)

**SLP-P4-5: BRDIA: Bidirectional Reasoning with Dynamic Instruction Adjustment for Multi-hop KGQA**

Chuanyang Gong (TongJi University); Zhihua Wei (TongJi University)

**SLP-P4-6: Towards Detecting LLMs Hallucination via Markov Chain-based Multi-agent Debate Framework**

Xiaoxi Sun (Peking University); Jinpeng Li (Peking University); Yan Zhong (Peking University); Dongyan Zhao (Peking University); Rui Yan (Renmin University of China)

**SLP-P4-7: Harnessing Dimensional Contrast and Information Compensation for Sentence Embedding Enhancement**

Kang He (Wuhan University); Ding Yuzhe (Wuhan university); Bobo Li (Wuhan University); Haining Wang (Wuhan University); Fei Li (Wuhan University); Chong Teng (Wuhan University); Donghong Ji (Wuhan University)

**SLP-P4-8: Bootstrapping LLM-based Fact-checking via Iterative Rationalization Finetuning**

Xiucheng Lyu (Harbin Institute of Technology, Shenzhen, China; Guangdong Provincial Key Laboratory of Novel Security Intelligence Technologies); Chengyu Cao (Harbin Institute of Technology (Shenzhen)); Mingwei Sun (HITSZ); Bin Liang (The Chinese University of Hong Kong; Harbin Institute of Technology (Shenzhen)); Liang Yao (Tencent Inc., Shenzhen, China); Ruifeng Xu (Harbin Institute of Technology, Shenzhen, China; Peng Cheng Laboratory, Shenzhen, China; Guangdong Provincial Key Laboratory of Novel Security Intelligence Technologies)

**SLP-P4-9: Dynamic Structure Hypergraph for Document-level Event Extraction**

Qi Ren (Inner Mongolia University); Weihua Wang (Inner Mongolian University); Jie Yu (National University of Defense Technology); Guanglai Gao (Inner Mongolia University)

**SLP-P4-10: HCoTT: Hierarchical Chain-of-Thought Distillation**

Zhichang Wang (Peking University); Xianwei Zhuang (Peking University); Zhihong Zhu (Peking University); Yuexian Zou (Peking University)

**SLP-P4-11: Semantic Data Augmentation for Few-Shot Biomedical Named Entity Recognition**

Ying Zhang (Inner Mongolia University); Weihua Wang (Inner Mongolian University)

**SLP-P4-12: CritiPrefill: A Segment-wise Criticality-based Approach for Prefilling Acceleration in LLMs**

Junlin Lv (USTC); Yuan Feng (USTC); Xike Xie (OPPO); Xin Jia (Guangdong OPPO Mobile Telecommunications Corp.,Ltd.); Qirong Peng (OPPO); Guiming Xie (OPPO)

**SLP-P5: Machine Learning for NLP: Language Models, Representation, and Summarization**

**Room: Rm. 206**

**Type: Poster**

**May 24th 15:00-16:30**

**SLP-P5-1: Promoting PLM Fine-Tuning through Consistency Adversarial Training**

Jianqi Gao (Shanghai Jiao Tong University); Jian Cao (Shanghai Jiao Tong University); Jinghua Tang (Shanghai Jiaotong University)

**SLP-P5-2: CascadePAIE: Reallocating Relevance for Event Roles and Event Text in Event Argument Extraction**

Chunyu Yao (East china university of science and technology); Yi Guo (ecust)

**SLP-P5-3: The Missing Piece in Model Editing: A Deep Dive into the Hidden Damage Brought By Model Editing**

Jianchen Wang (Fudan University); Zhouhong Gu (Fudan University); Xiaoxuan Zhu (Fudan University); Lin Zhang (Fudan University); Haoning Ye (Fudan University); Zhuozhi Xiong (Fudan University); Sihang Jiang (Fudan University); Hongwei Feng (Fudan University); Yanghua Xiao (Fudan University)

**SLP-P5-4: Tool Playgrounds: A Comprehensive and Analyzable Benchmark for LLM Tool Invocation**

Zhiwei Dong (University of Science and Technology Beijing); Ruihao Gong (SenseTime); Yang Yong (SenseTime); Shuo Wu (Sensetime); Yongqiang Yao (sensetime); Song-Lu Chen (University of Science and Technology Beijing); Xu-Cheng Yin (University of Science and Technology Beijing)

**SLP-P5-5: GEGA: Graph Convolutional Networks and Evidence Retrieval Guided Attention for Enhanced Document-level Relation Extraction**

Yanxu Mao (Henan University); Xiaohui Chen (China Mobile Research Institute); Peipei Liu (School of Cyber Security, University of Chinese Academy of Sciences); Tiehan Cui (Henan University); Zuhui Yue (China Mobile Research Institute); Zheng Li (China Mobile Research Institute)

**SLP-P5-6: Prompt-augmented Feature with Cross-domain Contrastive Learning for Efficient Multi-domain Sentiment Analysis**

Rui Li (Shantou University); Tao Yang (Shantou University); Cheng Liu (Shantou University); Dazhi Jiang (Shantou University); Hau San Wong (City University of Hong Kong); Si Wu (South China University of Technology)

**SLP-P5-7: Incorporating Spatial Cues in Modular Speaker Diarization for Multi-channel Multi-party Meetings**

Ruoyu Wang (University of Science and Technology of China); Shutong Niu (University of Science and Technology of China); Gaobin Yang (University of Science and Technology of China); Jun Du (University of Science and Technology of China); Shuangqing Qian (iFlytek Research); Tian Gao (iFlytek Research); Jia Pan (iFlytek Research)

**SLP-P5-8: Multi-modal Streaming ASR in Cross-talk Scenario for Smart Glasses**

Ya Jiang (University of Science and Technology of China); Hongbo Lan (USTC); Qing Wang (University of Science and Technology of China); Shutong Niu (University of Science and Technology of China)

**SLP-P5-9: LLMProto: A Hardware-Efficient Finetuning Model for Few-Shot Relation Extraction with Large Language Model**

Ye Longyi (Beijing Institute of Technology); Hua-Ping Zhang (Beijing Institute of Technology)

**SLP-P5-10: Mamba-SEUNet: Mamba UNet for Monaural Speech Enhancement**

Junyu Wang (Tianjin University); Zizhen Lin (Sichuan University); Tianrui Wang (Tianjin University); Meng Ge (Tianjin University); Longbiao Wang (Tianjin University); Jianwu Dang (Tianjin University)

**SLP-P5-11: MILE: Multi-Instance Learning for Document Event Argument Extraction**

Jia Xian Wang (Central China Normal University); Yong Zhang (Central China Normal University); Xiang Peng (Central China Normal University)

**SLP-P5-12: Utterance as A Bridge: Few-shot Joint Learning of Empathy Detection and Empathy Intent Classification**

Liting Jiang (Xinjiang University); Di Wu (Xinjiang University); Zhe Li (Hong Kong Polytechnic University); Shuangyong Song (China Telecom Corporation Ltd); Yanbing Li (Xinjiang University); Hao Huang (Xinjiang University)

**SLP-P5-13: MAEM: A Multi-Aspect Extraction Model for Enhanced Embedding in RAG**

Ni Yi (Computer Network Information Center, Chinese Academy of Sciences); Chen Liu (Computer Network Information Center, Chinese Academy of Sciences); Yue Wang (Computer Network Information Center, CAS, Beijing, China; University of Chinese Academy of Sciences, Beijing, China); Jianjun Yu (Computer Network Information Center, CAS, Beijing, China)

**AASP-P2: Audio Enhancement & Noise Control: Restoration, Echo/SignalSuppression**

**Room: Rm. 206**

**Type: Poster**

**May 24th 15:00-16:30**



**AASP-P2-1: Enabling Auditory Large Language Models for Automatic Speech Quality Evaluation**

Siyin Wang (Tsinghua University); Wenyi Yu (Tsinghua); Yudong Yang (Tsinghua University); Changli Tang (Tsinghua University); Yixuan Li (Tsinghua University); Jimin Zhuang (Tsinghua University); Xianzhao Chen (Bytedance); Xiaohai Tian (ByteDance); Jun Zhang (Bytedance); Guangzhi Sun (University of Cambridge Department of Engineering); Lu Lu (Bytedance); Chao Zhang (Tsinghua University)

**AASP-P2-2: Bridge-SR: Schrödinger Bridge for Efficient SR**

Chang Li (USTC); Zehua Chen (Tsinghua University); Fan Bao (Tsinghua University); Jun Zhu (Tsinghua University)

**AASP-P2-3: Language-Queried Target Sound Extraction Without Parallel Training Data**

Hao Ma (Shandong University); Zhiyuan Peng (CUHK); Xu Li (Tencent); Yukai Li (Shandong University); Mingjie Shao (Shandong University); Qiuqiang Kong (CUHK); Ju Liu (Shandong University)

**AASP-P2-4: Apollo: Band-sequence Modeling for High-Quality Audio Restoration**

Kai Li (Tsinghua University); Yi Luo (Tencent AI Lab)

**AASP-P2-5: Distance Based Single-Channel Target Speech Extraction**

Runwu Shi (Tokyo Institute of Technology); Benjamin Yen (Tokyo Institute of Technology); Kazuhiro Nakadai (Tokyo Institute of Technology)

**AASP-P2-6: Design and Optimization of Superdirective Beamforming and Post-Filtering for Speech Enhancement**

Xiaoran Yang (Wuhan University); Gongping Huang (Wuhan University); Jilu Jin (Northwestern Polytechnical University); Jingdong Chen (Northwestern Polytechnical University); Jacob Benesty (INRS)

**AASP-P2-7: A Spherical-Harmonic Domain Selective Spatial Active Noise Control System Based on Sound Field Reproduction**

Huawei Zhang (The Australian National University); Huiyuan Sun (The Australian National University); Jihui (Aimee) Zhang (the Australian National University); Prasanga Samarasinghe (Australian National University); Yile (Angela) Zhang (The Australian National University)

**AASP-P2-8: Transferable Selective Virtual Sensing Active Noise Control Technique Based on Metric Learning**

Boxiang Wang (Nanyang Technological University); Dongyuan Shi (Nanyang Technological University); Zhengding Luo (Nanyang Technological University); Xiaoyi Shen (Nanyang Technological University); Junwei Ji (Nanyang Technological University); Woon Seng Gan (NTU)

**AASP-P2-9: A Small-footprint Acoustic Echo Cancellation Solution for Mobile Full-Duplex Speech Interactions**

Yiheng Jiang (Alibaba Group); Biao Tian (-)

**AASP-P2-10: Preventing output saturation in active noise control: An output-constrained Kalman filter approach**

Junwei Ji (Nanyang Technological University); Dongyuan Shi (Nanyang Technological University); Boxiang Wang (Nanyang Technological University); Xiaoyi Shen (Nanyang Technological University); Zhengding Luo (Nanyang Technological University); Woon Seng Gan (NTU)

**AASP-P2-11: MusicEval: A Generative Music Dataset with Expert Ratings for Automatic Text-to-Music Evaluation**

Cheng Liu (Nankai University); Hui Wang (Nankai University); Jinghua Zhao (Nankai University); Shiwan Zhao (Nankai University); Hui Bu (AISHELL); Xin Xu (AISHELL); Jiaming Zhou (Nankai University); Haoqin Sun (Nankai University); Yong Qin (Nankai University)

**AASP-P2-12: STA-V2A: Video-to-Audio Generation with Semantic and Temporal Alignment**

Yong Ren (Institute of Automation, Chinese Academy of Sciences); Chenxing Li (Tencent AI Lab); Manjie Xu (Beijing Institute of Technology); Wei Liang (Beijing Institute of Technology); Yu Gu (Tencent AI Lab); Rilin Chen (tencent); Dong Yu (Tencent AI Lab)

**AASP-P2-13: PicoAudio: Enabling Precise Temporal Controllability in Text-to-Audio Generation**

Zeyu Xie (Shanghai Jiao Tong University); Xuenan Xu (Shanghai Jiao Tong University); Zhizheng Wu (Chinese University of Hong Kong, Shenzhen); Mengyue Wu (Shanghai Jiao Tong University)

**AASP-P2-14: SEF-PNet: Speaker Encoder-Free Personalized Speech Enhancement with Local and Global Contexts Aggregation**

Ziling Huang (Shanghai Normal University); Haixin Guan (University of Science and Technology of China; Unisound AI Technology Co., Ltd); Haoran Wei (Samsung Research America); Yanhua Long (Shanghai Normal University)

**BISP-P3: Medical Image Analysis I**

**Room: Rm. 206**

**Type: Poster**

**May 24th 15:00-16:30**

**BISP-P3-1: MA-Det: A Discriminative Morphology-Aware Detector for Cervical Lesion Cell Clumps**

Ziyang Yin (Hohai University); Qian Huang (Hohai University); Yulin Chen (Hohai University); Hao Lu (Hohai University)

**BISP-P3-2: Carver: Learning to Reconstruct Right Ventricle from Sparse Multi-View 2D Echocardiograms**

Yida Li (University of science and technology of China); Jun Shi (University of Science and Technology of China); Zhaohui Wang (University of Science and Technology of China); Tiantong Wang (USTC); Ziqi Zhu (University of Science and Technology of China); Minfan Zhao (university of science and technology of china); Junshi Chen (University of Science and Technology of China); Hong An (University of Science and Technology of China)

**BISP-P3-3: AIDC: Benchmark for Analytical Learning in Incremental Disease Classification**

Rongchang Zhao (Central South University); Jianyu Qi (Central South University); Rui Li (Central South University); Zhijie Zheng (Central South University); Jian Zhang (Central South University); Jiaxu Li (Central South University)

**BISP-P3-4: PromptSeg: Learning to Segment Medical Image via Visual Prompts**

Minfan Zhao (university of science and technology of china); Ziqi Zhu (University of Science and Technology of China); Jun Shi (University of Science and Technology of China); Zhaohui Wang (University of Science and Technology of China); Junshi Chen (university of science and technology of china); Hong An (University of Science and Technology of China); Bing Yan (Department of radiation oncology, The First Affiliated Hospital of USTC, Division of Life Sciences and Medicine, University of Science and Technology of China)

**BISP-P3-5: Evidential Deep Learning with Reweighted Margin Adjustment for Uncertainty-Driven Cervical OCT Image Diagnosis**

Hanfeng Zhu (Central China Normal University); Qu Yi (Central China Normal University); Yutao Ma (Central China Normal University); Yuchen Pei (Central China Normal University)

**BISP-P3-6: Precision in Pathology: PMA-DETR Elevates Tumor Lesion Detection**

Yecheng Zhao (Southeast University); Zihan Zhou (Southeast University); Lei Qi (Southeast University); Hui Xue (Southeast University)

**BISP-P3-7: A Domain Adversarial Learning Framework for Major Depression Disorder Diagnosis**

Shaozhe Liu (Peking University); Leike An (China Mobile Information Technology Center); Ziyu Jia (Institute of Automation of Chinese Academy of Sciences)

**BISP-P3-8: LitePest: Real-Time and Efficient Detection of Agricultural Pests Using an Advanced Lightweight Deep Learning Network**

Zhe Tang (Central South University); Jiajia Lu (Central South University); Wei Xiang (Chinese Academy of Agricultural Sciences); Wanyu Ling (Central South University); Lingyan Zhang (Central South University)

**BISP-P3-9: Global Context MambaVision for EEG-based Emotion Recognition**

Hao Wang (College of Computer Science and Technology, Harbin Engineering University); Li Xu (College of Computer Science and Technology, Harbin Engineering University); Yuntao Yu (China Electronics Standardization Institute); Weiyue Ding (Harbin Institute of Technology); Xu Yiming (Tokyo Institute of Technology)

**BISP-P3-10: Multi-label body constitution recognition via dual transform MLP-like architecture using tongue images**

Mengjian Zhang (South China University of Technology); Guihua Wen (South China University of Technology); Pei Yang (South China University of Technology)

**BISP-P3-11: TKA-MIL: Top-K Attention Multiple Instance Learning for Whole Slide Image Classification and Instance Probability Derivation**

Sicheng Yu (Sun Yat-sen University); Xingshu Chen (Sun Yat-sen University); Fangzhou Cao (Sun Yat-sen University); Ting Tian (Sun Yat-sen University)

**BISP-P3-12: MonoIR: Inpainting and Reconstruction for Monocular Endoscope Deformation Scenes**

Ziteng Zhang (National University of Defense Technology); Wenyu Li (National University of Defense Technology); Sidun Liu (NUDT); Peng Qiao (NUDT); Yong Dou (National University of Defense Technology)

**BISP-P3-13: PHMamba: Preheating State Space Models with Context-Augmented Features for Medical Image Segmentation**

Nuo Chen (Donghua University); Shaoyu Wang (Donghua University); Ran Lu (Donghua University); Wenxuan Li (Donghua University); Xiuji Shi (Donghua University)

**BISP-P4: Medical Image Analysis II**

**Room: Rm. 206**

**Type: Poster**

**May 24th 15:00-16:30**

**BISP-P4-1: CT Image prediction Of PD-1 Gastric Cancer Patients Based On the PLSG Framework**

Chaoyu Yuan (Heilongjiang University); Nan Wang (Heilongjiang University); Mohan Wang (Heilongjiang University); Yingwei Xue (Harbin Medical University Cancer Hospital)

**BISP-P4-2: Self-Prompting Driven SAM2 for 3D Medical Image Segmentation**

Sheng Wei (East China Normal University); Song Qiu (East China Normal University); Mei Zhou (East China Normal University); He Zhang (Obstetrics and Gynecology Hospital of Fudan University); Yan Wang (East China Normal University); Qingli Li (East China Normal University)

**BISP-P4-3: Translating Mental Imaginations into Characters with Codebooks and Dynamics-Enhanced Decoding**

Jingyuan Li (University of Washington); Yansen Wang (Microsoft); Nie Lin (Institute of Industrial Science, The University of Tokyo); Dongsheng Li (Microsoft Research Asia)

**BISP-P4-4: STFEnc: A Novel Deep Encoder for Brain-Computer Interface Based on Interpretable Brain Features**

Zonghan Du (Sun Yat-sen University); Zhongyuan Lai (Fudan University)

**BISP-P4-5: Exploring the Interpretability of EEG-Inception Convolutional Neural Networks for Epilepsy Prediction**

Guanglong Zhang (Beijing University of Posts and Telecommunications); Tianren Wang (Xuanwu Hospital of Capital Medical University); Jinjie Guo (Beijing University of Posts and Telecommunications); Zhiyuan Yang (Beijing University of Posts and Telecommunications); Yilian Wu (Beijing University of Posts and Telecommunications); Guixia Kang (Wuxi BUPT Sensory Technology and Industry Institute CO. LTD)

**BISP-P4-6: Multi-Scale Attention-Based Dense Spatial-Temporal Model for Emotion Induction in Response to Olfactory Stimuli**

Jian-Ming Zhang (Shanghai Jiao Tong University); Wei-Bang Jiang (Shanghai Jiao Tong University); Wei-Long Zheng (Shanghai Jiao Tong University); Bao-Liang Lu (Shanghai Jiao Tong University)

**BISP-P4-7: Multi-Source Multi-Target Domain Similarity Network for Cross-Cultural EEG Emotion Recognition**

Haiqing Hu (Shanghai Jiao Tong University); Hanwen Shi (Shanghai Jiao Tong University); Bao-Liang Lu (Shanghai Jiao Tong University); Wei-Long Zheng (Shanghai Jiao Tong University)

**BISP-P4-8: An Efficient Residual-based Low-dose PET Reconstruction with Spatial-Frequency Integration**

Minghui Li (Huazhong University of Science and Technology); Lei Yu (Huazhong University of Science and Technology); Hewen Pan (Huazhong University of Science and Technology); Shengqing Hu (Huazhong University of Science and Technology); Longling Zhang (Huazhong University of Science and Technology); Shengshan Hu (Huazhong University of Science and Technology); Wei Wan (Huazhong University of Science and Technology); Peijin Guo (HUST)

**BISP-P4-9: Learning Two-factor Representation for Magnetic Resonance Image Super-resolution**

Weifeng Wei (Nanchang University); Heng Chen (Nanchang University); Pengxiang Su (Nanchang University)

**BISP-P4-10: MUPO-Net: A Multilevel Dual-domain Progressive Enhancement Network with Embedded Attention for CT Metal Artifact Reduction**

Xiaoli Yao (Sichuan University); Jia Tan (West China Hospital, Sichuan University); Zijian Deng (Sichuan University); Xiong Deng (Stevens Institute of Technology); Qijun Zhao (Sichuan University); Min Wu (West China Hospital, Sichuan University)

**BISP-P4-11: DARNet: A Dual Attention Residual Network for Medical Image Classification**

Ao Zhang (Shenzhen University); Zhenghua Guan (Shenzhen University); Tengda Zhang (Shenzhen University); Wenzheng Hu (Shenzhen University); Yi Liu (Shenzhen University); Baiying Lei (Shenzhen University)

**BISP-P4-12: FKAN-GMFNet: Fourier Kolmogorov-Arnold-based Group Multi-scale Fusion Network for Aneurysm Image Segmentation**

Shanchen Pang (China University of Petroleum); Xue Zhao (China University of Petroleum); Yulin Zhang (Shandong University of Science and Technology); Yawu Zhao (China University of Petroleum); Hengtao Ding (China University of Petroleum); Zhiyuan Zhao (China University of Petroleum); Sibao Qiao (Tiangong University)

**BISP-P4-13: FuzzyMIL: Decoupling Pathological Phenotypes through Deep Fuzzy Clustering for Efficient Whole Slide Image Analysis**

Anran Liu (The Hong Kong Polytechnic University); Tong Li (Washington University in St. Louis); Jing Cai (The Hong Kong Polytechnic University); Vajrara Srinivasa Sampath Veer (Indian Institute of Information Technology Dharwad)

#### **BISP-P4-14: A Unified Spatiotemporal Frequency Graph Neural Network for fMRI-based Brain Functional Connectivity Analysis**

Yulang Huang (University of Chinese Academy of Sciences); Zhiyuan Ding (JHU); Guokai Duan (University of Chinese Academy of Sciences); Yan Liu (University of Chinese Academy of Sciences); Xiangzhu Zeng (Peking University Third Hospital); Zheng Wang (Peking University Third Hospital); Yingying Xu (Peking University Sixth Hospital); Ling Wang (University of Electronic Science and Technology of China)

#### **BISP-P4-15: TROI: Cross-Subject Pretraining with Sparse Voxel Selection for Enhanced fMRI Visual Decoding**

Ziyu Wang (Tsinghua University); Tengyu Pan (Tsinghua University); Zhenyu Li (Tsinghua University); Ji Wu (Beihang University); Xiuxing Li (School of Computer Science & Technology, Beijing Institute of Technology); Jianyong Wang (Tsinghua University)

#### **IFS-P2: Network Forensics, Blockchain, and Communications Security**

**Room: Rm. 206**

**Type: Poster**

**May 24th 15:00-16:30**

#### **IFS-P2-1: Intrusion Detection for Intelligent Transportation Systems: A lightweight interpretable model**

Yuxi Zhou (Systems Engineering Institute, AMS, PLA); Tao Feng (Systems Engineering Institute, AMS, PLA); Yazhuo Gao (Systems Engineering Institute, AMS, PLA); Yixuan Wu (Northwestern Polytechnical University); Lin Yang (Institute of Systems Engineering, AMS); Jiaqi Lin (State Key Laboratory of Networking and Switching Technology, Beijing University of Posts and Telecommunications)

#### **IFS-P2-2: Toward Forward-Secure End-to-End Data Sharing: An Attribute-Key-Free CP-ABE Scheme**

Xinyi Shi (Institute of Information Engineering, CAS); Yunchuan Guo (Institute of Information Engineering, CAS, China); Wei Jin (China Academy of Information and Communications Technology); Mingjie Yu (University of Science and Technology of China); Daiyong Quan (China Automotive Engineering Research Institute Co., Ltd.); Wenlong Kou (Institute of Information Engineering, CAS, China); Fenghua Li (Institute of Information Engineering, CAS, China)

#### **IFS-P2-3: Dynamically Optimize MTD Strategy in Satellite Computing Systems Using A2C Reinforcement Learning**

Lin Zhang (Institute of Information Engineering, CAS, China); Yunchuan Guo (Institute of Information Engineering, CAS, China); Shoukun Guo (Institute of Information Engineering, CAS, China); Fenghua Li (Institute of Information Engineering, CAS, China); Faqun Jiang (Beijing Venustech Cybervision Co., Ltd., China); Liang Fang (Institute of Information Engineering, CAS, China)

#### **IFS-P2-4: Security-Enhanced Data Transmission Scheme for IoT-Based Healthcare in Remote Areas**

Zhenbin Guo (National University of Defense Technology); Yuchuan Luo (National University of Defense Technology); Shaojing Fu (National University of Defense Technology); Ming Xu (National University of Defense Technology)

#### **IFS-P2-5: RanDoctor: System-Level Ransomware Detection with ProbSparse Self-attention**

Zhilu Wang (Institute of Information Engineering, Chinese Academy of Sciences); Peinan Li (Institute of Information Engineering, Chinese Academy of Sciences); Lingbo Zhao (Institute of Information Engineering, Chinese Academy of Sciences); Fengkai Yuan (Institute of Information Engineering, Chinese Academy of Sciences); Rui Hou (State Key Laboratory of Information Security, Institute of Information Engineering, CAS); Dan Meng (Institute of Information Engineering, CAS)

#### **IFS-P2-6: VulKiller: Java Web Vulnerability Detection with Code Property Graph and Large Language Models**

Xingchen Chen (IIE); Baizhu Wang (MYBank AntGroup); Mengjun Zhang (Institute of Information Engineering, Chinese Academy of Sciences, Beijing, China; School of Cyber Security, University of Chinese Academy of Sciences, Beijing, China); Yaqin Cao (Institute of Information Engineering, Chinese Academy of Sciences, China); Qixu Liu (Institute of Information Engineering, Chinese Academy of Sciences, China)

**IFS-P2-7: APTSniffer: Detecting APT Attack Traffic Using Retrieval-Augmented Large Language Models**

Hongbo Xu (Institute of Information Engineering, Chinese Academy of Sciences); Chengxiang Si (CNCERT/CC); Zhou Zhou (IIE, CAS); Chenxu Wang (Institute of Information Engineering, Chinese Academy of Sciences); Peishuai Sun (Institute of Information Engineering, Chinese Academy of Sciences); Qingyun Liu (Institute of Information Engineering, Chinese Academy of Sciences)

**IFS-P2-8: TRACE: A Robust Framework for Malicious Traffic Detection with Noisy Labels**

Yitong Cai (Institute of Information Engineering, Chinese Academy of Sciences; School of Cyber Security, University of Chinese Academy of Sciences); Chengwei Peng (National Computer Network Emergency Response Technical Team/Coordination Center of China); Shu Li (Institute of Information Engineering, Chinese Academy of Sciences; School of Cyber Security, University of Chinese Academy of Sciences); Yuyi Liu (Institute of Information Engineering, Chinese Academy of Sciences; School of Cyber Security, University of Chinese Academy of Sciences); Hongfei Zhang (Institute of Information Engineering, Chinese Academy of Sciences; School of Cyber Security, University of Chinese Academy of Sciences); Binxing Fang (Cyberspace Institute of Advanced Technology, Guangzhou University)

**IFS-P2-9: FeedbackFuzz:Fuzzing Processors via Intricate Program Generation with Feedback Engine**

Jiashun Wang (Beijing University of Posts and Telecommunications); Baojiang Cui (Beijing University of Posts and Telecommunications); Renhai Dong (Beijing University of Posts and Telecommunications); Rundi Zhai (Beijing University of Posts and Telecommunications)

**IFS-P2-10: Username-Password Models Beyond Traditional Password Guessability Assessment**

Jiahong Yang (Peking University); Wenting Li (Peking University); Haibo Cheng (Peking University); Ping Wang (Peking University)

**IFS-P2-11: RAS-GNN: Reconstructing APT Attack Scenario Using Graph Neural Network**

Zhicheng Huang (Peking University); Ping Wang (Peking University)

**IFS-P2-12: DSDIR: A Two-Stage Method for Addressing Noisy Long-Tailed Problems in Malicious Traffic Detection**

Guoliang Li (Nankai University); Ruiqi Zhang (Nankai University); Sun Zhe (Nankai University); Lingkai Xing (Nankai University); Yu Zhang (Nankai University)

**MLSP-P5: Generative Modelling and Time Series/Clustering**

**Room: Rm. 206**

**Type: Poster**

**May 24th 15:00-16:30**

**MLSP-P5-1: Hyper-SDT: HyperNetwork Slide Decision Tree for Interpretable Tabular Learning**

Nan Hu (National University of Defense Technology); Xueqiong Li (National University of Defense Technology); Jun-Jie Huang (National University of Defense Technology); Zhenhua Liang (National University of Defense Technology); Shaowu Yang (National University of Defense Technology); Ji Wang (National University of Defense Technology)

**MLSP-P5-2: MambaCPU: Enhanced Correlation Mining with State Space Models for CPU Performance Prediction**

Xiaoman Liu (Intel)

**MLSP-P5-3: When Sparse Graph Representation Learning Falls into Domain Shift: Feature Augmentation for Cross-Domain Graph Meta-Learning**

Simin Niu (Renmin University of China); Xun Liang (Renmin University of China); Sensen Zhang (Renmin University of China); Zhiyu Li (iaar); Xuan Zhang (Renmin University of China); Bo Wu (Renmin University of China); Hanyu Wang (Renmin University of China); Shichao Song (Renmin University of China); Mengwei Wang (Renmin University of China); Jiawei Yang (Renmin University of China)

**MLSP-P5-4: exploring text-queried sound event detection with audio source separation**

Han Yin (JLESS); Jisheng Bai (Northwestern Polytechnical University); Yang Xiao (Fortemedia Singapore); Hui Wang (Alibaba); Siqi Zheng (Alibaba Group); Yafeng Chen (Alibaba Group); Rohan Kumar Das (Fortemedia); Chong Deng (Alibaba inc); Jianfeng Chen (Northwestern Polytechnical University)

**MLSP-P5-5: Enhancing Image Generation Fidelity via progressive Prompts**

Zhen Xiong (Beijing University of Chemical Technology); Yuqi Li (Institute of Computing Technology, Chinese Academy of Sciences); Chuanguang Yang (Institute of Computing Technology, Chinese Academy of Sciences); Tan Tiao (tsinghua university); Zhihong Zhu (Peking University); Siyuan Li (EaseUS); Yue Ma (Hong Kong University of Science and Technology)

**MLSP-P5-6: Instantaneous Trajectory Prediction via Latent Bidirectional Cooperative Diffusion**

Kun Ma (Harbin Engineering University); Qilong Han (Harbin Engineering University); Jingzheng Yao (Harbin Engineering University); Changmao Wu (Chinese Academy of Sciences); Chunrui Na (Harbin Engineering University)

**MLSP-P5-7: Hypergradient-free Training for Deep Equilibrium Models**

Yuhan Lin (Fudan University); Deng Shengxiang (Fudan University); Xudong Li (Fudan University)

**MLSP-P5-8: Surface Defect Detection Algorithm for Strip Alloy Material Based on Improved YOLOv8**

Wei Yang (Zhejiang Sci-Tech University); Jun Yang (Jiaxing University); Yajin Xia (Haiyan ZhongDA METAL Electronic Material Co., LTD)

**MLSP-P5-9: Spatio-Temporal Mixed Graph Neural Controlled Differential Equations with Adaptive Connection Sampling for Irregular Multivariate Time Series Anomaly Detection**

Xudong Jia (National University of Defense Technology); Wei Peng (NUDT); Chiran Shen (National University of Defense Technology); Baokang Zhao (NUDTCS); Peng Xun (NUDT)

**MLSP-P5-10: Injecting Global Context for Multivariate Time Series Forecasting on Variable Subsets**

Xin-Yi Li (State Key Laboratory for Novel Software Technology, Nanjing University); Yu-Bin Yang (State Key Laboratory for Novel Software Technology, Nanjing University)

**MLSP-P5-11: Adapting Large Language Models to Forecast in Frequency Domain**

Yungeng Zhang (China Telecom Research Institute); Yuan Chang (China Telecom Research Institute); Xiaohou Shi (China Telecom Research Institute); Yaqi Song (China Telecom Research Institute); Feng Wang (China Telecom Research Institute); Mingchuan Yang (China Telecom Beijing Research Institute)

**MLSP-P5-12: MoME: Mixture of Multi-Domain Experts for Multivariate Long-Term Series Forecasting**

Xinyu Li (Fudan University); Zhiheng Yang (Fudan University); Hao Xu (Fudan University); Yunqi Cai (Fudan University); Hong Lu (Fudan University); Xin Wang (Fudan University); Jin Zhao (Fudan University); Fenglin Qi (Fudan University); Jiajie Shen (Fudan University)

**MLSP-P5-13: PPDformer: Channel-Specific Periodic Patch Division for Time Series Forecasting**

Meng Wan (Computer Network Information Center, Chinese Academy of Sciences); Qi Su (Beijing Jiaotong University); Huan Hao (Binzhou Institute of Technology); Jue Wang (Computer Network Information Center, Chinese Academy of Sciences); Yuexiu Cui (University of Jinan); Yuxuan Bi (North China Electric Power University); Rongqiang Cao (Computer Network Information Center, Chinese Academy of Sciences); Peng Shi (University of Science and Technology Beijing); Yangang Wang (Computer Network Information Center, Chinese Academy of Sciences); Zonghua Qiu (Hongqiao Maitre New Energy Co., LTD); Zongshan Zhang (Hongqiao Luxi New Energy Co., LTD)

**MLSP-P5-14: V-Fusion: 2D Detection-enhanced Multimodal 3D BEV Object Detection**

Zhenpeng Li (Fudan University); Xiao Zhao (Fudan University); Jingwei Bian (The first 'Jiefang' Automobile Manufacturing Corp.); Biao Liu (The first 'Jiefang' Automobile Manufacturing Corp.); Wei Li (Academy for Engineering and Technology, Fudan University, Shanghai, China); Lihua Zhang (Fudan University)

**MLSP-P5-15: USD: Unsupervised Soft Contrastive Learning for Fault Detection in Multivariate Time Series**

Hong Liu (Hangzhou City University); Xiuxiu Qiu (Hangzhou City University & Zhejiang University of Technology); Yiming Shi (Zhejiang University); Zelin Zang (Zhejiang University & Westlake University)

**MLSP-P5-16: GMMCL: Adaptive Concept Drift in Data Streams with Gaussian Mixture Models based on Contrastive Learning**

Hongwei Wu (Institute of Information Engineering, Chinese Academy of Sciences); Jin Pan (National Computer Network Emergency Response Technical Team/Coordination Center of China); Rong Yang (Institute of Information Engineering, Chinese Academy of Sciences); Hong Zhang (CNCERT); Guang Shi (National Computer Network Emergency Response Technical Team/Coordination Center of China); Zhuojun Jiang (Institute of Information Engineering, Chinese Academy of Sciences); Qingyun Liu (Institute of Information Engineering, Chinese Academy of Sciences)

**MLSP-P5-17: FreeAlign: Superior Text-Image Alignment by Modulating Prompt Attention**

Yibo Zhang (Xidian University); Dahua Gao (Xidian University); Feng Xie (Xidian University); Minxi Yang (Xidian University); Wenlong Wang (Xidian University); Ruichao Liu (Xidian University)

**MLSP-P5-18: Stable Control Visual AutoRegressive Model: Precise and Efficient Image Generation via Scale Alignment**

Feng Xie (Xidian University); Dahua Gao (Xidian University); Ruichao Liu (Xidian University); Minxi Yang (Xidian University); Yibo Zhang (Xidian University); Wenlong Wang (Xidian University)

**MLSP-P5-19: Unbalanced Co-relational Optimal Transport for Robust Heterogeneous Data Alignment**

Fengjiao Gong (Renmin University of China); Zichong Wang (Renmin University of China); Hongteng Xu (Renmin University of China)

**MLSP-P5-20: Improving GAN Performance Using Confidence-Aware Discrimination**

Jinfeng Wu (Southern University of Science and Technology); Wu Shi (Shenzhen Institutes of Advanced Technology)

**MLSP-P6: Adversarial/Robust Learning in Distributed Systems**

**Room: Rm. 206**

**Type: Poster**

**May 24th 15:00-16:30**

**MLSP-P6-1: Collaborative Personalized Federated Learning via Exponential Moving Average Optimization**

Qing Li (Beijing University of Posts and Telecommunications); Jintao Liang (Beijing University of Posts and Telecommunications); Peng Tang (Shandong University); Sen Su (Beijing University of Posts and Telecommunications)

**MLSP-P6-2: FedRPN: An Efficient Framework for Optimizing System Heterogeneity in Federated Learning**

Baolu Xue (Nanjing University of Aeronautics and Astronautics); Hanyuan Zheng (Nanjing University of Aeronautics and Astronautics); Jiale Zhang (Yangzhou University); Jiwen Liu (Nanjing University of Aeronautics and Astronautics); Bing Chen (Nanjing University of Aeronautics and Astronautics)



**MLSP-P6-3: FedSe: Group-Based Sequential Training Strategies for Mitigating Label Skew in Federated Learning**

Ketu Qiao (XinJiang Technical Institute of Physics and Chemistry, Chinese Academy of Sciences); Yi Wang (XinJiang Technical Institute of Physics and Chemistry Chinese Academy of Sciences); Baoquan Wang (XinJiang Technical Institute of Physics and Chemistry, Chinese Academy of Sciences); Zhengdong Luo (University of Chinese Academy of Sciences); Xi Zhou (Xinjiang Technical Institute of Physics & Chemistry, Chinese Academy of Sciences)

**MLSP-P6-4: AdapFed: Adaptive Devices Training Strategy for Heterogeneous Federated Learning**

Ziyang Chen (Beijing Jiaotong University); Ying Zhou (Beijing Jiaotong University); Fei Song (Beijing Jiaotong University)

**MLSP-P6-5: FedFLD: Heterogeneous Federated Learning via Forget-Less Distillation**

Xiaoyang Yi (Nankai University); Jian Zhang (Nankai University); Jing Chen (Nankai University); Yuru Bao (Nankai University); Lingkai Xing (nankai university)

**MLSP-P6-6: HyperMST: Multi-scale Spatio-Temporal Hypercorrelation Network for POI Recommendation**

Zeyun Zhao (National University of Defense Technology); Changjian Wang (National University of Defense Technology); Kele Xu (National University of Defense Technology); Zhen Huang (National University of Defense Technology); Gaojin He (National University of Defense Technology); Xu Liu (National University of Defense Technology)

**MLSP-P6-7: Multi-layer Network Disintegration via Deep Reinforcement Learning**

Zhenhua Liang (National University of Defense Technology); Xueqiong Li (National University of Defense Technology); Junjie Huang (National University of Defense Technology); Nan Hu (National University of Defense Technology); Shaowu Yang (National University of Defense Technology); Hengzhu Liu (National University of Defense Technology)

**MLSP-P6-8: Enhancing the Robustness of LiDAR-based Object Detection under Disappearing Attacks**

Huiying Wang (Institute of Information Engineering, Chinese Academy of Sciences. School of Cyber Security, University of Chinese Academy of Sciences.); Lisong Zhang (Institute of Information Engineering, Chinese Academy of Sciences. School of Cyber Security, University of Chinese Academy of Sciences.); Wenbo Wang (Institute of information engineering, Chinese Academy of Sciences, and School of Cyber Security, University of Chinese Academy of Sciences); Yu Wen (Institute of Information Engineering, CAS)

**MLSP-P6-9: Generating Targeted Universal Adversarial Perturbation against Automatic Speech Recognition via Phoneme Tailoring**

Yujun Zhang (Beihang University); Yanqu Chen (Beijing University of Technology); Jiakai Wang (Zhongguancun Laboratory); Jin Hu (Beihang University); Renshuai Tao (Beijing Jiaotong University); Xianglong Liu (BUAA)

**MLSP-P6-10: DiGradPatch: Black-Box Patch Attacks via Diffusion-Based Double Gradient and Sensitive Distribution Guidance**

Yang Wu (Inner Mongolia University); Jing Liu (Inner Mongolia University)

**MLSP-P6-11: Graph Contrastive Learning with Decoupled Augmentation**

Shihao Gao (Xiamen University); Caoshuo Li (Xiamen University); Cunli Mao (Kunming University of Science and Technology); Xulong Zhang (Ping An Technology (Shenzhen) Co., Ltd.); Xiaoyang Qu (Ping An Technology (Shenzhen) Co., Ltd.); Taisong Jin (Xiamen University); Jianzong Wang (Ping An Technology (Shenzhen) Co., Ltd.)

**MLSP-P6-12: DASSL: Domain Agnostic Self-Supervised Learning with Multiple Missing Information Reconstruction Branches**

Jiang Fang (Institute of Information Engineering, Chinese Academy of Sciences, Beijing, China); Haonan He (Institute of Information Engineering, Chinese Academy of Sciences, Beijing, China); Chen Guo (China Mobile Group Device Co., Ltd); Jiyan Sun (Institute of Information Engineering, Chinese Academy of Sciences); Zhaorui Guo (Institute of Information Engineering, Chinese Academy of Sciences); Chao Xu (China Mobile Communications Group Co.,Ltd); Mohan Su (China Mobile Communications Group Co.,Ltd); Yinlong Liu (Institute of Information Engineering, Chinese Academy of Sciences; School of Cyber Security, University of Chinese Academy of Sciences); Wei Ma (Institute of Information Engineering, Chinese Academy of Sciences, National Engineering Laboratory for Information Security Technologies, Beijing, China, 100093)

**MLSP-P6-13: PASTD: Progressive Augmentation and Spatiotemporal Decoupling Contrastive Learning for Skeleton-Based Action Recognition**

Qian Huang (Hohai University); Weiwen Qian (Hohai University); Chang Li (Hohai University); Gongyou Xu (BNU-HKBU); Zhongqi Chen (Hohai University)

**MLSP-P6-14: A Self-supervised UAV Detection Method Based on Channel State Information**

Pengxuan Gao (Shanghai Jiao Tong University); Disheng Xiao (Shanghai Jiao Tong University); Ruiheng Zou (Nanjing University); Kai Ying (Shanghai Jiao Tong University)

**MLSP-P6-15: Meta-Conscious Driven Domain-Aware Federated Learning**

Zilong Yin (Shanghai University of Engineering Science); Haoyu Wang (Shanghai University Of Engineering Science); Xiaogang Lin (Shanghai University of Engineering Science); Xin Zhang (Tianjin University of Technology); Bin Chen (University of Shanghai for Science and Technology); Chenyu Zhou (Xinjiang University)

**MLSP-P6-16: FedTG: Text-guided Federated Domain Generalization**

Yiming Chen (Tsinghua University); Nan He (Tsinghua University); Lifeng Sun (Tsinghua University)

**MLSP-P6-17: Energy-based Model Guided Self-Supervised Learning for Speaker Verification**

Yaqian Hao (China Mobile Research Institute); Chenguang Hu (chinamobile); Chong Bian (chinamobile); Junlan Feng (chinamobile); Yingying Gao (chinamobile); Shilei Zhang (chinamobile)

## Sunday, May 25

### **IVMSP-P4: Image and Video Content Analysis and Representation**

**Room: Rm. 206**

**Type: Poster**

**May 25th 8:30-10:00**

### **IVMSP-P4-1: Weakly-Supervised Video Highlight Detection by Characteristic and Commonality Modeling**

Chengze Zhao (Department of Automation, Shanghai Jiao Tong University); Zixuan Zhao (Shanghai Jiao Tong University); Xu Zhao (Shanghai Jiao Tong University)

### **IVMSP-P4-2: Non-Autoregressive Image Captioning with Multi-Label Classification and Self-Critical Sequence Training**

Yuanqiu Liu (Dalian University of Technology); Hong Yu (Dalian University of Technology); Hui Li (Dalian University of Technology); Xiaotong Zhang (School of Software, Dalian University of Technology); Xin Han (Dalian University of Technology); Han Liu (Dalian University of Technology)

### **IVMSP-P4-3: RecNet: Optimization for Dense Object Detection in Retail Scenarios Based on View Rectification**

Junhao Xiao (Central China Normal University); Yi Chen (Central China Normal University); Xiao Feng (Central China Normal University); Ruoyu Wang (University of Electronic Science and Technology of China); Zhiyu Wu (Fudan University)

### **IVMSP-P4-4: A Scale-Adaptive and Background-Robust Method for Surface Defect Detection**

Jiahao Dong (Guangdong Laboratory of Artificial Intelligence and Digital Economy (SZ)); Zuo Zuo (Xi'an Jiaotong University); Zongze Wu (Shenzhen University); Meiqin Liu (Xi'an Jiaotong University)

### **IVMSP-P4-5: Joint Multi-Scale Contextual and Noise Suppression for Group Emotion Recognition**

Wangdong Guo (Jiangsu University); Qing Zhu (Jiangsu university); Qirong Mao (Jiangsu University)

### **IVMSP-P4-6: Cloth-debiasing with Stable Diffusion in Cloth-changing Person Re-identification**

Haiyang Zhang (Beijing University of Posts and Telecommunications); Xinshuang Wang (Beijing University of Posts and Telecommunications)

### **IVMSP-P4-7: Object-Centric Discriminative Learning for Text-Based Person Retrieval**

Haiwen Li (bupt); Delong Liu (Beijing University of Posts and Telecommunications); Fei Su (Beijing University of Posts and Telecommunications); Zhicheng Zhao (BUPT)

### **IVMSP-P4-8: Hazy Remote Sensing Image Semantic Segmentation with Weak Annotations via Pre-training Optimization and Co-training**

Junda Xu (Beijing Normal University); Libao Zhang (Beijing Normal University)

### **IVMSP-P4-9: Subpart Suppression Network for Few-Shot Object Counting**

Lanxin Liu (University of Chinese Academy of Sciences); Xinyan Liu (University of Chinese Academy of Sciences); Guorong Li (University of Chinese Academy of Sciences)

**IVMSP-P5: Model-based and Machine Learning Methods for Image and Video****Room: Rm. 206****Type: Poster****May 25th 8:30-10:00****IVMSP-P5-1: LNeRV: Learnable Hierarchical Encoding Improve Neural Representation Video Codec**

Jiahong Chen (Tsinghua University); Xiang Liu (Tsinghua University); Bin Chen (Harbin Institute of Technology, Shenzhen); Baoyi An (Network Technology Lab, Huawei Technologies CO., LTD); Tao Dai (Shenzhen University); Shu-Tao Xia (Tsinghua University)

**IVMSP-P5-2: MLNet: Mutual Learning Network to Improve Self-Supervised Representation for Fine-Grained Visual Recognition**

Peipei Zhao (Xidian University); Jiaxuan Wang (Xidian University); Zixiang Lu (Xidian University); Qiguang Miao (Xidian University)

**IVMSP-P5-3: DRDM: A Disentangled Representations Diffusion Model for Synthesizing Realistic Person Images**

Enbo Huang (Nanning Normal University); Yuan Zhang (Nanning Normal University); Faliang Huang (Nanning Normal University); Guangyu Zhang (South China Agricultural University); Yang Liu (Sun Yat-sen University)

**IVMSP-P5-4: Serial Local Patterns and Irregular Dependencies Extract and Cascaded Fusion Network for Structural Crack Segmentation**

Hui Liu (Tianjin University of Technology); Chen Jia (Tianjin University of Technology); Xu Cheng (Norwegian University of Science and Technology); Xiufeng Liu (Technical University of Denmark); Fan Shi (Tianjin University of Technology)

**IVMSP-P5-5: CurMIM: Curriculum Masked Image Modeling**

Hao Liu (Shandong University); Kun Wang (Shandong University); Yudong Han (Shandong University); Wang Haocong (Shandong University); Yupeng Hu (Shandong University); Chunxiao Wang (Shandong Computer Science Center (National Supercomputer Center in Jinan)); Liqiang Nie (Harbin Institute of Technology (Shenzhen))

**IVMSP-P5-6: Cross-Layer Graph Knowledge Distillation for Image Recognition**

Jiaming Chu (Institute of Computing Technology, Chinese Academy of Sciences); Yanzhuo Xiang (University of Illinois Urbana-Champaign); Yuqi Li (Institute of Computing Technology, Chinese Academy of Sciences); 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)

**IVMSP-P5-7: Prototype-Driven Multi-Feature Generation for Visible-Infrared Person Re-identification**

Jiarui Li (Institute of Computing Technology, Chinese Academy of Sciences); Zhen Qiu (China University of Mining and Technology); Yilin Yang (Institute of Computing Technology, Chinese Academy of Sciences); Yuqi Li (Institute of Computing Technology, Chinese Academy of Sciences); Zeyu Dong (Boston University); Chuanguang Yang (Institute of Computing Technology, Chinese Academy of Sciences)

**IVMSP-P5-8: High-Fidelity Editable Portrait Synthesis with 3D GAN Inversion**

Jindong Xie (Shenzhen University); Jiachen Liu (Shenzhen University); Yupei Lin (Guangdong University of Technology); Jinbao Wang (Shenzhen University); Xianxu Hou (Xi'an Jiaotong-Liverpool University); Linlin Shen (Shenzhen University)

**IVMSP-P5-9: Enhancing Robustness of Implicit Neural Representations Against Weight Perturbations**

Wenyong Zhou (The University of Hong Kong); Yuxin Cheng (The University of Hong Kong); Taiqiang Wu (The University of Hong Kong); Chen Zhang (The University of Hong Kong); Zhengwu Liu (The University of Hong Kong); Ngai Wong (The University of Hong Kong)

**IVMSP-P5-10: Dual-Domain Feature-Guided Task Alignment for Enhanced Small Object Detection**

Fangrui Guo (University of California, Los Angeles); Quan Zhang (Xi'an Jiaotong-Liverpool University); Junwei Wu (University of Liverpool)

**IVMSP-P5-11: MINR: Efficient Implicit Neural Representations for Multi-Image Encoding**

Wenyong Zhou (The University of Hong Kong); Taiqiang Wu (The University of Hong Kong); Yuxin Cheng (The University of Hong Kong); Chen Zhang (The University of Hong Kong); Zhengwu Liu (The University of Hong Kong); Ngai Wong (The University of Hong Kong)

**IVMSP-P5-12: DreamHA: Towards High-Quality Human Animation with Image-to-Video Diffusion Models**

Longran Shao (University of Chinese Academy of Sciences); Bonan Li (University of Chinese Academy of Sciences); Congying Han (University of Chinese Academy of Sciences); Wenzhao Liu (University of Chinese Academy of Sciences); Tiande Guo (University of Chinese Academy of Sciences); Tianchi Xing (University of Chinese Academy of Sciences); Xinmin Qiu (University of Chinese Academy of Science); Zicheng Zhang (University of Chinese Academy of Science)

**IVMSP-P5-13: VPCI: Self-Supervised Visual Prompt-Guided Cross-Domain Interactive Image Fusion Framework**

Yong Liu (Shandong University); Chengyu Wu (Shandong University); Jiayuan Cui (Shandong University); Bin Jiang (Shandong University)

**IVMSP-P5-14: Map-Free Visual Relocalization Enhanced by Instance Knowledge and Depth Knowledge**

Mingyu Xiao (Beijing University of Posts and Telecommunications); Runze Chen (Beijing University of Posts and Telecommunications); Haiyong Luo (Research Center for Ubiquitous Computing Systems, Institute of Computing Technology, Chinese Academy of Sciences); Fang Zhao (School of Software Engineering, Beijing University of Posts and Telecommunications); Fan Wu (Beijing University of Posts and Telecommunications); Hao Xiong (School of Computer Science, Beijing University of Posts and Telecommunications); Xuepeng Ma (Shouguang Cheng Zhi Feng Xing Technology Co., Ltd.); Juan Wang (Shouguang Cheng Zhi Feng Xing Technology Co., Ltd.)

**IVMSP-P6: Image and Video Synthesis, Rendering, Storage, and Retrieval**

**Room: Rm. 206**

**Type: Poster**

**May 25th 8:30-10:00**

**IVMSP-P6-1: Segment Any Bone in CT with Partial Supervision**

Tianyou Liang (University of Technology Sydney); Xiaoxu Li (CURVEBEAM AI); Yu Peng (Curvebeam AI); Min Xu (University of Technology Sydney)

**IVMSP-P6-2: Granularity-Aware Contrastive Learning for Fine-grained Action Recognition**

Hailun Zhang (Sichuan University); Xinrui Wang (Sichuan University); Qijun Zhao (Sichuan University)

**IVMSP-P6-3: SkeletonMix: A Mixup-Based Data Augmentation Framework for Skeleton-Based Action Recognition**

Zongye Zhang (State Key Laboratory of Virtual Reality Technology and System, Beihang University, Beijing 100191, China); 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)

**IVMSP-P6-4: Do Less and Achieve More: Free Condition Video Outpainting with Diffusion Model**

Haofan Huang (Zhejiang University); Yinlin Guo (Zhejiang University); Yening Lv (Zhejiang University); Sizhe Shan (Zhejiang University); Yan Zhang (Zhejiang University); Yuehai Wang (Zhejiang University)

**IVMSP-P6-5: A Cross-Modal Multi-Attitude Framework for the Generation of Space Target ISAR Images**

Derong Kong (National University of Defense Technology); Huaizhang Liao (National University of Defense Technology); Jingyuan Xia (National University of Defense Technology)

**IVMSP-P6-6: Semantic-Guided Gaussian Splatting with Deferred Rendering**

Nan Wang (Tongji University); Xiaohan Yan (Tongji University); Xiaowei Song (Tongji University); Zhicheng Wang (Tongji University)

**IVMSP-P6-7: Generating Editable Head Avatars with 3D Gaussian GANs**

Guohao Li (Beihang University); Hongyu Yang (Beihang University); Yifang Men (Alibaba); Di Huang (Beihang University, China); Weixin Li (Beihang University); Ruijie Yang (Beihang University); Yunhong Wang (State Key Laboratory of Virtual Reality Technology and System, Beihang University, Beijing 100191, China)

**IVMSP-P6-8: DreamVideo: High-Fidelity Image-to-Video Generation with Image Retention and Text Guidance**

Cong Wang (Sun Yat-sen University); Jiaxi Gu (Huawei Noah's Ark Lab); Panwen Hu (The Chinese University of Hong Kong, Shenzhen); Yuanfan Guo (Huawei); Xiao Dong (Sun Yat-sen University); Hang Xu (Huawei Noah's Ark Lab); Xiaodan Liang (Sun Yat-sen University)

**IVMSP-P6-9: EasyControl: Adding Control to Video Diffusion for Controllable Video Generation and Interpolation**

Cong Wang (Sun Yat-sen University); Jiaxi Gu (Huawei Noah's Ark Lab); Panwen Hu (The Chinese University of Hong Kong, Shenzhen); Xiao Dong (Sun Yat-sen University); Yuanfan Guo (Huawei); Hang Xu (Huawei Noah's Ark Lab); Xiaodan Liang (Sun Yat-sen University)

**IVMSP-P6-10: MAITFuse: Multi-Dimension Adaptive Interaction Transform Network For Infrared-visible Image Fusion**

Ya Bin Sun (Jiangnan University); Wentai Lei (Central South University); Ziyi Zhang (Jiangnan University); Jiongchang Liu (Jiangnan University); Chenxu Li (Jiangnan University); Tao Zhang (Jiangnan University)

**IVMSP-P6-11: Dense Point Clouds Matter: Dust-GS for Scene Reconstruction from Sparse Viewpoints**

Shen Chen (East China University of Science and Technology); Jiale Zhou (East China University of Science and Technology); Lei Li (University of Washington)

**IVMSP-P6-12: Generative Adversarial Network with Structured Semantic Prompts Constraining Clip for Text-to-Image**

Shuheng Ge (Harbin Institute of Technology); Li Zhang (Harbin Institute of Technology); Haoyu Xing (Harbin Institute of Technology); Xiangqian Wu (Harbin Institute of Technology, China)

**IVMSP-P6-13: AKI360: Enabling Highly Interactive 360-degree Video Streaming by Adaptive Keyframe Interval**

Haitao Liu (Computer Network Information Center, Chinese Academy of Sciences); Xinyi Zhang (cnic); Chuanmin Jia (Peking University); Yanbiao Li (Computer Network Information Center, Chinese Academy of Sciences); Gaogang Xie (Computer Network Information Center, Chinese Academy of Sciences)

**IVMSP-P6-14: Pipeline-Centered Neighboring Network for Deep Unfolding Pansharpening**

Yan Li (Zhejiang University of Technology); Qiuju Chen (Zhejiang University of Technology); Chuangjie Fang (Zhejiang University of Technology); Ni Xu (Zhejiang University of Technology); Honghui Xu (Zhejiang University of Technology); Jianwei Zheng (Zhejiang University of Technology)

**IVMSP-P6-15: MHAD: Multimodal Home Activity Dataset with Multi-Angle Videos and Synchronized Physiological Signals**

Lei Yu (Huazhong University of Science and Technology); Jintao Fei (JD Health); Xinyi Liu (JD Health); Yang Yao (JD Health); Jun Zhao (JingDong Health Inc.); Guoxin Wang (Zhejiang University; JD Health International Inc.); Xin Li (JD Health)

**MLSP-P7: Graph Neural Networks****Room: Rm. 206****Type: Poster****May 25th 8:30-10:00****MLSP-P7-1: Combining Loss-aware Curriculum Learning with Incomplete Graph Neural Networks**

Chen Jiawei (Tianjin University); Keao Xi (Tianjin University); Gaoke Zhang (Tianjin University); Yueheng Sun (Tianjin University); Wenjun Wang (Tianjin University)

**MLSP-P7-2: Enhancing Session-Based Recommendation with Hypergraph Motifs and Contrastive Learning**

Tingxuan Chen (Central South University); Liu Yang (School of Computer Science and Engineering, Central South University); Zidong Wang (School of Computer Science and Engineering, Central South University); Guohui Li (School of Computer Science and Engineering, Central South University); Jun Long (Central South University)

**MLSP-P7-3: Homogeneous Graph Extraction: An Approach to Learning Heterogeneous Graph Embedding**

Shihao Gao (Xiamen University); Xiaoyan Yu (Beijing Institute of Technology); Yu Cai (Xiamen University); Xulong Zhang (Ping An Technology (Shenzhen) Co., Ltd.); Jianzong Wang (Ping An Technology (Shenzhen) Co., Ltd.); Taisong Jin (Xiamen University)

**MLSP-P7-4: RETAIN: Reliable Topology Augmentation for both Heterophilic and Homophilic Graphs**

Ziyun Zou (Xiamen University); Lian Shen (Xiamen University); Yanhao Li (Xiamen University); Yifan Lu (Hangzhou Dianzi University); Juan Liu (Pen-Tung Sah Institute of Micro-Nano Science and Technology, Xiamen University); Xiangrong Liu (Xiamen University, China)

**MLSP-P7-5: MoHGNN: Enhanced Heterogeneous Graph Neural Network via Metapath Optimization**

Taiyao Zhang (Institute of Information Engineering, Chinese Academy of Sciences; School of Cyber Security, University of Chinese Academy of Sciences); Xingyu Fu (Institute of Information Engineering, Chinese Academy of Sciences; School of Cyber Security, University of Chinese Academy of Sciences); Yuxin Zhang (Institute of Information Engineering, Chinese Academy of Sciences; School of Cyber Security, University of Chinese Academy of Sciences); Qingyun Liu (Institute of Information Engineering, Chinese Academy of Sciences; School of Cyber Security, University of Chinese Academy of Sciences)

**MLSP-P7-6: Wasserstein Heterogeneous Graph Neural Networks for Uncertainty-Aware Anomaly Detection**

Chen Chen (BEIHANG UNIVERSITY); Yunchun Li (Beihang University); Boxuan Jiao (BEIHANG UNIVERSITY); Guorui Zhao (BEIHANG UNIVERSITY); Wei Li (BEIHANG UNIVERSITY)

**MLSP-P7-7: Joint-Wise Distributed Perception Graph Convolutional Network for Skeleton-Based Action Recognition**

Qian Huang (Hohai University); Qiang Geng (Hohai University); Zhaoyu Chen (Hohai University); Xin Li (College of Computer Science and Software Engineering, Hohai University; Key Laboratory of Water Big Data Technology of Ministry of Water Resources, Hohai University); Yangyang Li (Hohai University); Xing Li (Nanjing Forestry University)

**MLSP-P7-8: CGEDN: Approximation of Graph Edit Distance with Path Generation via Learning Node Matching**

Liu Yang (School of Computer Science and Engineering, Central South University); Qiankun Zheng (School of Computer Science and Engineering, Central South University); Zidong Wang (School of Computer Science and Engineering, Central South University)

**MLSP-P7-9: Don't Lose Yourself: Boosting Multimodal Recommendation via Reducing Node-neighbor Discrepancy in Graph Convolutional Network**

Zheyu Chen (The Hong Kong Polytechnic University); Jinfeng Xu (The University of Hong Kong); Haibo Hu (Hong Kong Polytechnic University)

**MLSP-P7-10: CSD: Weather forecasting with graph neural network based on cross-scale diffusivity**

Jinrun Li (Beijing University of Posts and Telecommunications); Gaowei Zhang (Beijing University of Posts and Telecommunications); Wei Wang (Beijing University of Posts and Telecommunications); Yi Wang (Beijing University of Posts and Telecommunications)

**MLSP-P7-11: Personalized Graph Transformer for Federated Graph Learning**

Haohe Jia (Fudan University); Yi Huang (Fudan University); Hongbin Zhu (Fudan University); Hongfeng Chai (Fudan University)

**MLSP-P7-12: CIEGCL: Counterfactual Intervention Enhancing Graph Contrastive Learning in Implicit Feedback**

Zijian Huang (Key Laboratory of Aerospace Information Security and Trusted Computing, Ministry of Education, School of Cyber Science and Engineering, Wuhan University); Tian Jiang (Key Laboratory of Aerospace Information Security and Trusted Computing, Ministry of Education, School of Cyber Science and Engineering, Wuhan University); Yan Feng (Key Laboratory of Aerospace Information Security and Trusted Computing, Ministry of Education, School of Cyber Science and Engineering, Wuhan University); Zerui Wen (Key Laboratory of Aerospace Information Security and Trusted Computing, Ministry of Education, School of Cyber Science and Engineering, Wuhan University); Xiaohui Cui (School of Cyber Science and Engineering, Wuhan University)

**MLSP-P7-13: GADACE: Graph Anomaly Detection Combining Attribute Contrast and Structure Reconstruction**

Shihui Wang (Wuhan University); Yulan Yang (Wuhan University); Zixin Tan (Wuhan University); Zhigao Zheng (Wuhan University); Jiawei Jiang (Wuhan University); Hao Huang (Wuhan University); Quanqing Xu (OceanBase, Ant Group); Chuanhui Yang (OceanBase)

**MLSP-P7-14: One-step Incomplete Multi-view Clustering based on Bipartite Graph Learning**

Minghao Li (Zhejiang Normal University); Hechuan Lin (Zhejiang Normal University); Huiying Xu (Zhejiang Normal University); Ziyang Wang (Zhejiang Normal University); Xinzhong Zhu (Zhejiang Normal University); Xiao Huang (Zhejiang Normal University)

**MLSP-P7-15: Domain-aware Node Representation Learning for Graph Out-of-Distribution Generalization**

Yi Qiao (Institute of Computing Technology, CAS); Yang Liu (Institute of Computing Technology, Chinese Academy of Sciences); Qing He (Institute of Computing Technology, Chinese Academy of Sciences); Xiang Ao (Institute of Computing Technology, CAS)

**MLSP-P8: Sequential Feature Learning**

**Room: Rm. 206**

**Type: Poster**

**May 25th 8:30-10:00**

**MLSP-P8-1: kNN-CL: Enhancing Continual Learning with Nearest Neighbor Retrieval**

En Zhi Wang (Nankai University); Qicheng Li (Nankai University); Hao Chen (Lenovo Research); Ruiqi Sun (Lenovo Research); Xin Zhou (Lenovo Research)

**MLSP-P8-2: SOA: A Sparsity-Oriented Activation on Sub-layers of FFN of Transformers**

Yulong Meng (University of Science and Technology of China); Yuan Li (University of Science and Technology of China); Binhan Chen (University of Science and Technology of China); Yi Kang (University of Science and Technology of China)

**MLSP-P8-3: Optimizing Speech Multi-View Feature Fusion through Conditional Computation**

Weiqliao Shan (Northeastern University, China); Yuhao Zhang (The Chinese University of Hong Kong (Shenzhen)); Yuchen Han (Northeastern University); Bei Li (Northeastern University, China); Xiaofeng Zhao (HW-TSC); Yuang Li (Huawei); Min Zhang (Huawei); Hao Yang (Huawei); Tong Xiao (Northeastern University); Jingbo Zhu (Northeastern University, China)



**MLSP-P8-4: Learning Class Unique Features in Fine-Grained Visual Classification**

Runkai Zheng (Carnegie Mellon University); Li Liu (The Hong Kong University of Science and Technology (Guangzhou)); Zhijia Yu (Byte Dance); Yinqi Zhang (East China Normal University); Hei Victor Cheng (Aarhus University); Chris Ding (The Chinese University of Hong Kong, Shenzhen)

**MLSP-P8-5: Disentangling Hierarchical Features for Anomalous Sound Detection Under Domain Shift**

Jian Guan (Harbin Engineering University); Jiantong Tian (Harbin Engineering University); Qiaoxi Zhu (University of Technology Sydney); Feiyang Xiao (Harbin Engineering University); Hejing Zhang (Harbin Engineering University); Xubo Liu (University of Surrey)

**MLSP-P8-6: Human Action Recognition in Multi-Level Convolutional Temporal Attention Network**

Qian Huang (Hohai University); Zhongqi Chen (Hohai University); Chang Li (Hohai University); Weiwen Qian (Hohai University)

**MLSP-P8-7: Grouping-Based Crowding Differential Evolution Approaches for Multimodal Feature Selection**

Junliu Zhu (South China Normal University); Zong-Gan Chen (South China Normal University); Jian-Yu Li (Nankai University); Yuncheng Jiang (South China Normal University); Zhi-Hui Zhan (South China University of Technology); Jun Zhang (Hanyang University)

**MLSP-P8-8: CA-UAP: Content-Agnostic Universal Adversarial Perturbation for Enhanced Generalization**

Rui Lu (Sun Yat-sen University); Ziqiang He (Sun Yat-Sen University); Jingyang Wen (North Minzu University); Xiangui Kang (Sun Yat-Sen University); Z. Jane Wang (University of British Columbia)

**MLSP-P8-9: Dynamic Graph Multi-granularity Attribute Scene Evolution Sequence Recommendation**

Longtao Wang (Shandong University of Science and Technology); Qingtian Zeng (Shandong University of Science and Technology); Guiyuan Yuan (Shandong University of Science and Technology); Hua Duan (Shandong University of Science and Technology); Cheng Cheng (Shandong University of Science and Technology); Kai Jiang (Shandong University of Science and Technology)

**MLSP-P8-10: Large Covariance Matrix Estimation for Groups of Highly Correlated Variables via Nonconvex Optimization**

Shanshan Zou (Shanghaitech University); Ziping Zhao (ShanghaiTech University)

**MLSP-P8-11: Enhancing Data-Free Class-Incremental Learning via Image-Centric Dual Distillation**

Feifei Fu (Renmin University of China); Zhiwu Lu (Renmin University of China)

**MLSP-P8-12: A Conditional KAN Diffusion Network for Human Activity Recognition with Missing Sensor Signal Series**

Hao Xiong (School of Computer Science, Beijing University of Posts and Telecommunications); Jiayi Gong (School of Computer Science, Beijing University of Posts and Telecommunications); Haiyong Luo (Research Center for Ubiquitous Computing Systems, Institute of Computing Technology, Chinese Academy of Sciences); Fang Zhao (School of Software Engineering, Beijing University of Posts and Telecommunications); Yang Gao (University of Chinese Academy of Sciences); Runze Chen (School of Computer Science, Beijing University of Posts and Telecommunications); Mingyu Xiao (Beijing University of Posts and Telecommunications)

**MLSP-P8-13: HFedPFS: Heterogeneous Federated Learning with Personalized Data Feature Sharing**

Jingxian Xu (Nankai University); Liping Yi (Nankai University); Wang Gang (Nankai University); Liu Xiaoguang (Nankai University)

**MLSP-P8-14: Efficient and Effective Model Extraction**

Hongyu Zhu (Shanghai Jiao Tong University); Wentao Hu (Shanghai Jiao Tong University); Sichu Liang (Southeast University); Fangqi Li (SEIEE, Shanghai Jiao Tong University); Wenwen Wang (Carnegie Mellon University); Shilin Wang (SEIEE, Shanghai Jiaotong University)

**MLSP-P8-15: TS-Net: Assembling Task-specific Features from Multiple Feature Levels for Multi-task Learning**

Chen Liu (Harbin Institute of Technology); Zhaolin Wan (Harbin Institute of Technology); Penghong Wang (Harbin Institute of Technology); Xingtao Wang (Harbin Institute of Technology); Xiaopeng Fan (Harbin Institute of Technology)

**MLSP-P9: Machine Learning for Image and Video Processing**

**Room: Rm. 206**

**Type: Poster**

**May 25th 8:30-10:00**

**MLSP-P9-1: Multi-modal Salient Object Detection via a Unified Diffusion Model**

Shuo Zhang (East China Normal University); Jiaming Huang (huolala); Wenbing Tang (Nanyang Technological University); Lili Tian (East China Normal University); Yuang Wei (East China Normal University); Jing Liu (East China Normal University)

**MLSP-P9-2: An Attribute-Enriched Dataset and Auto-Annotated Pipeline for Open Detection**

Pengfei Qi (China Mobile Research Institute); Yifei Zhang (China Mobile Research Institute); Wenqiang Li (China Mobile Research Institute); Youwen Hu (China Mobile Research Institute); Kunlong Bai (China Mobile Research Institute)

**MLSP-P9-3: TSP: Task-Specific Pruning for Personalized Image Classification on Edge Devices**

Yanting Wang (Northwestern Polytechnical University); Bojie Shi (Northwestern Polytechnical University); Han Zhang (China Unicom Research Institute)

**MLSP-P9-4: Flare-Aware RWKV for Flare Removal**

Wanying Zhang (Harbin Institute of Technology); Wei Shang (Harbin Institute of Technology); Dongwei Ren (Harbin Institute of Technology); Wangmeng Zuo (Harbin Institute of Technology, China)

**MLSP-P9-5: Using Depth-Enhanced Spatial Transformation for Student Gaze Target Estimation in Dual-View Classroom Images**

Haonan Miao (Xi'an Jiaotong University); Peizheng Zhao (Xi'an Jiaotong-Liverpool University); Yuqi Sun (Xi'an Jiaotong University); Fang Nan (Xi'an Jiaotong University); Xiaolong Zhang (Xi'an Jiaotong University); Yaqiang Wu (Xi'an Jiaotong University); Feng Tian (Xi'an Jiaotong University)

**MLSP-P9-6: Medical Image Segmentation via Sparse Coding Decoder**

Long Zeng (Chongqing University); Mingwei Zhu (Chongqing University); Kaigui Wu (Chongqing University); Zefang Li (Chongqing University Qianjiang Hospital)

**MLSP-P9-7: Improving micro-expression recognition using multi-sequence driven face generation**

Yuan Chen (Central South University); Chongju Zhong (Central South University); Pinyi Huang (Central South University); Wangyang Cai (Changsha University of Science and Technology); Lei Wang (Central South University)

**MLSP-P9-8: KSSANet: KAN-Driven Spatial-Spectral Attention Networks for Hyperspectral Image Super-Resolution**

Baisong Li (Jilin University); Xingwang Wang (Jilin University); Haixiao Xu (Jilin University)

**MLSP-P9-9: Foreground-aware Prototypical Network for Prohibited Item Detection from X-ray Scans**

Xu Yang (MUST); Yufei Li (Xidian University); Long Tian (Xidian University); Haonan Shi (Xidian University); Ting Lan (Macau University of Science and Technology); Xiyang Liu (Xidian University)

**MLSP-P9-10: Facilitating Semi-Supervised Pedestrian Detection with Structurally Controllable Instance Synthesis**

Tianyou Zhang (South China University of Technology); Wenhao Wu (City University of Hong Kong); Si Wu (South China University of Technology); Rui Li (Shantou University)

**BISP-P5: Multimodal, Neural, and Physiological Signal Analysis**

**Room: Rm. 206**

**Type: Poster**

**May 25th 8:30-10:00**

**BISP-P5-1: NucleiFormer: A Nuclei Segmentation Model Optimized by Joint Haar Wavelet and Adaptive Feature Calibration**

Yulin Chen (Hohai University); Qian Huang (Hohai University); Zhijian Wang (Hohai University); Ziyang Yin (Hohai University); Meng Geng (Hohai University)

**BISP-P5-2: Swin-VasMamba: A Topologically Constrained Model For 3D Vascular Segmentation**

Ziyu Liu (University of Nottingham, Ningbo, China); Jiaxuan Li (University of Nottingham, Ningbo, China); Xiangjian He (University of Nottingham Ningbo); Qing Xu (University of Nottingham Ningbo China); Xin Chen (University of Nottingham); Shoujun Zhou (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences)

**BISP-P5-3: CoMT: Chain-of-Medical-Thought Reduces Hallucination in Medical Report Generation**

Yue Jiang (Fudan University); Jiawei Chen (Fudan University); Dingkang Yang (Fudan University); Mingcheng Li (Fudan University); Shunli Wang (Tencent YouTu Lab); Tong Wu (Xiamen University); Ke Li (Tencent); Lihua Zhang (Fudan University)

**BISP-P5-4: Adaptive Time-Frequency Attention Network for Sleep Stage Classification Using Respiratory Signals**

Zihang Liang (South China University of Technology); Kejing He (South China University of Technology)

**BISP-P5-5: RespDiff: An End-to-End Multi-scale RNN Diffusion Model for Respiratory Waveform Estimation from PPG Signals**

Yuyang Miao (Imperial College London); Zehua Chen (Tsinghua University); Chang Li (USTC); Danilo P. Mandic (Imperial College of London, UK)

**BISP-P5-6: Panorama: An enabling technology for Hearables**

Qiyu Rao (Imperial College London); Zdenka Babic (University of Banja Luka); Scott C. Douglas (Southern Methodist University); Danilo P. Mandic (Imperial College of London, UK)

**BISP-P5-7: TELL ME: Tackle Electrocardiogram with Large Language Model Effectively**

Tianyi Shi (Beijing University of Posts and Telecommunications); Siyang Zheng (Beijing University of Posts and Telecommunications); Zhu Meng (Beijing University of Posts and Telecommunications); Zhe Cui (Beijing University of Posts and Telecommunications); Jin Huang (Beijing Academy of Blockchain and Edge Computing); Changrui Ren (Beijing Academy of Blockchain and Edge Computing); Bo Zhang (Beijing Academy of Blockchain and Edge Computing); Zhicheng Zhao (BUPT)

**BISP-P5-8: A Multi-scenario Attention-based Generative Model for Personalized Blood Pressure Time Series Forecasting**

Cheng Wan (Georgia Institute of Technology); Chenjie Xie (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences); Longfei Liu (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences); Wu Dan (Shenzhen Institutes of Advanced Technology); Ye Li (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences)

**BISP-P5-9: A multi-modal information fusion model for automatic sleep staging**

Xh Wang (Wuhan University)

**BISP-P5-10: Non-contact Quickest Abnormal Heart Rate Detection using MIMO Radar**

Peichao Wang (University of Electronic Science and Technology of China); Qian He (University of Electronic Science and Technology of China)

**BISP-P5-11: Deep Transfer Regression for EEG-based Driving Fatigue Detection**

Yikai Zhang (Hangzhou Dianzi University); Yong Peng (Hangzhou Dianzi University); Ziyue Yang (Hangzhou Dianzi University); Feiwei Qin (Hangzhou Dianzi University); Wanzeng Kong (Hangzhou Dianzi University)

**BISP-P5-12: Accurate 3D Facial Paralysis Analysis Using Multi-View Infrared Structured Light System**

Di Wu (SIAT); Placeholder (yuping Ye); Jixin Liang (Yuping Ye); Shiyang Long (Shenzhen Institute of Advanced Technology); Zhan Song (SIAT)

**BISP-P5-13: EEG Correlation Analysis-guided Graph Local Enhanced Feature Learning For Emotion Recognition**

Xinhui Li (Anhui University); Guowang Zhuang (anhui university); Minchao Wu (anhui university); Zhao Lv (anhui university)

**BISP-P5-14: Essentia: Boosting Artifact Removal from EEG through Semantic Guidance Utilizing Diffusion Model**

Haoran Li (Nankai University); Zhibo Zhang (Nankai University); Yuchen Li (Nankai University); Xiaoli Gong (Nankai University); Jin Zhang (Nankai University); Tingjuan Lu (903rd Hospital of PLA); Jin Zhou (Tianjin Chest Hospital); Zhe Sun (Juntendo University); Andrzej Cichocki (Systems Research Institute)

**SAM-P1: Microphone Array Signal Processing: Calibration, DOA Estimation, and Source Localization**

**Room: Rm. 206**

**Type: Poster**

**May 25th 8:30-10:00**

**SAM-P1-1: Neural Directed Speech Enhancement with Dual Microphone Array in High Noise Scenario**

Wen Wen (Shanghai Jiao Tong University); Qiang Zhou (AISpeech Ltd.); Yu Xi (Shanghai Jiao Tong University); Haoyu Li (Shanghai Jiao Tong University); Ziqi Gong (AISpeech Ltd.); Kai Yu (Shanghai Jiao Tong University)

**SAM-P1-2: Co-attention based multi-channel TF-GridNet for speech separation with ad-hoc microphone array**

Hongmei Guo (Northwestern Polytechnical University); Linfeng Feng (Northwestern Polytechnical University); Yijiang Chen (IFLYTEK CO, Ltd); Xueqing Li (Northwestern Polytechnical University); Zhu Boyu (Institute of Artificial Intelligence (TeleAI), China Telecom Corp Ltd, China); Hao-Yu Wang (Southern University of Science and Technology); Zhang Xiaolei (Northwestern Polytechnical University); Xuelong Li (Institute of Artificial Intelligence (TeleAI), China Telecom Corp Ltd)

**SAM-P1-3: Calibration of Multiple Asynchronous Microphone Arrays using Hybrid TDOA**

Chengjie Zhang (Southern University of Science and Technology); Wenda Pan (Southern University of Science and Technology); Xinyang Han (Southern University of Science and Technology); He Kong (Southern University of Science and Technology)

**SAM-P1-4: Improved Extrinsic Calibration of Acoustic Cameras via Batch Optimization**

Zhi Li (Southern University of Science and Technology); Jiang Wang (Southern University of Science and Technology); Xiaoyang Li (Southern University of Science and Technology); He Kong (Southern University of Science and Technology)

**SAM-P1-5: EXTENDING MPR FOR LOCATING A MOVING OBJECT BASED ON TDOA AND FDOA**

Beichuan Tang (SiChuan University); Yimao Sun (Sichuan University); Xiantao Heng (SiChuan University); Yanbing Yang (Sichuan University); Liangyin Chen (Sichuan University)

**SAM-P1-6: A Blind Super-Resolution Method for Near-Field Channel Estimation with Angle-Range Recovery**

Li Jie (Nanjing University of Science and Technology); Qiaozhen Chen (Nanjing University of Science and Technology); Feng Xi (Nanjing University of Science and Technology)

**SAM-P1-7: DOA Estimation of Coherent Sources Using Residual Network-based Subspace Reconstruction**

Tiange Wang (Xiamen University); Lingyu Chen (Xiamen University); Huanglin Zhang (Xiamen University)

**SAM-P1-8: UAV-mounted SIM: A Hybrid Optical-Electronic Neural Network for DoA Estimation**

Lin Shining (University of Electronic Science and Technology of China); Jiancheng An (Nanyang Technological University); Gan Lu (University of Electronic Science and Technology of China); Debbah Mérouane (Khalifa University of Science and Technology)

**SAM-P1-9: Identical-Delay Based 2-D DOA and Frequency Joint Estimation With Sub-Nyquist Sampling for URA**

Liang Liu (University of Electronic Science and Technology of China); Xinyun Zhang (UESTC); Xinyi Zhou (University of Electronic Science and Technology of China); Lu Gan (University of Electronic Science and Technology of China); Jiancheng An (Nanyang Technological University); Hongbin Li (Stevens Institute of Technology)

**SAM-P1-10: Target Localization With a Coprime Multistatic MIMO Radar via Coupled Canonical Polyadic Decomposition Based on Joint EVD**

Guo-Zhao Liao (Dalian University of Technology); Xiao-Feng Gong (Dalian University of Technology); Wei Liu (The Hong Kong Polytechnic University); Hing Cheung So (City University of Hong Kong)

**SAM-P1-11: Near-field AoA estimation with Complex Convolutional Kolmogorov-Arnold Network**

Jiayi Wang (Shanghai Jiao Tong University); Disheng Xiao (Shanghai Jiao Tong University); Yingkai Cao (Shanghai Jiao Tong University); Kai Ying (Shanghai Jiao Tong University); Ming Xiao (KTH Royal Institute of Technology)

**SAM-P1-12: Selective-Memory Meta-Learning with Environment Representations for Sound Event Localization and Detection**

Jinbo Hu (Institute of Acoustics, Chinese Academy of Sciences); Yin Cao (Xi'an Jiaotong Liverpool University); Ming Wu (Institute of Acoustics, Chinese Academy of Sciences); Qiuqiang Kong (Chinese University of Hong Kong); Feiran Yang (Institute of Acoustics, Chinese Academy of Sciences); Mark Plumbley (University of Surrey); Jun Yang (Institute of Acoustics, Chinese Academy of Sciences)

**SAM-P1-13: Augmented Bayesian Nonparametric Clustering for Source Counting with a Small Aperture Microphone Array**

Kunkun Songgong (Army Engineering University); Pufen Zhang (Army Engineering University); Xiongwei Zhang (Army engineering university); Wenwu Wang (University of Surrey); Meng Sun (Army engineering university); Chong Jia (Army engineering university); Yihao Li (Army engineering university)

**SAM-P1-14: Robust Frame-level Speaker Localization in Reverberant and Noisy Environments by Exploiting Phase Difference Losses**

Shanmukha Srinivas Battula (The Ohio State University); Hassan Taherian (The Ohio State University); Ashutosh Pandey (META); Daniel Wong (Meta Platforms Inc.); Buye Xu (Meta Reality Labs Research); Deliang Wang (Ohio State University)

**SAM-P1-15: Atom-constrained Gridless DOA Refinement with Wirtinger Gradients**

Yongsung Park (Scripps Institution of Oceanography, University of California San Diego); Peter Gerstoft (Scripps Institution of Oceanography, University of California San Diego); Christoph Mecklenbräuker (Institute of Telecommunications, Technische Universität Wien)

**SPCOM-P: Advanced Communication Systems: Routing, Sensing, MIMO, and Synchronization**

**Room: Rm. 206**

**Type: Poster**

**May 25th 8:30-10:00**

**SPCOM-P-1: Collaborative Inference Acceleration with Non-Penetrative Tensor Partitioning**

Zhibang Liu (China University of Petroleum, Beijing); Chaonong Xu (China University of Petroleum, Beijing); Zhenjie Lv (China university of petroleum, Beijing); Zhizhuo Liu (China University of Petroleum, Beijing); Suyu Zhao (China University of Petroleum, Beijing)

**SPCOM-P-2: MetaCon: Revitalizing Internet Congestion Control with Meta-Reinforcement Learning**

He Bai (Peking University); Hui Li (Peking University); Jianming Que (Peking University); Minglong Zhang (Mississippi State University); Peter Han Joo Chong (Auckland University of Technology); Kushan Sudheera Kalupahana Liyanage (Faculty of Engineering, University of Ruhuna); Xinyuan Pei (Peking University)

**SPCOM-P-3: An Improved Planar Approximation Localization Method in Distributed Airborne Radars**

Jing Li (Xidian University); Jinshan Ding (Xidian University); Liwu Wen (Xidian University); Zehua Yu (Xidian University); Demin Huang (Xidian University)

**SPCOM-P-4: Analysis and Calibration of Nonlinear Power Amplifiers in Wideband OFDM-Based LEO Satellite Communication System**

Kai Ying (Shanghai Jiao Tong University); Linshan Zhao (Shanghai Advanced Research Institute, Chinese Academy of Sciences (CAS), Shanghai, China; university Of Chinese Academy Of Sciences, Beijing, China); Pengcheng Jia (Guangzhou Starway Communication Technology Co., Ltd); Ming Zhou (Guangzhou Starway Communication Technology Co., Ltd); Kai Kang (Shanghai Advanced Research Institute, Chinese Academy of Sciences (CAS), Shanghai, China)

**SPCOM-P-5: MIMO Channel as a Neural Function: Implicit Neural Representations for Extreme CSI Compression**

Haotian Wu (Imperial College London); Maojun Zhang (Zhejiang University); Yulin Shao (Imperial College London); Krystian Mikołajczyk (Imperial College London); Deniz Gunduz (Imperial College London)

**SPCOM-P-6: Locally Correctable Lattices**

Haodong Yang (Syracuse University); Venkata Gandikota (Syracuse University)

**SPCOM-P-7: FA-GAN: Defense Against Adversarial Attacks in Automatic Modulation Recognition**

Shilong Zhang (Inner Mongolia University); Yu Song (Inner Mongolia University); Shubin Wang (Inner Mongolia University)

**SPCOM-P-8: DULRTC-RME: A Deep Unrolled Low-rank Tensor Completion Network for Radio Map Estimation**

Yao Wang (Beijing University of Posts and Telecommunications); Xin Wu (Beijing University of Posts and Telecommunications); Lianming Xu (Beijing University of Posts and Telecommunications); Na Liu (Beijing University of Posts and Telecommunications); Li Wang (BUPT)

**SPCOM-P-9: Harnessing the Potential of Omnidirectional UAVs in RIS-Enabled Wireless Networks**

Abdoul Karim A.h Saliah (College of Computing, Mohammed VI Polytechnic University(UM6P)); Hajar El Hammouti (College of Computing, Mohammed VI Polytechnic University (UM6P)); Daniel Bonilla Licea (Mohammed VI Polytechnic University)

**MMSP-O3: Multimodal Reasoning and Communication Systems****Room: Rm. 103****Type: Oral****May 25th 10:30-12:00****MMSP-O3-1: Enhancing Complex Formula Recognition with Hierarchical Detail-Focused Network**

Jiale Wang (360 AI Research Institute); Junhui Yu (360 AI Research Institute); Liu Huanyong (360 AI Research Institute); Chenanran Kong (The Chinese university of HongKong (Shenzhen)))

**MMSP-O3-2: Hard Sample Aware Robust Contrastive Learning for Multi-View Clustering**

Yuanzhe Cai (Dalian University of Technology); Zhikui Chen (Dalian University of Technology); Jing Gao (Dalian University of Technology); Peng Li (Dalian University of Technology); Jianing Zhang (Dalian University of Technology)

**MMSP-O3-3: A Quality-Aware Sampling Framework for Efficient 3D Point Cloud Transmission**

Puyue Hou (Shanghai Jiao Tong University); Qi Yang (University of Missouri-Kansas City); Yue Li (Shanghai Jiao Tong University); Yujie Zhang (Shanghai Jiao Tong University); Jianchao Yang (Shanghai Jiao Tong University); Yiling Xu (Shanghai Jiao Tong University); Tiejun Huang (Peking University)

**MMSP-O3-4: U2AD: A UAV-Assisted Autonomous Driving Framework for Enhancing Vehicle Risk Perception and Decision-Making Capabilities**

Chuangxin Li (Inner Mongolia University); Yongqiang Gao (Inner Mongolia University); Rao Fu (Inner Mongolia University); Jia Chen (Inner Mongolia University)

**MMSP-O3-5: Exploring Triple Knowledge Cues for Zero-Shot Human-Object Interaction Detection**

Fang Nan (Xi'an Jiaotong University); Ni Zhang (Northwestern Polytechnical University); Qidong Liu (Xi'an Jiaotong University / City University of Hong Kong); Wei Jing (Lenovo Research); Guang Dai (State Grid Corporation of China); Yan Chen (MOEKLINNS, School of Electronic and Information Engineering, Xi'an Jiaotong University, China); Feng Tian (Xi'an Jiaotong University)

**ASPS-O: Foundation Models and Efficient Learning****Room: Rm. 104****Type: Oral****May 25th 10:30-12:00****ASPS-O-1: MixHD: A Method for Detecting Hallucinations Based on the Internal State and Output Probability of Large Language Models**

Chuang Li (Institute of Information Engineering, Chinese Academy of Sciences); Bingnan Xing (henu university); Dongdong Huo (Institute of Information Engineering, Chinese Academy of Sciences, China); Qihui Zhou (Institute of Information Engineering, Chinese Academy of Sciences); Zhen Xu (State Key Laboratory of Information Security, Institute of Information Engineering, Chinese Academy of Sciences); Yu Wang (Institute of Information Engineering, Chinese Academy of Sciences, China)

**ASPS-O-2: Constraint-Awareness and Graph Reasoning for Temporal Question Answering**

Zheng Sun (Eastmoney Information Co., Ltd.); Kai Zhang (Eastmoney Information Co., Ltd.); Xiulong Zhang (Eastmoney Information Co., Ltd.); Jianting Liu (Google Search)

**ASPS-O-3: Pushing Wi-Fi towards fine-grained sensing via spectrogram enhancement**

Hongbo Jiang (Hunan University); Yiwei Chen (Hunan University); Jingyang Hu (Hunan university); Siyu Chen (Hunan University)

**ASPS-O-4: Efficient Object Placement Via LLM and Diffusion Model**

Wei Liu (Fujitsu R&D Center, Co., LTD); Liuan Wang (FUJITSU R&D CENTER CO.,LTD.); Jun Sun (Fujitsu R&D Center Co., Ltd.)

**ASPS-O-5: Clutter Resilient Occlusion Avoidance for Tightly-Coupled Motion-Assisted Detection**

Zhixuan Xie (Southern University of Science and Technology); Jianjun Chen (Southern University of Science and Technology); Guoliang Li (University of Macau); Shuai Wang (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences); Kejiang Ye (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences); Yonina Eldar (Weizmann Institute of Science); Cheng-Zhong Xu (University of Macau)

**ASPS-O-6: Unsupervised UAV 3D Trajectories Estimation with Sparse Point Clouds**

Hanfang Liang (Jiangnan University); Yizhuo Yang (Nanyang Technological University); Jinming Hu (Jiangnan University); Jianfei Yang (Nanyang Technological University); Fen Liu (Nanyang Technological University); Shenghai Yuan (Nanyang Technological University)

**IVMSP-O3: Image & Video Analysis + Networks**

**Room: Rm. 105**

**Type: Oral**

**May 25th 10:30-12:00**

**IVMSP-O3-1: TGDrag: Adding Semantic Control into Point-based Image Editing via Text Guidance**

Chenhao Lin (Xi'an Jiaotong University); Yanjie Zhu (Xi'an Jiaotong University); Yingmao Miao (Xi'an Jiaotong University); Zhengyu Zhao (Xi'an Jiaotong University); Shuai Liu (Xi'an Jiaotong University); Chao Shen (Xi'an Jiaotong University)

**IVMSP-O3-2: Learned Video Compression With Refined Adaptive Flow Pyramid And Coordinate-Aware Attention**

Qian Huang (Hohai University); Wenting Liu (Hohai University); Xin Li (College of Computer Science and Software Engineering, Hohai University; Key Laboratory of Water Big Data Technology of Ministry of Water Resources, Hohai University); Yiming Wang (Hohai university)

**IVMSP-O3-3: UniIVFT: Towards a Unified Framework for Infrared-Visible Fusion and Translation**

Honglin Wu (National University of Defense Technology); Xueqiong Li (National University of Defense Technology); Shaowu Yang (National University of Defense Technology); Huibin Tan (National University of Defense Technology); Yuhua Tang (National University of Defense Technology); Tianrui Liu (National University of Defense Technology)

**IVMSP-O3-4: OCTAMamba: A State-Space Model Approach for Precision OCTA Vasculature Segmentation**

Shun Zou (Nanjing Agricultural University); Zhuo Zhang (National University of Defense Technology); Guangwei Gao (Nanjing University of Posts and Telecommunications)

**IVMSP-O3-5: Multimodal ARMAX model for Characterization of human body system**

Huiling Li (University of Electronic Science and Technology of China); Qian He (University of Electronic Science and Technology of China); Zhao Jin (Chengdu University of Traditional Chinese Medicine)

**SLP-O4: Speech and Language Understanding**

**Room: Rm. 107**

**Type: Oral**

**May 25th 10:30-12:00**



**SLP-O4-1: Zero-Shot Cross-Domain Slot Filling with Retrieval Augmented In-Context Learning**

Mengxiao Song (Institute of Information Engineering, Chinese Academy of Sciences, Beijing, China); Tingwen Liu (Institute of Information Engineering, CAS); Quangang Li (Institute of Information Engineering, CAS); Duohe Ma (Institute of Information Engineering, Chinese Academy of Sciences); Sun Ming (School of Computer Science and Engineering, University of Electronic Science and Technology of China); Ling Tian (University of Electronic Science and Technology of China)

**SLP-O4-2: DrawSpeech: Expressive Speech Synthesis Using Prosodic Sketches as Control Conditions**

Weidong Chen (The Chinese University of Hong Kong); Shan Yang (Tencent AI Lab); Guangzhi Li (Tencent); Xixin Wu (The Chinese University of Hong Kong)

**SLP-O4-3: A prompt learning framework with large language model augmentation for few-shot multi-label intent detection**

Ning Zhuang (Tianjin University); Xiao Wei (Tianjin University); Junlei Li (tianjinuniversity); Xiaobao Wang (Tianjin University); Chenyang Wang (Tianjin University); Longbiao Wang (Tianjin University); Jianwu Dang (Tianjin University)

**SLP-O4-4: Investigating Numerical Translation with Large Language Models**

Wei Tang (Huawei); Jiawei Yu (Xiamen University); Yang Li (Huawei); Yanqing Zhao (Huawei); Weidong Zhang (Huawei); Wei Feng (Huawei); Min Zhang (Huawei); Hao Yang (Huawei)

**SLP-O4-5: Analyzing and Reducing Catastrophic Forgetting in Parameter Efficient Tuning**

Xinlong Li (AHU-IAI AI Joint Laboratory, Anhui University); Weijieying Ren (Penn State University); Wei Qin (Hefei University of Technology); Lei Wang (Singapore Management University); Tianxiang Zhao (Penn State University); Richang Hong (Hefei University of Technology)

**BISP-O1: Physiological and wearable signal processing**

**Room: Rm. 108 & 109**

**Type: Oral**

**May 25th 10:30-12:00**

**BISP-O1-1: Gram: A Large-Scale General EEG Model for Raw Data Classification and Restoration Tasks**

Ziyi Li (Shanghai Jiao Tong University); Wei-Long Zheng (Shanghai Jiao Tong University); Bao-Liang Lu (Shanghai Jiao Tong University)

**BISP-O1-2: PRIMUS: Pretraining IMU Encoders with Multimodal Self-Supervision**

Arnav Das (University of Washington); Chi Ian Tang (Nokia Bell Labs); Fahim Kawsar (Nokia Bell Labs); Mohammad Malekzadeh (Nokia Bell Labs)

**BISP-O1-3: Using Ear-EEG to Decode Auditory Attention in Multiple-speaker Environment**

Haolin Zhu (Peking University); Yujie Yan (Peking University); Xiran Xu (Peking University); Zhongshu Ge (PeKing University); Pei Tian (Peking University); Xihong Wu (Peking University); Jing Chen (Peking University)

**BISP-O1-4: SPTU-Lite: An Efficient Auxiliary Diagnostic Approach Combining Spiking Neural Networks And Large Kernel Extractors For ECG Signals**

Chuxuan Shan (Beijing Institute of Technology); Xiaohua Wang (School of Integrated Circuits and Electronics, Beijing Institute of Technology); Hang Qi (School of Integrated Circuits and Electronics, Beijing Institute of Technology); Qingxu Meng (School of Integrated Circuits and Electronics, Beijing Institute of Technology); Jiabao Wang (School of Integrated Circuits and Electronics, Beijing Institute of Technology); Weijiang Wang (School of Integrated Circuits and Electronics, Beijing Institute of Technology); Yueting Shi (Science and Technology on Millimeter-wave Laboratory, Beijing Institute of Remote-Sensing Equipment)

**BISP-O1-5: SCNN: Spike Coupling Neural Network for Multimodal Brain Network Analysis**

Shaolong Wei (Nantong university); Jiashuang Huang (Nantong University); Mingliang Wang (Nanjing University of Information Science and Technology); Shu Jiang (Nantong university); Weiping Ding (Nantong University)

**SLP-O5: Speech Processing and Security**

**Room: Rm. 205**

**Type: Oral**

**May 25th 10:30-12:00**

**SLP-O5-1: Phone-purity Guided Discrete Tokens for Dysarthric Speech Recognition**

Huimeng Wang (The Chinese University of Hong Kong); Xurong Xie (Institute of Software, Chinese Academy of Sciences); Mengzhe Geng (National Research Council Canada); Shujie Hu (The Chinese University of Hong Kong); Haoning Xu (The Chinese University of Hong Kong); Youjun Chen (The Chinese University of Hong Kong); Zhaoqing Li (The Chinese University of Hong Kong); Jiajun Deng (The Chinese University of Hong Kong); Xunying Liu (The Chinese University of Hong Kong)

**SLP-O5-2: PET: High-Frequency Temporal Self-Consistency Learning for Partially Deepfake Audio Localization**

Jiayi He (Institute of Automation, Chinese Academy of Sciences); Jiangyan Yi (National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences); Jianhua Tao (Tsinghua University); Siding Zeng (Institute of Automation, Chinese Academy of Sciences)

**SLP-O5-3: Cross-Lingual Speech Emotion Recognition: Humans vs. Self-Supervised Models**

Zhichen Han (University of Edinburgh); Tianqi Geng (Tianjin University); Hui Feng (Tianjin University); Jiahong Yuan (University of Science and Technology of China); Korin Richmond (University of Edinburgh); Yuanchao Li (University of Edinburgh)

**SLP-O5-4: Multi-Level Speaker Representation for Target Speaker Extraction**

Ke Zhang (Northeastern University); Junjie Li (The hong kong polytechnic university); Shuai Wang (Shenzhen Research Institute of Big Data, Chinese University of Hong Kong (Shenzhen)); Yangjie Wei (Northeastern University); Yi Wang (Northeastern University); Yannan Wang (Tencent); Haizhou Li (The Chinese University of Hong Kong, Shenzhen)

**SLP-O5-5: CASC-XVC: Zero-Shot Cross-Lingual Voice Conversion with Content Accordant and Speaker Contrastive Losses**

Han-Jie Guo (University of Science and Technology of China); Hui-Peng Du (University of Science and Technology of China); Zheng-Yan Sheng (University of Science and Technology of China); Liping Chen (University of Science and Technology of China); Yang Ai (University of Science and Technology of China); Zhen-Hua Ling (University of Science and Technology of China)

**IVMSP-O7: Machine Learning for Image and Video Processing III**

**Room: Rm. 207**

**Type: Oral**

**May 25th 10:30-12:00**

**IVMSP-O7-1: Sigmoid-GS: To Train Depth More Effectively**

Hongai Chow (Tsinghua University); Licheng Shen (Tsinghua University); Lingyun Wang (ZeroZero Lab); Tong Zhang (ZeroZero Lab); Mengqiu Wang (Zhejiang University); Yuxing Han (Tsinghua University)

**IVMSP-O7-2: Less Yet Robust: Crucial Region Selection for Scene Recognition**

Jianqi Zhang (Institute of Software, Chinese Academy of Sciences, University of Chinese Academy of Sciences, Beijing, China); Mengxuan Wang (South China University of Technology); Jingyao Wang (Institute of Software, Chinese Academy of Sciences, University of Chinese Academy of Sciences, Beijing, China); Lingyu Si (Institute of Software, Chinese Academy of Sciences, University of Chinese Academy of Sciences, Beijing, China); Changwen Zheng (Institute of Software, Chinese Academy of Sciences, University of Chinese Academy of Sciences, Beijing, China); Fanjiang Xu (Institute of Software, Chinese Academy of Sciences, University of Chinese Academy of Sciences, Beijing, China)

**IVMSP-O7-3: Guiding Inter-domain Class Balancing With Salient Features for Domain Adaptive Object Detection**

Haiming Peng (Fudan University); Dingkang Yang (Fudan University); Wang Mingxu (Fudan University); Weilong Lin (Fudan University); Xinhua Zeng (Fudan University)

**IVMSP-O7-4: Unveiling Deepfakes with Latent Diffusion Counterfactual Explanations**

Chen Yang (Institute of Information Engineering, Chinese Academy of Sciences); Bo Peng (Institute of Automation, Chinese Academy of Sciences); Jing Dong (Chinese Academy of Sciences); Xiao-Yu Zhang (Institute of Information Engineering, Chinese Academy of Sciences)

**IVMSP-O7-5: Proximity Detection and Trajectory Recognition with Machine Learning for UHF RFID Systems**

Thomas Pohl (TU Wien); Christoph Mecklenbräuker (TU Wien); Holger Arthaber (TU Wien)

**SLP-P6: LLMs Applications, Keyword Spotting, and Robust Speech Synthesis**

**Room: Rm. 206**

**Type: Poster**

**May 25th 10:30-12:00**

**SLP-P6-1: WMCCodec: End-to-End Neural Speech Codec with Deep Watermarking for Authenticity Verification**

Junzuo Zhou (Institute of Automation, Chinese Academy of Sciences); Jiangyan Yi (National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences); Yong Ren (Institute of Automation, Chinese Academy of Sciences); Jianhua Tao (Tsinghua University); Tao Wang (Institute of Automation, Chinese Academy of Sciences); Chu Yuan Zhang (Tsinghua University)

**SLP-P6-2: Integrating Potential Pronunciations for Enhanced Mispronunciation Detection and Diagnosis Ability in LLMs**

Minglin Wu (The Chinese University of Hong Kong); Jing Xu (The Chinese University of Hong Kong); Xueyuan Chen (The Chinese University of Hong Kong); Helen Meng (The Chinese University of Hong Kong)

**SLP-P6-3: Phoneme-Level Contrastive Learning for User-Defined Keyword Spotting with Flexible Enrollment**

Kewei Li (University of Science and Technology of China); Hengshun Zhou (University of Science and Technology of China); Kai Shen (iFlytek); Yusheng Dai (University of Science and Technology of China); Jun Du (University of Science and Technology of China)

**SLP-P6-4: Adapting Whisper for Code-Switching through Encoding Refining and Language-Aware Decoding**

Jiahui Zhao (Tianjin University); Hao Shi (Kyoto University); Chenrui Cui (Tianjin University); Tianrui Wang (Tianjin University); Hexin Liu (Nanyang Technological University); Zhaoheng Ni (Meta AI); Lingxuan Ye (University of Chinese Academy of Sciences); Longbiao Wang (Tianjin University)

**SLP-P6-5: Automatic Text Pronunciation Correlation Generation and Application for Contextual Biasing**

Gaofeng Cheng (Key Laboratory of Speech Acoustics and Content Understanding, Institute of Acoustics); Haitian Lu (Institute of Acoustics); Chengxu Yang (University of Chinese Academy of Sciences; Institute of Acoustics, Chinese Academy of Sciences); Xuwang Wang (Institute of Acoustics, Chinese Academy of Sciences); Ta Li (Institute of Acoustics, Chinese Academy of Sciences); Yonghong Yan (Institute of Acoustics, Chinese Academy of Sciences)

**SLP-P6-6: Enhancing Zero-Shot Relation Extraction through Staged Interaction with Large Language Models**

Yifang Zhang (Wuhan University of Technology); Pengfei Duan (Wuhan University of Technology); Yiwen Yang (Wuhan University of Technology); Shengwu Xiong (Wuhan University of Technology)

**SLP-P6-7: CogniDual Framework: Self-Training Large Language Models within a Dual-System Theoretical Framework for Improving Cognitive Tasks**

Yongxin Deng (Shanghai University Of Engineering Science); Xihe Qiu (Shanghai University of Engineering Science); Xiaoyu Tan (INFLY TECH (Shanghai) Co., Ltd.); Chao Qu (Inftech); Jing Pan (Monash University); Yuan Cheng (Fudan University); Yinghui Xuyinghui (inf); Wei Chu (inf)

**SLP-P6-8: DPI-TTS: Directional Patch Interaction for Fast Converging and Style Temporal Modeling in Text-to-Speech**

Xin Qi (University of Chinese Academy of Sciences); Ruibo Fu (Institute of Automation, Chinese Academy of Sciences); Zhengqi Wen (Tsinghua University); Tao Wang (Institute of Automation, Chinese Academy of Sciences); Chunyu Qiang (Tianjin University); Jianhua Tao (Tsinghua University); Chenxing Li (Tencent AI Lab); Yi Lu (State Key Laboratory of Multimodal Artificial Intelligence Systems, Institute of Automation, Chinese Academy of Sciences); Shuchen Shi (Shanghai Polytechnic University); Zhiyong Wang (University of Chinese Academy of Sciences); Xiaopeng Wang (UCAS); Yuankun Xie (Communication University of China); Yukun Liu (UCAS); Xuefei Liu (Qiyuan Lab); Guanjun Li (Institute of Automation, Chinese Academy of Sciences)

**SLP-P6-9: SSM2Mel: State Space Model to Reconstruct Mel-Spectrogram from the EEG**

Cunhang Fan (Anhui Provincial Key Laboratory of Multimodal Cognitive Computation, School of Computer Science and Technology, Anhui University); Sheng Zhang (Anhui Provincial Key Laboratory of Multimodal Cognitive Computation, School of Computer Science and Technology, Anhui University); Jingjing Zhang (Anhui University); Zexu Pan (Alibaba group); Zhao Lv (anhui university)

**SLP-P6-10: Emo-DPO: Controllable Emotional Speech Synthesis through Direct Preference Optimization**

Xiaoxue Gao (Astar); Chen Zhang (National University of Singapore); Yiming Chen (National University of Singapore); Huayun Zhang (ASTAR); Nancy Chen (Institute for Infocomm Research)

**SLP-P6-11: E1 TTS: Simple and Fast Non-Autoregressive TTS**

Zhijun Liu (The Chinese University of Hong Kong (Shenzhen)); Shuai Wang (Shenzhen Research Institute of Big Data, Chinese University of Hong Kong (Shenzhen)); Pengcheng Zhu (Fuxi AI Lab, NetEase Inc.); Mengxiao Bi (NetEase Fuxi AI Lab); Haizhou Li (The Chinese University of Hong Kong, Shenzhen)

**SLP-P6-12: Integrated Interpolation and Matrix Completion for Radio Map Estimation: A Convex Optimization Approach**

Hongcheng Dong (The Chinese University of Hong Kong, Shenzhen); Wenqiang Pu (Shenzhen Research Institute of Big Data); Rui Zhou (Shenzhen Research Institute of Big Data); Xiao Fu (Oregon State University); Feng Yin (The Chinese University of Hong Kong, Shenzhen)

**SLP-P6-13: Large Language Model Should Understand Pinyin for Chinese ASR Error Correction**

Yuang Li (Huawei); Xiaosong Qiao (Huawei); Xiaofeng Zhao (Huawei); Huan Zhao (Huawei); Wei Tang (Huawei); Min Zhang (Huawei); Hao Yang (Huawei)

**SLP-P6-14: A Modular-based Strategy for Mitigating Gradient Conflicts in Simultaneous Speech Translation**

Xiaoqian Liu (Northeastern University); Yangfan Du (Northeastern University); Jianjin Wang (Northeastern University); Yuan Ge (Northeastern University, china); Chen Xu (Harbin Engineering University); Tong Xiao (Northeastern University); Guocheng Chen (Northeastern University); Jingbo Zhu (Northeastern University, China)

**SLP-P6-15: Incremental Disentanglement for Environment-Aware Zero-Shot Text-to-Speech Synthesis**

Ye-Xin Lu (University of Science and Technology of China); Hui-Peng Du (University of Science and Technology of China); Zheng-Yan Sheng (University of Science and Technology of China); Yang Ai (University of Science and Technology of China); Zhen-Hua Ling (University of Science and Technology of China)

**SLP-P6-16: Speaking from Coarse to Fine: Improving Neural Codec Language Model via Multi-Scale Speech Coding and Generation**

Haohan Guo (The Chinese University of Hong Kong); Fenglong Xie (Xiaohongshu); Dongchao Yang (The Chinese University of Hong Kong); Xixin Wu (The Chinese University of Hong Kong); Helen Meng (The Chinese University of Hong Kong)

**SLP-P7: Multi-Modal and Efficient Speech Processing**

**Room: Rm. 206**

**Type: Poster**

**May 25th 10:30-12:00**

**SLP-P7-1: Enhancing Multimodal Sentiment Analysis for Missing Modality through Self-Distillation and Unified Modality Cross-Attention**

Yuzhe Weng (University of Science and Technology of China); Haotian Wang (University Of Science And Technology Of China); Tian Gao (iFlytek Research); Kewei Li (University of Science and Technology of China); Shutong Niu (University of Science and Technology of China); Jun Du (University of Science and Technology of China)

**SLP-P7-2: A MoE Multimodal Graph Attention Network Framework for Multimodal Emotion Recognition**

Chengwen Zhang (Beijing University of Posts & Telecommunications); Yaohui Liu (Beijing University Of Posts and Telecommunications); Bo Cheng (Beijing University of Posts and Telecommunications)

**SLP-P7-3: Multilingual Parameter-Sharing Adapters: A Method for Optimizing Low-Resource Neural Machine Translation**

Yunlong Zhang (Inner Mongolia university); Nan Chen (Inner Mongolian University); Yonghe Wang (Inner mongolia university); Xiangdong Su (Inner Mongolia University); Feilong Bao (Inner Mongolia University)

**SLP-P7-4: A Chinese Expressive Long-dialogue Speech Dataset with Scripts**

Jin Li (Tianjin University); Tianrui Wang (Tianjin University); Meng Ge (Tianjin University); Chenrui Cui (Tianjin University); Jiahui Zhao (Tianjin University); Jianrong Wang (School of Computer Science and Technology, Tianjin University, Tianjin, China); Longbiao Wang (Tianjin University); Jianwu Dang (Tianjin University)

**SLP-P7-5: Span Attention for Entity-Consistent Task-Oriented Dialogue Response Generation**

Jiale Chen (South China Normal University); Xuelian Dong (South China Normal University); Wenxiu Xie (City University of Hong Kong); Tao Gong (Google Inc.); Fu Lee Wang (Hong Kong Metropolitan University); Tianyong Hao (South China Normal University)

**SLP-P7-6: Enhancing Large Language Models on Domain-specific Tasks: A Novel Training Strategy via Domain Adaptation and Preference Alignment**

Jingyang Deng (Peking University); Zeren Zhang (Peking University); Jo-Ku Cheng (Peking University); Jinwen Ma (Peking University)

**SLP-P7-7: WeightedKV: Attention Scores Weighted Key-Value Cache Merging for Large Language Models**

Jian Yuan (Shanghai Jiao Tong University); Ziwei He (Shanghai Jiao Tong University); Haoli Bai (Huawei Noah's Ark Lab); Jingwen Leng (Shanghai Jiao Tong University); Bo Jiang (Shanghai Jiao Tong University)

**SLP-P7-8: Dual Decoder for Fast Inference in Natural Language Generation**

Wenbo Wang (Institute of information engineering, Chinese Academy of Sciences, and School of Cyber Security, University of Chinese Academy of Sciences); Huiying Wang (Institute of Information Engineering, Chinese Academy of Sciences. School of Cyber Security, University of Chinese Academy of Sciences.); Zhaoyang Wang (Institute of Information Engineering, Chinese Academy of Sciences. School of Cyber Security, University of Chinese Academy of Sciences.); Shuailou Li (Institute of Information Engineering, Chinese Academy of Sciences. School of Cyber Security, University of Chinese Academy of Sciences.); Yu Wen (Institute of Information Engineering, Chinese Academy of Sciences)

**SLP-P7-9: ClingTP: Curriculum Learning based Multi-style Title Prefix Generation**

Yusong Wang (Tokyo Institute of Technology); Dongyuan Li (Tokyo Institute of Technology); Jialun Shen (Tokyo Institute of Technology); Yicheng Xu (Tokyo Institute of Technology); Shuai Zhong (Guangdong Institute of Intelligent Science and Technology); Mingkun Xu (Guangdong Institute of Intelligence Science and Technology)

**SLP-P7-10: GateM<sup>2</sup>Former: Gated Feature Selection and Expert Modeling in Multimodal Emotion Recognition**

Weixiang Xu (Hunan University); Zhongren Dong (Hunan University); Runmin Wang (Hunan Normal University); Xinzhou Xu (Nanjing University of Posts and Telecommunications); Zixing Zhang (Hunan University)

**SLP-P7-11: Enhanced Multimodal Depression Detection with Emotion Prompts**

Shiyu Teng (Ritsumeikan University); Jiaqing Liu (ritsumeikan); Hao Sun (Zhejiang University); Shurong Chai (Ritsumeikan university); Tomoko Tateyama (Fujita Health University); Lanfen Lin (Zhejiang University); Yen-Wei Chen (Ritsumeikan University)

**SLP-P8: Translation, Dialog, and Multi-Modal Speech-Language Processing**

**Room: Rm. 206**

**Type: Poster**

**May 25th 10:30-12:00**

**SLP-P8-1: Effective and Efficient Mixed Precision Quantization of Speech Foundation Models**

Haoning Xu (The Chinese University of Hong Kong); Zhaoqing Li (The Chinese University of Hong Kong); Zengrui Jin (The Chinese University of Hong Kong); Huimeng Wang (The Chinese University of Hong Kong); Youjun Chen (The Chinese University of Hong Kong); Guinan Li (Chinese University of HongKong); Mengzhe Geng (National Research Council Canada); Shujie Hu (The Chinese University of Hong Kong); Jiajun Deng (The Chinese University of HongKong); Xunying Liu (The Chinese University of Hong Kong)

**SLP-P8-2: Efficient Pruning for Large-Scale Seq2Seq Speech Models without Back-Propagation**

Tianteng Gu (Shanghai Jiao Tong University); Bei Liu (Shanghai Jiao Tong University); Yanmin Qian (Shanghai Jiao Tong University)

**SLP-P8-3: CAMEL: Cross-Attention Enhanced Mixture-of-Experts and Language Bias for Code-Switching Speech Recognition**

He Wang (NWPU); Xucheng Wan (Huawei Technologies Co., Ltd.); Naijun Zheng (Huawei Technologies Co., Ltd.); Kai Liu (Huawei Technologies Co., Ltd.); Zhou Huan (AARC, Huawei Technologies Co., Ltd.); Guojian Li (NWPU); Lei Xie (NWPU)

**SLP-P8-4: Speech Few-Shot Learning for Language Learners' Speech Recognition**

Jian Cheng (Google); Sam Nguyen (Google)

**SLP-P8-5: Egocentric Speaker Diarization with Vision-Guided Clustering and Adaptive Speech Re-detection**

He Huang (Hunan University); Haoyuan Yu (Hunan University); Daibo Liu (Hunan University); Haowen Chen (Hunan University); Minjie Cai (Hunan University)

**SLP-P8-6: Leveraging Chain of Thought Towards Empathetic Spoken Dialogue without Corresponding Question-Answering Data**

Jingran Xie (Tsinghua University); Shun Lei (Tsinghua University); Yue Yu (PCL); Yang Xiang (Peng Cheng Laboratory); Hui Wang (Peng Cheng Laboratory); Xixin Wu (The Chinese University of Hong Kong); Zhiyong Wu (Tsinghua University)

**SLP-P8-7: Hyperbolic Multimodal Knowledge Graph Embedding**

Qiuyu Liang (Inner Mongolia University); Weihua Wang (Inner Mongolian University); Cunda Wang (Inner Mongolia University); Feilong Bao (Inner Mongolia University); Jie Yu (National University of Defense Technology)

**SLP-P8-8: EffectiveASR: A Single-Step Non-Autoregressive Mandarin Speech Recognition Architecture with High Accuracy and Inference Speed**

Ziyang Zhuang (Ping An Technology); Chenfeng Miao (Ping An technology); Kun Zou (Ping An Technology); Ming Fang (Ping An Technology); Tao Wei (Ping An Technology); Zijian Li (Georgia Institute Technology); Ning Cheng (Ping An Technology (Shenzhen) Co., Ltd); Wei Hu (Ping An Technology); Shaojun Wang (PAII Inc.); Jing Xiao (Ping An Insurance (Group) Company Of China)

**BISP-P6: Multimodal Image Fusion, Analysis, and Advanced Interfaces**

**Room: Rm. 206**

**Type: Poster**

**May 25th 10:30-12:00**

**BISP-P6-1: Multi-scale across attention incorporated network for X-ray coronary vessel segmentation**

Deng He (Wuhan University of Science and Technology); Fang Tong (Huazhong University of Science and Technology); Min Xiangde (Huazhong University of Science and Technology)

**BISP-P6-2: An Attentive Dual-Encoder Framework Leveraging Multimodal Visual and Semantic Information for Automatic OSAHS Diagnosis**

Yingchen Wei (Shanghai University Of Engineering Science); Xihe Qiu (Shanghai University of Engineering Science); Xiaoyu Tan (INFLY TECH (Shanghai)); Jingjing Huang (Fudan University); Wei Chu (inf); Yinghui Xu (inf); Yuan Qi (Fudan University)

**BISP-P6-3: Self-Geometry-Guided Direct Pose Regression Based on Dual Perspective Fusion for 2D-3D Cross Dimensional Spinal Surgery Navigation**

Jing Ling (Chongqing Boshikang Technology Company); Zhengyang Wu (Army Medical University); Changqing Li (Army Medical University); Weisheng Li (Chongqing University of Posts and Telecommunications); Chao Zhang (Army Medical University); Yucheng Shu (Chongqing University of Posts and Telecommunications)

**BISP-P6-4: A Novel Single Continuous Shot Multiple Lesions Endoscopy Report Generation**

Xinpan Yuan (Hunan University of Technology); Junhua Kuang (hunan university of technology); Liujie Hua (Hunan University of Technology); Guihu Zhao (Xiangya Hospital, Central South University); Changhong Zhang (Zhuzhou People's Hospital); Jiabao Li (Hunan University of Technology)

**BISP-P6-5: SFma-Unet: A Mamba-Based Spatial-Frequency Fusion Network for Medical Image Segmentation**

Zhanpeng Liu (Xiamen University); Yuqiang Zhang (HUBEI UNIVERSITY); Bin Wang (Xiamen University); Yang Yang (Hubei University); Lin Cai (hubei university)

**BISP-P6-6: Exploring Temporal Constraints for Unsupervised Iris Motion Tracking in AS-OCT Videos**

Lingxi Hu (University of Birmingham); Xiao Wu (Southern University of Science and Technology); Risa Higashita (tomey corporation); Xiaoli Xing (Tianjin Medical University Eye Hospital); Menglan Zhou (Aier Eye Hospital(East of Chengdu)); Song Lin (Tianjin Medical University Eye Hospital); Xiaorong Li (Tianjin Medical University Eye Hospital); Xiaoling Li (Wenzhou Medical University); Jinming Duan (University of Birmingham); Jiang Liu (Southern University of Science and Technology)

**BISP-P6-7: An LSTM Feature Imitation Network for Hand Movement Recognition from sEMG Signals**

Chuheng Wu (New York University); S. Farokh Atashzar (NYU); Mohammad Ghassemi (Michigan State University); Tuka Alhanai (New York University Abu Dhabi)

**BISP-P6-8: Enhancing EEG-based Covert Speech Decoding through Knowledge Transfer**

Zhiwei Guo (Nanyang Technological University); Muyun Jiang (Nanyang Technological University); Chenyu Liu (Nanyang Technological University); Min Wu (Institute for Infocomm Research, ASTAR, Singapore); Jia Lu (National University of Singapore); Balazs Gulyas (Nanyang Technological University); Cuntai Guan (Nanyang Technological University)

**BISP-P6-9: Toward Robust Early Detection of Alzheimer's Disease via an Integrated Multimodal Learning Approach**

Yifei Chen (Hangzhou Dianzi University); Shenghao Zhu (Hangzhou Dianzi University); Zhaojie Fang (Hangzhou Dianzi University); Chang Liu (Hangzhou Dianzi University); Binfeng Zou (Hangzhou Dianzi University); Linwei Qiu (School of Astronautics, Beihang University); Yuhe Wang (Hangzhou Dianzi University); Shuo Chang (Hangzhou Dianzi University); Fan Jia (Hangzhou Dianzi University); Feiwei Qin (Hangzhou Dianzi University); Jin Fan (Hangzhou Dianzi University); Yong Peng (Hangzhou Dianzi University); Changmiao Wang (Shenzhen Research Institute of Big Data)

**AASP-P3: Bioacoustics and Audio Security**

**Room: Rm. 206**

**Type: Poster**

**May 25th 10:30-12:00**

**AASP-P3-1: Infant Cry Detection Using Causal Temporal Representation**

Minghao Fu (Mohamed bin Zayed University of Artificial Intelligence); Danning Li (McGill University); Aryan Gadhiya (Vellore Institute of Technology); Benjamin Lambright (Brandeis University); Mohamed Alowais (American University of Sharjah); Mohab Bahnassy (The American University in Cairo); Saad El Dine Eletter (Alexandria University); Hawau Toyin (Mohamed Bin Zayed University of Artificial Intelligence); Haiyan Jiang (MBZUAI); Kun Zhang (Mohamed Bin Zayed University of Artificial Intelligence); Hanan Aldarmaki (MBZUAI)

**AASP-P3-2: Black-Box Adversarial Defense Against Voice Conversion Using Latent Space Perturbation**

Jie Gao (Tsinghua University); Haiyun Li (Tsinghua University); Zhisheng Zhang (Tsinghua University); Zhiyong Wu (Tsinghua University)

**AASP-P3-3: Gradient Norm-based Fine-Tuning for Backdoor Defense in Automatic Speech Recognition**

Nanjun Zhou (South China University of Technology); Weilin Lin (The Hong Kong University of Science and Technology (Guangzhou)); Li Liu (The Hong Kong University of Science and Technology (Guangzhou))

**AASP-P3-4: Generalize Audio Deepfake Algorithm Recognition via Attribution Enhancement**

Zhigang Wang (Key Laboratory of Aerospace Information Security and Trusted Computing, Ministry of Education, School of Cyber Science and Engineering, Wuhan University); Dengpan Ye (Key Laboratory of Aerospace Information Security and Trusted Computing, Ministry of Education, School of Cyber Science and Engineering, Wuhan University); Jingyang Li (Key Laboratory of Aerospace Information Security and Trusted Computing, Ministry of Education, School of Cyber Science and Engineering, Wuhan University); Jiacheng Deng (Key Laboratory of Aerospace Information Security and Trusted Computing, Ministry of Education, School of Cyber Science and Engineering, Wuhan University)



**AASP-P3-5: Adversarial Training and Gradient Optimization for Partially Deepfake Audio Localization**

Siding Zeng (Institute of Automation, Chinese Academy of Sciences); Jiangyan Yi (National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences); Jianhua Tao (Tsinghua University); Jiayi He (Institute of Automation, Chinese Academy of Sciences); Zheng Lian (Institute of Automation, Chinese Academy of Sciences); Shan Liang (Department of Intelligence Science, Xi'an Jiaotong-Liverpool University, Suzhou, China); Chu Yuan Zhang (Tsinghua University); Yujie Chen (Anhui University); Xiaohui Zhang (School of Computer and Information Technology, Beijing Jiaotong University)

**AASP-P3-6: SPED: A Sight-singing Dataset for Performance Evaluation**

Yan Zhang (Huazhong University of Science and Technology); Jie Luo (Wuhan Conservatory of Music); Tianrui Li (Huazhong University of Science and Technology); Wei Xu (Huazhong University of Science and Technology)

**AASP-P3-7: Developing a Multilingual Dataset and Evaluation Metrics for Code-Switching: A Focus on Hong Kong's Polylingual Dynamics**

Peng Xie (Hong Kong University of Science and Technology); Kani Chen (HKUST)

**AASP-P3-8: MVANet: Multi-Stage Video Attention Network for Sound Event Localization and Detection with Source Distance Estimation**

Hengyi Hong (University of Science and Technology of China); Qing Wang (University of Science and Technology of China); Ruoyu Wei (iFlytek Research); Mingqi Cai (iFlytek Research); Xin Fang (iFlytek Research)

**AASP-P3-9: Debaised training for Semi-supervised Sound Event Detection**

Shengchang Xiao (UCAS); Xueshuai Zhang (UCAS); Pengyuan Zhang (UCAS); Yonghong Yan (UCAS)

**AASP-P3-10: SLAM-AAC: Enhancing Audio Captioning with Paraphrasing Augmentation and CLAP-Refine through LLMs**

Wenxi Chen (Shanghai Jiao Tong University); Ziyang Ma (Shanghai Jiao Tong University); Xiquan Li (Shanghai Jiao Tong University); Xuenan Xu (Shanghai Jiao Tong University); Yuzhe Liang (Shanghai Jiaotong University); Zhisheng Zheng (Shanghai Jiao Tong University); Kai Yu (Shanghai Jiao Tong University); Xie Chen (Shanghai Jiaotong University)

**AASP-P3-11: SSE: A Speaking Style Extractor Based on Fine-Grained Contrastive Learning between Speech and Descriptive Text**

Zixing Zhang (Hunan University); Yimeng Wu (Hunan University); Zhongren Dong (Hunan University); Wulong Xiang (Hunan University); Shengfan Shen (Hunan University); Bjorn Schuller (Imperial College London)

**AASP-P3-12: SML: A Backdoor Defense for Non-Intrusive Speech Quality Assessment via Semi-Supervised and Multi-Task Learning**

Ying Ren (Ningbo University); Wenjie Zhang (Ningbo University); Jiahong Ye (Ningbo University); Jie Li (Ningbo University); Diquan Yan (Ningbo University); Bin Ma (Qilu University of Technology)

**AASP-P3-13: Diffusion Augmentation Sub-center Modeling for Unsupervised Anomalous Sound Detection with Partially Attribute-Unavailable Conditions**

Jiawei Yin (Ecust); Yu Gao (Midea); Wenbin Zhang (Midea); Tianyi Wang (Midea); Mingjun Zhang (Midea)

**AASP-P4: Spatial & Array Processing: Localization, Environment Modeling**

**Room: Rm. 206**

**Type: Poster**

**May 25th 10:30-12:00**

**AASP-P4-1: An Experimental Study on Joint Modeling for Sound Event Localization and Detection with Source Distance Estimation**

Yuxuan Dong (University of Science and Technology of China); Qing Wang (University of Science and Technology of China); Hengyi Hong (University of Science and Technology of China); Ya Jiang (University of Science and Technology of China); Shi Cheng (University of Science and Technology of China)

**AASP-P4-2: Noise Supervised Contrastive Learning and Feature-Perturbed for Anomalous Sound Detection**

Shun Huang (Xinjiang University); Zhihua Fang (Xinjiang University); Liang He (Tsinghua University)

**AASP-P4-3: An Abnormal Audio Generation Method for Fault Diagnosis of Power Transformers**

Ben Niu (Northeastern University); Yangjie Wei (Northeastern University); Ke Zhang (Northeastern University); Zhuoran Yu (Northeastern University)

**AASP-P4-4: Graph-Enhanced Dual-Stream Feature Fusion with Pre-Trained Model for Acoustic Traffic Monitoring**

Shitong Fan (Harbin Engineering University); Feiyang Xiao (Harbin Engineering University); Wenbo Wang (Harbin Institute of Technology); Shuhan Qi (Harbin Institute of Technology, Shenzhen); Qiaoxi Zhu (University of Technology Sydney); Wenwu Wang (University of Surrey); Jian Guan (Harbin Engineering University)

**AASP-P4-5: Parametric Binaural Beamforming Based on Auditory Perception**

De Hu (Inner Mongolia University); Xinzhe Zhang (Inner Mongolia University)

**AASP-P4-6: Microphone Array Beamforming for Speech Enhancement based on Dynamic Mode Decomposition**

Wei Liu (Wuhan University); Gongping Huang (Wuhan University); Xin Liu (OPPO); Jilu Jin (Northwestern Polytechnical University); Jingdong Chen (Northwestern Polytechnical University); Jacob Benesty (INRS)

**AASP-P4-7: Design of robust differential beamformers with microphone arrays of arbitrary planar geometry**

Kunlong Zhao (Wuhan University); Xueqin Luo (CIAIC, Northwestern Polytechnical University); Jilu Jin (CIAIC, Northwestern Polytechnical University); Gongping Huang (Wuhan University); Jingdong Chen (Northwestern Polytechnical University); Jacob Benesty (INRS)

**AASP-P4-8: On the design of Low-rank differential beamformer with nonuniform linear microphone arrays**

Hanchen Pei (Wuhan University); Chen Kang (Wuhan University); Gongping Huang (Wuhan University); Jilu Jin (Northwestern Polytechnical University); Jacob Benesty (INRS); Jingdong Chen (Northwestern Polytechnical University)

**AASP-P4-9: Data-driven white noise gain constrained robust superdirective beamformer for speech enhancement**

Hanchen Pei (Wuhan University); Gongping Huang (Wuhan University); Jilu Jin (Northwestern Polytechnical University); Jianbo Ma (Dolby Laboratories); Zhizheng Wu (Chinese University of Hong Kong, Shenzhen); Jingdong Chen (Northwestern Polytechnical University); Jacob Benesty (INRS)

**AASP-P4-10: RADIATION AND DIRECTIVITY ANALYSIS OF A VIBRATING DOME-SHAPED RADIATOR MOUNTED ON AN INFINITE BAFFLE**

Junqing Zhang (Northwestern Polytechnical University); Wen Zhang (Northwestern Polytechnical University); Jingdong Chen (Northwestern Polytechnical University); Jacob Benesty (INRS)

**AASP-P4-11: SS-BRPE: Self-supervised blind room parameter estimation using attention mechanisms**

Chunxi Wang (Beijing University of Technology); Maoshen Jia (Beijing University of Technology); Meiran Li (Beijing University of Technology); Changchun Bao (Beijing University of Technology); Wenyu Jin (Sonos, Inc.)

**AASP-P4-12: Generating Gezi Opera Scores with a Large Language Model and a High-Quality Dataset**

Zhen Lei (Xiamen University); Ke Gu (Xiamen University); Peng Bai (Xiamen University); Xiaodong Shi (Xiamen University)

**AASP-P4-13: Improvised Performance Following in Real Time for Automatic Accompaniment**

Junyan Jiang (New York University Shanghai); Akira Maezawa (Yamaha Corporation); Gus Xia (New York University Shanghai)

**ASPS-P2: Generative AI and Foundation Models: Applications**

**Room: Rm. 206**

**Type: Poster**

**May 25th 10:30-12:00**

**ASPS-P2-1: Retrieval-Augmented Multilingual Citation Generation**

Xun Liang (Renmin University of China); Simin Niu (Renmin University of China); Sensen Zhang (Renmin University of China); Zhiyu Li (iaar); Xuan Zhang (Renmin University of China); Bo Wu (Renmin University of China); Feiyu Xiong (iaar); Bo Tang (iaar); Hanyu Wang (Renmin University of China); Shichao Song (Renmin University of China); Mengwei Wang (Renmin University of China); Jiawei Yang (Renmin University of China)

**ASPS-P2-2: What Are They Doing? Joint Audio-Speech Co-Reasoning**

Yingzhi Wang (ELM); Pooneh Mousavi (Concordia University); Artem Ploujnikov (Université de Montréal); Mirco Ravanelli (Université de Montréal)

**ASPS-P2-3: TIMERAG: BOOSTING LLM TIME SERIES FORECASTING VIA RETRIEVAL-AUGMENTED GENERATION**

Silin Yang (Peking University); Dong Wang (National University of Defense Technology); Haoqi Zheng (National University of Defense Technology); Ruochun Jin (National University of Defense Technology)

**ASPS-P2-4: DDA: Distillation-Driven Acceleration of the Reverse Diffusion Process for Stochastic Multi-Ship Trajectory Prediction**

Kun Ma (Harbin Engineering University); Qilong Han (Harbin Engineering University); Jingzheng Yao (Harbin Engineering University); Changmao Wu (Chinese Academy of Sciences); Yuntao Zhang (Harbin Engineering University)

**ASPS-P2-5: IDE:A Multi-Agent-Driven Iterative Framework for Dynamic Evaluation of LLMs**

Xin Tong (People's Public Security University of China); Bo Jin (The Third Research Institute of Ministry of Public Security); Jingya Wang (People's Public Security University of China); Wenpeng Xing (Zhejiang University); Tian Xia (Renmin University of China); Meng Han (Zhejiang University)

**ASPS-P2-6: EagerLog: Active Learning Enhanced Retrieval Augmented Generation for Log-based Anomaly Detection**

Chiming Duan (Peking University); Tong Jia (Peking University); Yong Yang (Peking University); Guiyang Liu (Alibaba Group); Jinbu Liu (Alibaba Group); Huxing Zhang (Alibaba Group); Qi Zhou (Alibaba Cloud Computing Company); Ying Li (Peking University); Gang Huang (Peking University)

**ASPS-P2-7: Leave No Stone Unturned: Optimizing Subpattern Information Entropy for Coreset Selection**

Haohao Song (Xiamen University); Qiao Xiang (Xiamen University); Jiwu Shu (Xiamen University)

**ASPS-P2-8: UMETTS: A Unified Framework for Emotional Text-to-Speech Synthesis with Multimodal Prompts**

Xiang Li (Shenzhen University); Zhi-Qi Cheng (Carnegie Mellon University); Jun-Yan He (DAMO Academy, Alibaba Group); Junyao Chen (Shenzhen Technology University); Xiaomao Fan (Shenzhen Technology University); Xiaojiang Peng (Shenzhen Technology University); Alexander Hauptmann (Carnegie Mellon University, USA)

**ASPS-P2-9: AGR: Age Group fairness Reward for Bias Mitigation in LLMs**

Cao Shuirong (Nanjing University); Ruoxi Cheng (Southeast University); Zhiqiang Wang (Beijing Electronics Science and Technology Institute)

**ASPS-P2-10: CycleFlow: Leveraging Cycle Consistency in Flow Matching for Speaker Style Adaptation**

Ziqi Liang (University of Science and Technology of China); Xulong Zhang (Ping An Technology (Shenzhen) Co., Ltd.); Chang Liu (University of Science and Technology of China); Xiaoyang Qu (Ping An Technology (Shenzhen) Co., Ltd.); Weifeng Zhao (Tencent Music Entertainment Lyra Lab, Shenzhen, China); Jianzong Wang (Ping An Technology (Shenzhen) Co., Ltd.)

**ASPS-P2-11: I-KAN: Reconstructing Over-Range Inertial Signals**

Yifeng Wang (Harbin Institute of Technology, Shenzhen); Shu Zhang (Harbin Institute of Technology, Shenzhen); Yi Zhao (Harbin Institute of Technology, Shenzhen)

**ASPS-P2-12: Generative Diffusion Model-based Energy Management in Networked Energy Systems**

Xinyu Lu (Shanghai Jiao Tong University); Zhanbo Feng (Shanghai Jiao Tong University); Jiawei Sun (Shanghai Jiao Tong University); Jiong Lou (Shanghai Jiao Tong University); Chentao Wu (Shanghai Jiao Tong University); Wugede Bao (Hohhot Minzu College); Jie Li (Shanghai Jiao Tong University)

**ASPS-P2-13: ScalaLog: Scalable Log-Based Failure Diagnosis Using LLM**

Lingzhe Zhang (Peking University); Tong Jia (Peking University); Mengxi Jia (Institute of Artificial Intelligence (TeleAI), China Telecom); Yifan Wu (Peking University); Hongyi Liu (Peking University); Ying Li (Peking University)

**IFS-P3: Data Protection, Privacy, and Biometrics**

**Room: Rm. 206**

**Type: Poster**

**May 25th 10:30-12:00**

**IFS-P3-1: Generating Is Believing: Membership Inference Attacks against Retrieval-Augmented Generation**

Yuying Li (Hubei university); Gaoyang Liu (Huazhong University of Science and Technology); Chen Wang (Huazhong University of Science and Technology); Yang Yang (Hubei University)

**IFS-P3-2: ReTD: Reconstruction-Based Traceability Detection for Generated Images**

Weizhuo Chen (Chinese Academy of Sciences, Institute of Information Engineering); Fangfang Yuan (Institute of Information Engineering, Chinese Academy of Sciences); Cong Cao (Institute of Information Engineering, Chinese Academy of Sciences, Beijing, China); Kun Peng (Institute of Information Engineering, Chinese Academy of Sciences & School of Cyber Security, University of Chinese Academy of Sciences); Dakui Wang (Institute of Information Engineering, CAS); Yanbing Liu (Institute of Information Engineering, Chinese Academy of Sciences)

**IFS-P3-3: Efficient and Expandable Token-Level Approach for Multi-Domain Sensitive Information Classification**

Hongyi Li (Fudan University); Jiawei Ye (Fudan University); Jie Wu (Fudan University); Lijun Zu (Fudan University)

**IFS-P3-4: Robust Adversarial Training for Industrial Defect Classification with Long-Tailed Data**

Shuchun Xu (Harbin Engineering University); Jiguang Lv (Harbin Engineering University); Dapeng Man (Harbin Engineering University); Hengheng Xiong (Harbin Engineering University); Tao Liu (Harbin Engineering University); Wu Yang (Harbin Engineering University)

**IFS-P3-5: Filtering Resistant Large Language Model Watermarking via Style Injection**

Zhaojun Guo (Fudan University); Guobiao Li (Fudan University); Junqiang Huang (Fudan University); Xinpeng Zhang (School of Computer Science, Fudan University); Zhenxing Qian (School of Computer Science, Fudan University); Sheng Li (Fudan University)

**IFS-P3-6: Poisoning The Diffusion: A Simple and Robust Watermarking Method for Audio Generation**

Yi Tang (South China University of Technology)

**IFS-P3-7: Emotion-Preserving Prosody Anonymization Network for Voice Privacy Protection**

Jiabei He (Nankai University); Shiwan Zhao (Nankai University); Jiaming Zhou (Nankai University); Haoqin Sun (Nankai University); Hui Wang (Nankai University); Yong Qin (Nankai University)

**IFS-P3-8: RPPFL: Robust and Privacy-Preserving Federated Learning via Trusted Execution Environments**

Xiaolei Zhang (Peking university); Zhaoyu Chen (Peking University); Guangpu Chen (Peking University); Xinyu Feng (Peking University); Qingni Shen (Peking University); Zhonghai Wu (Peking University)

**IFS-P3-9: Adversarial Knowledge Transfer for Black-Box Model Inversion Attack**

Xinhao Liu (ShenzhenUniversity); Zetao Lin (SHENZHEN UNIVERSITY); Yingzhao Jiang (szu); Qiao Yan (SHENZHEN UNIVERSITY)

**IFS-P3-10: Rethinking the Fragility and Robustness of Fingerprints of Deep Neural Networks**

Fangqi Li (SEIEE, Shanghai Jiao Tong University); Shilin Wang (SEIEE, Shanghai Jiaotong University); Lei Yang (Shanghai Jiao Tong University)

**IFS-P3-11: SVRM: Composing Various Network Service Fuzzing Corpus with One Single Model**

Wenfeng Lin (National University of Defense Technology); Zhiyuan Jiang (National University of Defense Technology); Fangliang Xu (National University of Defense Technology); Yunfei Su (National University of Defense Technology); Zhiwei Li (National University of Defense Technology); Lingchu Mao (National University of Defense Technology); Chaojing Tang (National University of Defense Technology)

**IFS-P3-12: SEHAP: Secure and Efficient Handover Authentication Protocol in LEO Satellite Non-Terrestrial Networks**

Yunchuan Guo (Institute of Information Engineering, CAS, China); Jing Wang (Institute of Information Engineering, CAS, China); Kui Geng (Institute of Information Engineering, CAS, China); Zifu Li (Institute of Information Engineering, CAS, China); Fenghua Li (Institute of Information Engineering, CAS, China); Liang Fang (Institute of Information Engineering, CAS, China)

**MLSP-P10: Machine Learning for Speech, Audio, and Time-Series Analysis**

**Room: Rm. 206**

**Type: Poster**

**May 25th 10:30-12:00**

**MLSP-P10-1: DS-BTIAN: A Novel Deep-Shallow Bidirectional Transformer Interactive Attention Network for Multimodal Emotion Recognition**

Zengzhao Chen (Central China Normal University); Chuanxu Zhao (Central China Normal University); Zhifeng Wang (Central China Normal University); Chuan Liu (Central China Normal University); Qiuyu Zheng (central China normal university); Cheng Zou (Central China Normal University)

**MLSP-P10-2: PaSTS: Parameter-affined Seasonal-Trend Synthesis for Multi-dimensional Long-Term Time Series Forecasting within LLM**

Quanfeng Lv (IIE,CAS); Jingguo Ge (iie, cas); Yifei Xu (IIE); Tong Li (Institute of Information Engineering, Chinese Academy of Sciences); Liangxiong Li (Institute of information engineering, Chinese Academy of Sciences)

**MLSP-P10-3: Dual Trajectory Revised Diffusion Model for Time Series Forecasting**

Zilong Hu (Hefei University of Technology); Yan Qiao (Hefei University of Technology); Zidang Cai (Hefei University of Technology); Rongyao Hu (Hefei University of Technology); Junjie Wang (HFUT); Meng Li (Hefei University of Technology); Zhenchun Wei (Hefei University of Technology)

**MLSP-P10-4: EGENN:An Efficient Graph-Enhanced NeuralNetwork for Multivariate Time Series Forecasting**

Haoxuan Xu (Harbin Institute of Technology); Haiqi Zhu (Harbin Institute of Technology); Yifan Chen (University of Nottingham Malaysia Campus); Chunzhi Yi (Harbin Institute of Technology); Baichun Wei (Harbin Institute of Technology); Feng Jiang (Harbin Institute of Technology, Harbin)

**MLSP-P10-5: LagTS: Toward Adaptive Lag Relationship Modeling for Multivariate Time Series Forecasting**

Ciyi Liu (Nankai University); Jiaqi Ye (Nankai University); Zhenpeng Yu (Digital Research Institute, ENN Group); Shubao Zhao (Digital Research Institute, ENN Group); Zhaoxiang Hou (ENN); Chengyi Yang (ENN Group); Yanlong Wen (Nankai University); Xiaojie Yuan (Nankai Univeristy)

**MLSP-P10-6: HCLTS: Mining Customers' Consumption Patterns in Natural Gas Time Series with Hierarchical Contrastive Learning**

Yuhang Niu (Nankai University); Jiaqi Ye (Nankai University); Shubao Zhao (Digital Research Institute, ENN Group); Zhaoxiang Hou (ENN); Chengyi Yang (ENN Group); Zengxiang Li (ENN Group); Yanlong Wen (Nankai University); Xiaojie Yuan (Nankai Univeristy)

**MLSP-P10-7: TIDE-Net: A Physics-Based Graph Model for Predicting Tropical Cyclone Impacts on Estuarine Systems**

Gaowei Zhang (Beijing University of Posts and Telecommunications); Wei Wang (Beijing University of Posts and Telecommunications); Yi Wang (Beijing University of Posts and Telecommunications)

**MLSP-P10-8: Latent Space Score-based Diffusion Model for Probabilistic Multivariate Time Series Imputation**

Guojun Liang (Halmstad University); Najmeh Abiri (Halmstad University); Atiye Sadat Hashemi (Halmstad University); Jens Lundström (Halmstad University); Stefan Byttner (Halmstad University); Prayag Tiwari (Halmstad University)

**MLSP-P10-9: A Joint Time-Frequency Attention for Leakage Detection in Water Distribution Networks Using Time Series Decomposition**

Juan Luo (Hunan University); Yiyang Chen (Shanghai Jiao Tong University); Jielong Yang (Jiangnan University); Xionghu Zhong (Hunan University)

**MLSP-P10-10: Multi-Scale Conditional Generative Adversarial Networks for Wind Speed Data Imputation in Earthen Ruins Protection**

Hang Li (Northwest University); Hai Wang (Northwest University); Rui Cao (Northwest University); Shuo Ji (Northwest University); Jie Zheng (Northwest University)

**MLSP-P10-11: InjectTST: Injecting Global Information into Independent Channels for Long Time Series Forecasting**

Ce Chi (China Mobile Research Institute); Xing Wang (China Mobile Research Institute); Kexin Yang (China Mobile Research Institute); Zhiyan Song (China Mobile Research Institute); Jin Di (CMCC); Lin Zhu (China Mobile); Chao Deng (China Mobile Research Institute); Junlan Feng (China Mobile Research)

### **MLSP-P10-12: Global Tropical Cyclone Intensity Forecasting with Multi-modal Multi-scale Causal Autoregressive Model**

Xinyu Wang (University of Science and Technology of China); Kang Chen (University of Science and Technology of China); Lei Liu (University of Science and Technology of China); Tao Han (Shanghai AI Lab); Bin Li (University of Science and Technology of China); Lei Bai (Shanghai AI Laboratory)

### **MLSP-P10-13: Path Signatures are Unsupervised Time Series Anomaly Extractors**

Ruiqi Wang (Tsinghua University); Zhenwei Zhang (Tsinghua University); Yuantao Gu (Tsinghua University)

### **IVMSP-P7: 3D and Biomedical Image and Video Analysis**

**Room: Rm. 206**

**Type: Poster**

**May 25th 13:00-14:30**

### **IVMSP-P7-1: PlantPCC: Dual Sampling and Multi-level Geometry-aware Contrastive Regularization for Plant Point Cloud Completion**

Xiaomeng Li (China Agricultural University); Wenxu Wang (College of Computer Science and Technology, Ocean University of China); Haoxiang Sun (China Agricultural University); Yanhao Ding (China Agricultural University); Zhenbo Li (China Agricultural University)

### **IVMSP-P7-2: KAN-HyperpointNet for Point Cloud Sequence-Based 3D Human Action Recognition**

Zhaoyu Chen (Hohai University); Xing Li (Nanjing Forestry University); Qian Huang (Hohai University); Qiang Geng (Hohai University); Tianjin Yang (Hohai university); Shihao Han (Hohai University)

### **IVMSP-P7-3: MSANet: Mixed Spectral and Attention Network for Robust 3D Human Pose Estimation**

Bing Wang (Ningxia University); Suping Wu (Ningxia University); Xitie Zhang (Ningxia University); Liyuan Shi (Ningxia University); Sheng Yang (Ningxia University); Zhijian Duan (Ningxia University); Tuo Xiong (Ningxia University)

### **IVMSP-P7-4: Credible and Detailed 3D Face Reconstruction in Large Pose**

Xinyu Li (Ningxia University); Xitie Zhang (Ningxia University); Suping Wu (Ningxia University); Ruijie Peng (Ningxia University); Kehua Ma (Ningxia University); Xiang Zhang (Ningxia University)

### **IVMSP-P7-5: Meta-Learning for Finger Vein Recognition in Internet of Things Smart Home Security**

Hengyi Ren (Nanjing Forestry University); Lijuan Sun (Nanjing University of Posts and Telecommunications); Jinting Ren (Nanjing Forestry University); Xing Li (Nanjing Forestry University); Ying Cao (Henan University)

### **IVMSP-P7-6: Low-Resolution Hierarchical Training for Efficient 3D Gaussian Splatting**

Yilin Jin (Tsinghua University); Shaohui Li (Tsinghua University); Zhi Li (Tsinghua University); Yu Liu (Tsinghua University)

### **IVMSP-P7-7: ASFC-NeRF: Large-Scale Scene Rendering with Adaptive Sampling and Feature-aware Compression**

Xinrui Zhang (Beihang University); Yufeng Wang (Beihang University); Shuangkang Fang (megvii,buaa); Zesheng Wang (Beihang University); Huayu Zhang (Beihang University); Dacheng Qi (Beihang University); Wenrui Ding (Beihang University)

### **IVMSP-P7-8: 3D Shape Classification by Registration: Neural-Network-Free and Training-Free**

Chang Gou (Nanjing University); Yuanqu Mou (Nanjing University); Wenjie Li (Nanjing University); Neetesh Purohit (IIIT Alahabad); Suneel Yadav (IIIT Alahabad); Haiyang Bai (Nanjing University); Xu Zhang (Nanjing University); Lijun Chen (Nanjing University)

### **IVMSP-P7-9: CSS: Overcoming Pose and Scene Challenges in Crowd-Sourced 3D Gaussian Splatting**

Runze Chen (Beijing University of Posts and Telecommunications); Mingyu Xiao (Beijing University of Posts and Telecommunications); Haiyong Luo (Research Center for Ubiquitous Computing Systems, Institute of Computing Technology, Chinese Academy of Sciences); Fang Zhao (School of Software Engineering, Beijing University of Posts and Telecommunications); Fan Wu (Beijing University of Posts and Telecommunications); Hao Xiong (School of Computer Science, Beijing University of Posts and Telecommunications); Qi Liu (China Unicom Smart City Research Institute); Meng Song (China Unicom Smart City Research Institute)

### **IVMSP-P8: Applications of Image and Video Processing I**

**Room: Rm. 206**

**Type: Poster**

**May 25th 13:00-14:30**

### **IVMSP-P8-1: Prompt-UIE: A Unified Prompt-Driven Framework for Underwater Image Enhancement**

Yanling Zhang (Zhejiang University of Technology); Linxuan Luo (Zhejiang University of Technology); Pan Mu (Zhejiang University of Technology); Cong Bai (Zhejiang University of Technology)

### **IVMSP-P8-2: Relation-aware Semantic Alignment Network for Text-to-Image Person Retrieval**

Yong Wu (Anhui Normal University); Rongxi Zhou (Anhui Normal University); Hongchao Li (Anhui Normal University); Ze Zhou (Anhui Normal University); Feifei Wei (Anhui Normal University); Min Li (Agricultural Science and Technology Information Research Institute, Guangxi Academy of Agricultural Sciences); Guodui He (China Communications Service Guangxi Technical Service Branch)

### **IVMSP-P8-3: DeBeauty: A joint Framework for Facial Beautification Removal Based on Spatial Collaborative Adaptation and Hyperplane Relocation**

Jinghang Wang (Northeast Normal University); Yi Li (Northeast Normal University); Zexing Zhang (Changchun University of Technology); Cunrui Zou (Northeast Normal University); Zibo Liu (Northeast Normal University); Zhiguo Zhou (Northeast Normal University)

### **IVMSP-P8-4: Learning Binary-Antithetical Information Bottleneck for Generalizable Face Anti-Spoofing**

Hao Yu (University of Oulu); Haoyu Chen (University of Oulu); Guoying Zhao (University of Oulu)

### **IVMSP-P8-5: Vision Mamba-Based Approach for Incomplete Boundary Document Image Rectification**

Weihao Zhang (HiThink RoyalFlush Information Network Co., Ltd.); Xin Xia (HiThink RoyalFlush Information Network Co., Ltd.); Maopeng Li (HiThink RoyalFlush Information Network Co., Ltd.); Yun-Bo Zhao (University of Science and Technology of China)

### **IVMSP-P8-6: JANE: Joint Angle Networks Assisting 3D Human Pose Estimation**

Jinhuan Wang (Zhejiang University of Technology); Yuzhen Zhao (Zhejiang University of Technology); Xujie Song (Zhejiang University of Technology); Wenzhou Chen (Hangzhou Dianzi University); Qi Xuan (Zhejiang University of Technology)

### **IVMSP-P8-7: Multi-range Adaptive Perception Transformer for Iterative Homography Estimation**

Tianming Li (Hunan University); Qing Zhu (Hunan University); Zhen Zhou (Hunan University); Jianqiao Luo (Hunan University); Yaonan Wang (Hunan University)

### **IVMSP-P8-8: MambaTrack: Exploiting Dual-Enhancement for Night UAV Tracking**

Chunhui Zhang (Shanghai Jiaotong University, CloudWalk Technology Co., Ltd); Li Liu (The Hong Kong University of Science and Technology (Guangzhou)); Hao Wen (CloudWalk); Xi Zhou (CloudWalk Technology); Yanfeng Wang (Shanghai Jiaotong University)



**IVMSP-P8-9: DiffRS: An Extensible Diffusion Model for Remote Sensing Image Generation**

Xinyue Huang (National University of Defense Technology); Xin Niu (NUDT); Jingfei Jiang (National University of Defense Technology); Hengyue Pan (National University of Defense Technology)

**IVMSP-P8-10: An End-to-End Graph-Guided Spatiotemporal Model for Adaptive Frame-Level Facial Affect Analysis in the Wild**

Yan Liang (South China Normal University); Yan Hao (South China Normal University); Zenan Yao (South China Normal University); Jiacheng Liao (South China Normal University); Jiahui Pan (South China Normal University)

**IVMSP-P8-11: DSFormer: Deformable Pointformer for 3D Salient Object Detection**

Yibo Hu (Zhejiang University); Lai Wei (Chinese University of Hong Kong); Yanzhe Wang (Zhejiang University); Qiuyu Huang (Zhejiang University, Hangzhou, China); Yanding Wei (Zhejiang University, Hangzhou, China); Qiang Fang (Zhejiang University, Hangzhou, China)

**IVMSP-P8-12: UV-Mamba: A DCN-Enhanced State Space Model for Urban Village Boundary Identification in High-Resolution Remote Sensing Images**

Lulin Li (Qinghai University); Ben Chen (Qinghai University); Xuechao Zou (Beijing Jiaotong University); Junliang Xing (Tsinghua University); Pin Tao (Tsinghua University)

**IVMSP-P9: Applications of Image and Video Processing II**

**Room: Rm. 206**

**Type: Poster**

**May 25th 13:00-14:30**

**IVMSP-P9-1: Improving Irregular Text Recognition with Adaptive Feature Compression**

Yin Liu (School of Computer Science, Fudan University); Zhineng Chen (School of Computer Science, Fudan University)

**IVMSP-P9-2: M3-CVC: Controllable Video Compression with Multimodal Generative Models**

Rui Wan (Fudan University)

**IVMSP-P9-3: Aesthetic Perception Prompting for Interpretable Image Aesthetics Assessment with MLLMs**

Lanjuan Wang (Tianjin University); Zheyu Qiao (Tianjin University); Ruidong Chen (Tianjin University); Jingqiu Li (Tianjin University); Wang Wenjie (meituan); Xiaoqiong Wang (Beijing Sankuai Online Technology Co., Ltd.); Wei Rao (Meituan); Shuai Chen (meituan); An-An Liu (Tianjin University)

**IVMSP-P9-4: Exploring Spectral Signatures of Chinese liquor using Machine Learning and SHapley Additive exPlanations**

Danlei Chen (Shaanxi University of Science and Technology); Yun Wang (Xi'an University of Technology); Linruize Tang (Northwestern Polytechnical University); Zhengqiao Zhao (Northwestern Polytechnical University); Jie Chen (Northwestern Polytechnical University); Jingdong Chen (Northwestern Polytechnical University)

**IVMSP-P9-5: RetinaStereo: Dynamic-Volume Stereo Matching Network**

Xiaoyan Liao (Peking University); Haoliang Zhao (The Hong Kong Polytechnic University); Fan Yang (Peking University); Kwokching Cheung (Peking University); Jun Jiang (Peking University); Yong Zhao (Peking University); Jie Chen (Peking University); Xinan Wang (Peking University)

#### **IVMSP-P9-6: UMSSS: A Visual Scene Semantic Segmentation Dataset for Underground Mines**

Jiawen Wang (China University of Mining and Technology-Beijing); Chenfei Liao (China University of Mining and Technology-Beijing); Zhongqi Zhao (China University of Mining and Technology-Beijing); Lianghui Li (China University of Mining and Technology-Beijing); Xuan Gao (China University of Mining and Technology-Beijing); Suna Pan (China University of Mining and Technology-Beijing); Fangzhen Shi (China University of Mining and Technology-Beijing); Yudong Wang (China University of Mining and Technology-Beijing); Weijie Zhou (China University of Mining and Technology-Beijing); Kehu Yang (China University of Mining and Technology-Beijing)

#### **IVMSP-P9-7: MPFNet: A Multi-Prior Fusion Network for Video-based Micro-Expression Recognition**

Chuang Ma (Defense Innovation Institute, Academy of Military Sciences (AMS)); Shaokai Zhao (Defense Innovation Institute, Academy of Military Sciences (AMS)); Yu Pei (Defense Innovation Institute, Academy of Military Sciences (AMS)); Liang Xie (National Innovation Institute of Defense and Technology); Ye Yan (National Innovation Institute of Defense and Technology); Erwei Yin (National Institute of Defense Technology Innovation, Academy of Military Sciences China, Beijing, 100081, China; Tianjin Artificial Intelligence Innovation Center (TAIIC), Tianjin, 300450, China)

#### **IVMSP-P9-8: KAN-Face: Efficient Resource Usage and Precision Lip-Sync in Talking Head Generation**

Guanwen Feng (Xidian University); Siyu Jin (Xidian University); Zhihao Qian (Xidian University); Yunan Li (Xidian University); Qiguang Miao (Xidian University)

#### **MMSP-P2: LLMs, Vision-Language Models, Cross-modal Fusion, and Diffusion Models**

**Room: Rm. 206**

**Type: Poster**

**May 25th 13:00-14:30**

#### **MMSP-P2-1: Language Models Can See Better: Visual Contrastive Decoding For LLM Multimodal Reasoning**

Yuqi Pang (Institute of Information Engineering, Chinese Academy of Sciences); Bowen Yang (Institute of Information Engineering, Chinese Academy of Sciences.); Haoqin Tu (University of Chinese Academy of Sciences); Yun Cao (Institute of Information Engineering, Chinese Academy of Sciences); Zeyu Zhang (Institute of Information Engineering)

#### **MMSP-P2-2: Towards Patronizing and Condescending Language in Chinese Videos: A Multimodal Dataset and Detector**

Hongbo Wang (Dalian University of Technology); Junyu Lu (Dalian University of Technology); Yan Han (University of Tsukuba); Kai Ma (Dalian University of Technology); Liang Yang (Dalian University of Technology); Hongfei Lin (Dalian University of Technology)

#### **MMSP-P2-3: Enhancing Incomplete Multimodal Learning via Modal Complementary Recovering**

Meirong Ding (School of Software, South China Normal University); Hongyi Lin (School of Artificial Intelligence, South China Normal University); Jiawei Zhu (School of Artificial Intelligence, South China Normal University); Chuang Zou (South China Normal University); Wenxiu Cai (School of Artificial Intelligence, South China Normal University); Bingzhi Chen (Beijing Institute of Technology, Zhuhai)

#### **MMSP-P2-4: Diffusion Models are Good Unsupervised Class-agnostic Shape Part Segmentors**

Zhongbin Jiang (Nanjing University of Posts and Telecommunications); Tianhao Shi (Nanjing University of Posts and Telecommunications); Hao Gao (Nanjing University of Posts and Telecommunications); Jun Liu (Lancaster University); Ye Liu (Nanjing University of Posts and Telecommunications)

**MMSP-P2-5: NCDI-Diffusion: Neural Contextual and Directional Inversion for Novel View Synthesis through Diffusion Models**

Wenpeng Xing (Zhejiang University); Jie Chen (Hong Kong Baptist University); Zaifeng Yang (A-STAR Singapore); Xin Tong (People's Public Security University of China); Changting Lin (Binjiang Institute of Zhejiang University); Meng Han (Zhejiang University)

**MMSP-P2-6: Dual Encoders for Diffusion-based Image Inpainting**

Dezhi Zheng (Shenzhen University); Kaijun Deng (Shenzhen University); Jinbao Wang (Shenzhen University); Linlin Shen (Shenzhen University)

**MMSP-P2-7: FreeSegDiff: Annotation-free Saliency Segmentation with Diffusion Models**

Chaofan Ma (Shanghai Jiao Tong University); Yuhuan Yang (Shanghai Jiao Tong University); Chen Ju (Alibaba Group); Yue Shi (Shanghai Jiao Tong University); Ya Zhang (Cooperative Medianet Innovation Center, Shanghai Jiao Tong University); Yan-Feng Wang (Cooperative medianet innovation center of Shanghai Jiao Tong University)

**MMSP-P2-8: Audio-Faces Intra-Frame Alignment with Graph Attention Networks for Active Speaker Detection**

Yongkang Yin (Peking University); Xusheng Yang (Peking University); Liming Liang (Peking University); Xu Li (Tencent); Yuexian Zou (Peking University)

**MMSP-P2-9: OTMEA : Multi-modal Entity Alignment via Optimal Transport**

Cunda Wang (Inner Mongolia University); Weihua Wang (Inner Mongolian University); Xinyu Li (Inner Mongolia University); Qiuyu Liang (Inner Mongolia University); Feilong Bao (Inner Mongolia University)

**MMSP-P2-10: DiffGAP: A Lightweight Diffusion Module in Contrastive Space for Bridging Cross-Model Gap**

Shentong Mo (Carnegie Mellon University); Zehua Chen (Tsinghua University); Fan Bao (Tsinghua University); Jun Zhu (Tsinghua University)

**MMSP-P2-11: PulmoScan: A Practical Pulmonary Disease Pre-Screening System**

Baixu Yan (Tsinghua University); Shjia Ge (Tsinghua University); Meizi Lu (Tsinghua University); Weixiang Zhang (Tsinghua University); Shuzhao Xie (Tsinghua University); Zhi Wang (Tsinghua University)

**MMSP-P2-12: MSA-ITEI: A Novel Method for Multimodal Analysis of Social Media Stickers**

Yuanchen Shi (Soochow University); Fang Kong (Soochow University)

**MMSP-P2-13: Identity-Preserving Audio-Driven Holistic Human Motion Video Generation**

Haiwei Xue (Tsinghua University); Zhensong Zhang (Huawei Noah's Ark Lab); Minglei Li (01.ai); Zonghong Dai (Huawei Cloud); Zhiyong Wu (Tsinghua University)

**MMSP-P2-14: Text-Infused Audio-Visual Video Parsing with Semantic-Aware Multimodal Contrastive Learning**

Pengcheng Zhao (Hefei University of Technology); Yanxiang Chen (Hefei University of Technology); Dan Guo (Hefei University of Technology); Yuanzhi Yao (Hefei University of Technology)

**MMSP-P2-15: Rhythmic Foley: A Framework For Seamless Audio-Visual Alignment In Video-to-Audio Synthesis**

Zhiqi Huang (Tsinghua University); Dan Luo (Tsinghua University); Jun Wang (Tencent); Huan Liao (Tsinghua University); Zhiheng Li (Tsinghua University); Zhiyong Wu (Tsinghua University)

**MMSP-P2-16: You Only Speak Once to See**

Wenhao Yang (Tianjin University); Jianguo Wei (School of Computer Software, Tianjin University, Tianjin, China); Wenhuan Lu (Tianjin University); Lei Li (University of Washington)

**MMSP-P2-17: Unifying Within and Across: Intra-Modality Multi-View Fusion and Inter-Modality Alignment for Knowledge Graph Completion**

Zhen Li (China Mobile Information Technology Center); Jibin Wang (China Mobile Information Technology Center); Zhuo Chen (China Mobile); Wu Kun (China Mobile Information Technology Co., Ltd.); Meng Ai (China Mobile Information Technology Center); Leike An (China Mobile Information Technology Center); Liqiang Wang (China Mobile Information Technology Center); Haoxuan Li (Peking University)

**MMSP-P2-18: Sketch-based Point Cloud Generation with Diffusion Model and Pre-training Enhancement**

Yangdong Chen (Fudan University); Mohan Chen (Fudan University); Yuejie Zhang (Fudan University); Rui Feng (Fudan University); Tao Zhang (Shanghai University of Finance and Economics); Shang Gao (Deakin University)

**MMSP-P3: Multimodal Processing, Analysis, Reasoning, and Sentiment Analysis**

**Room: Rm. 206**

**Type: Poster**

**May 25th 13:00-14:30**

**MMSP-P3-1: Diagram Formalization Enhanced Multi-Modal Geometry Problem Solver**

Zeren Zhang (Peking University); Jo-Ku Cheng (Peking University); Jingyang Deng (Peking University); Lu Tian (01.AI); Jinwen Ma (Peking University); Ziran Qin (Shanghai Jiao Tong University); Xiaokai Zhang (Shanghai University); Na Zhu (Shanghai University); Tuo Leng (Shanghai University)

**MMSP-P3-2: Causal Debiasing for Visual Commonsense Reasoning**

Jiayi Zou (Nanjing University of Posts and Telecommunications); Gengyun Jia (Nanjing University of Posts and Telecommunications); Bingkun Bao (Nanjing University of Posts and Telecommunications)

**MMSP-P3-3: Improving Open-Ended Referring Expression Comprehension via Dual-Language Constraints**

Chenglong Lei (Hunan University); Chao Yang (Hunan University); Jianbo Zheng (Hunan university)

**MMSP-P3-4: Enhancing Image Editing with Chain-of-Thought Reasoning and Multimodal Large Language Models**

Mengxue Kang (Intelligent Science & Technology Academy); Zhang Xinyu (Meituan); Fei Wei (Alibaba Inc.); Shuang Xu (Meituan); Yuhe Liu (Beihang university)

**MMSP-P3-5: Adversarial Training and Cross-modal Feature Fusion in Multimodal Sentiment Analysis**

Junhuai Li (Xi'an University of Technology); Chuang Lin (Xi'an University of Technology); Huaijun Wang (Xi'an University of Technology); Yuxing Zhi (Xi'an University of Technology); Jing Chen (Xi'an University of Technology); Tao Huang (James Cook University)

**MMSP-P3-6: Key Clues Guided Video Character Social Relationship Recognition Enhanced by LLM**

Wenlong Dong (Jiangsu University); Qing Zhu (Jiangsu university); Qirong Mao (Jiangsu University)

**MMSP-P3-7: MFMamba: A Multimodal Fusion State Space Model for Depression Recognition**

Jingyi Liu (Capital Normal University); Yuanyuan Shang (Capital Normal University); Mengyuan Yang (Capital Normal University); Zhuhong Shao (Capital Normal University); Jiaxi Lu (capitai normal university); Tie Liu (Capital Normal University)

**MMSP-P3-8: Infrared and Visible Image Fusion with Hierarchical Human Perception**

Guang Yang (Xidian University); Jie Li (Xidian University); Xin Liu (Xidian University); Zhushi Zhong (Xidian University); X.-B. Gao (Xidian University)

**MMSP-P3-9: Bottleneck-Enhanced Contrastive Decoupled Network for Multimodal Aspect-based Sentiment Classification**

Rui Liu (Institute of Information Engineering, Chinese Academy of Sciences & School of Cyber Security, University of Chinese Academy of Sciences); Jiahao Cao (kuaishou); Lei Jiang (Institute of Information Engineering, Chinese Academy of Sciences); Chaodong Tong (Institute of Information Engineering, Chinese Academy of Sciences); Haimei Qin (IIE); Yanan Cao (Institute of Information Engineering, Chinese Academy of Sciences)

**MMSP-P3-10: DiffMEL: A large-scale difficulty-graded dataset for Multimodal Entity Linking**

Fang Wang (peking university); Xiaoying Bai (AIBD); Tianwei Yan (National University of Defense Technology); Minghao Hu (Advanced Institute of Big Data); Yi Liang (School of Computer Science and Technology, Xinjiang University)

**MMSP-P3-11: Mixed Gaussian Splatting for High-Quality Rendering and Reconstruction**

Shuai Liu (Shanghai Jiao Tong University); Jianyu Ding (Shanghai JiaoTong university); Jie Yang (Shanghai Jiao Tong University); Wei Liu (Shanghai Jiao Tong University)

**MMSP-P3-12: Trusted Mamba Contrastive Network for Multi-View Clustering**

Jian Zhu (Zhejiang Lab); Xin Zou (China University of Geosciences); Lei Liu (University of Science and Technology of China); Zhangmin Huang (Zhejiang Lab); Ying Zhang (Zhejiang Lab); Chang Tang (China University of Geosciences); Lirong Dai (University of Science and Technology of China)

**MMSP-P3-13: Debiased Estimation for Cross-Domain Cold Start Recommendation**

Fengxin Li (Renmin University of China); Hongyan Liu (Tsinghua University); Jun He (Renmin University of China); Xiaoyong Du (Renmin University of China)

**MMSP-P3-14: Contrast-Unity for Partially-Supervised Temporal Sentence Grounding**

Haicheng Wang (Shanghai Jiao Tong university); Chen Ju (Alibaba Group); Weixiong Lin (SJTU); Chaofan Ma (Shanghai Jiao Tong University); Shuai Xiao (Alibaba Group); Ya Zhang (Cooperative Medianet Innovation Center, Shanghai Jiao Tong University); Yan-Feng Wang (Cooperative medianet innovation center of Shanghai Jiao Tong University)

**MMSP-P3-15: A novel multimodal personality prediction method based on pretrained models and graph relational transformer network**

Rongquan Wang (University of Science and Technology Beijing); Xianyu Xu (Qingdao Institute Of Cognitive Artificial Intelligence); Hao Yang (Zhengzhou University); Lin Wei (Civil Aviation Flight University of China); Huimin Ma (University of Science and Technology Beijing)

**MMSP-P3-16: GMCL: Graph-Enhanced Multimodal Contrastive Learning for Rumor Detection**

Kun Lu (Harbin Institute of Technology); Hongli Zhang (Harbin Institute of Technology); Tianze Sun (Harbin Institute of Technology); Yuchen Yang (Harbin Institute of Technology); Chao Meng (Harbin Institute of Technology); Gongzhu Yin (Harbin Institute of Technology); Binxing Fang (Harbin Institute of Technology)

**MMSP-P3-17: Lenna: Language Enhanced Reasoning Detection Assistant**

Fei Wei (Alibaba Inc.); Zhang Xinyu (Meituan); Ailing Zhang (Peking University); Bo Zhang (Meituan); Xiangxiang Chu (Meituan)

**MMSP-P3-18: Local Feature Alignment Prompt-Tuning for Few-shot Multimodal Aspect Sentiment Analysis**

Meirong Ding (School of Software, South China Normal University); Chuang Zou (South China Normal University); Hongyi Lin (School of Artificial Intelligence, South China Normal University)

**MLSP-P11: Machine Learning for Multimedia, Multimodal Data, and Other Applications****Room: Rm. 206****Type: Poster****May 25th 13:00-14:30****MLSP-P11-1: Self-supervised Contrastive Pre-training for Dry Electrode EEG Emotion Recognition via Cross Device Representation Consistency**

Meihong Zhang (University of Electronic Science and Technology of China); Shaokai Zhao (Defense Innovation Institute, Chinese Academy of Military Sciences); Zhiguo Luo (Defense Innovation Institute, Chinese Academy of Military Sciences); Liang Xie (National Innovation Institute of Defense and Technology); Tiejun Liu (University of Electronic Science and Technology of China); Dezhong Yao (University of Electronic Science and Technology of China); Ye Yan (Defense Innovation Institute, Chinese Academy of Military Sciences); Erwei Yin (National Institute of Defense Technology Innovation, Academy of Military Sciences China, Beijing, 100081, China; Tianjin Artificial Intelligence Innovation Center (TAIIC), Tianjin, 300450, China)

**MLSP-P11-2: Individual Fairness for Fuzzy C-Means Clustering**

Zhijing Yang (Southwest University of Science and Technology); Boyang Yan (Southwest University of Science and Technology); Junjie Zheng (Southwest University of Science and Technology); Yiding Tang (Southwest University of Science and Technology); Chuan Qian (Southwest University of Science and Technology); Hui Zhang (Southwest University of Science and Technology)

**MLSP-P11-3: Rethinking Early-Fusion Strategies for Improved Multimodal Image Segmentation**

Zhengwen Shen (China University of Mining and Technology); Yulian Li (China University of Mining and Technology); Han Zhang (China University of Mining and Technology); Yuchen Weng (China University of Mining and Technology); Jun Wang (China University of Mining and Technology)

**MLSP-P11-4: MPNAS: Multimodal Sentiment Analysis Pruning via Neural Architecture Search**

Binyan Zhang (Chongqing University); Ao Ren (Chongqing University); Zihao Zhang (Chongqing University); Moming Duan (National University of Singapore); Duo Liu (Chongqing University); Yujuan Tan (Chongqing University); Kan Zhong (Chongqing University)

**MLSP-P11-5: MTPareto: A MultiModal Targeted Pareto Framework for Fake News Detection**

Kaiying Yan (Sun Yat-sen University); Moyang Liu (Beihang University); Yukun Liu (UCAS); Ruibo Fu (Institute of Automation, Chinese Academy of Sciences); Zhengqi Wen (Tsinghua University); Jianhua Tao (Tsinghua University); Xuefei Liu (Qiyuan Lab); Guanjun Li (Institute of Automation, Chinese Academy of Sciences)

**MLSP-P11-6: OPFormer: Real-Time Optimal Power Flow with CNN-Based Transformer**

Kaijie Xu (Zhejiang University); Xilin Dai (Zhejiang University); Lin Qiu (Zhejiang University)

**MLSP-P11-7: Simple Adaptive Spectrum Graph Filter for Rumor Detection**

Yu Nanjun (East China Normal University); Qiang Cao (School of Computer Science and Technology, East China Normal University); Zheng Dong (Bytedance)

**MLSP-P11-8: MVCBRec: Multi-View Contrastive Learning for Bundle Recommendation**

Mengmeng Li (Academy of Military Sciences); Jinlong Tian (National University of Defense Technology); Yongqiang Zhao (Peking University); Hongmei Li (Academy of Military Sciences); Xudong Fang (Academy of Military Sciences)

**MLSP-P11-9: Heterogeneous Graph Dual-structure Optimization Based Attribute-aware for Recommendation**

Longtao Wang (Shandong University of Science and Technology); Qingtian Zeng (Shandong University of Science and Technology); Guiyuan Yuan (Shandong University of Science and Technology); Hua Duan (Shandong University of Science and Technology); Cheng Cheng (Shandong University of Science and Technology); Zilong Wang (Shandong University of Science and Technology)

**MLSP-P11-10: Unlocking Financial Statement Fraud Detection: Tracking Disclosure Changes via Representation Learning**

Yue Yu (Institute of Information Engineering, Chinese Academy of Sciences); Zhen Wu (Institute of Information Engineering, Chinese Academy of Sciences); Yanni Han (Institute of Information Engineering, Chinese Academy of Sciences); Zhuoqun Li (Institute of Information Engineering, Chinese Academy of Sciences); Wenqi Wei (Fordham University)

**MLSP-P11-11: Enhancing Fairness in Gaussian Mixture Clustering through Impact Factor**

Zhijing Yang (Southwest University of Science and Technology); Chuan Qian (Southwest University of Science and Technology); Junjie Zheng (Southwest University Of Science and Technology); Yiding Tang (Southwest University Of Science and Technology); Boyang Yan (Southwest University of Science and Technology); Hui Zhang (Southwest University of Science and Technology)

**MLSP-P11-12: Extract Information from Hybrid Long Documents Leveraging LLMs: A Framework and Dataset**

Chongjian Yue (PKU); Xinrun Xu (UCAS); Xiaojun Ma (Microsoft); Lun Du (Ant Research); Zhiming Ding (ISCAS); Shi Han (Microsoft Research); Dongmei Zhang (Microsoft Research Asia); Qi Zhang (Microsoft)

**MLSP-P11-13: ROME: Radar Sparsity Improvement and Omnimodal Enhancement for 3D Object Detection in Bird's Eye Views**

Yilong Guo (Wuhan University of Technology); Junyin Wang (wuhan university of technology); Chenghu Du (Wuhan university of technology); Shengwu Xiong (Wuhan University of Technology); Yaxiong Chen (Wuhan University of Technology)

**MLSP-P11-14: DynamicAttention: Dynamic KV Cache for Disaggregate LLM Inference**

Ding Zhiqiang (antgroup); Tongkai Yang (AntGroup)

**MLSP-P11-15: ACRL-10K: A Dataset for Air Conditioner Refrigerant Leak Smoke Detection**

Yuhan Jiang (Wuhan University); Zhongyuan Wang (Wuhan University); Jie Hua (Wuhan University); Jinbi Liang (Wuhan University); Zengmin Xu (Guilin University of Electronic Technology)

**MLSP-P11-16: KAnoCLIP: Zero-Shot Anomaly Detection through Knowledge-Driven Prompt Learning and Enhanced Cross-Modal Integration**

Chengyuan Li (Southeast University); Suyang Zhou (Southeast University); Jieping Kong (Southeast University); Lei Qi (Southeast University); Hui Xue (Southeast University)

**MLSP-P11-17: MMTP: Meta-learning-based Multi-Textual Prompt Tuning for Visual-Language Models**

Fangtong Sun (Academy of Military Science); Junjie Zhu (Academy of Military Sciences); Zunlin Fan (National Innovation Institute of Defense Technology, China); Yiyang Li (Artificial Intelligence Research Center, DII); Zhiyuan Wang (AIRC); Ke Yang (NIIDT)

**MLSP-P11-18: Uncertainty-Aware Dynamic Fusion for Multimodal Clinical Prediction Tasks**

Jiayu Guo (Fudan University); Ying Cheng (Fudan University); Wen He (Fudan University); Yuejie Zhang (Fudan University); Rui Feng (Fudan University); Xiaobo Zhang (Children's Hospital, Fudan University)

**MLSP-P11-19: KMG-LL: Knowledge-enhanced Multimodal Graph for Dialogue Generation**

Yuezhou Dong (University of Electronic Science and Technology of China); Tao He (Monash University); Qian Dong (University of Electronic Science and Technology of China); Ke Qin (University of Electronic Science and Technology of China)

**MLSP-P12: Other Machine Learning Applications and Clustering****Room: Rm. 206****Type: Poster****May 25th 13:00-14:30****MLSP-P12-1: Incorporate Global Information from Entire Datasets for Knowledge Tracing via Mini-Batch Input**

Hui Zhao (Wangxuan Institute of Computer Technology, Peking University); Tingyu Fu (Harbin University of Commerce)

**MLSP-P12-2: ETDE-Net: An End-to-End Time-Domain Enhancement Network for LPI Radar Signals**

Chen Cheng (University of Electronic Science and Technology of China); Zhi Sun (University of Electronic Science and Technology of China); Haonan Zhang (University of Electronic Science and Technology of China); Zihao Xiao (University of Electronic Science and Technology of China); Guolong Cui (University of Electronic Science and Technology of China)

**MLSP-P12-3: GRACED: A Plug-and-Play Solution for Certifiable Graph Classification**

Xiaoyu Liang (beihang); Haohua Du (Beihang); He Lu (Beihang); Fei Shang (University of Science and Technology of China)

**MLSP-P12-4: Spatiotemporal Causal Decoupling Model for Air Quality Forecasting**

Jiaming Ma (University of Science and Technology of China); Guanjin Wang (University of Science and Technology of China); Sheng Huang (University of Science and Technology of China); Kuo Yang (University of Science and Technology of China); Binwu Wang (University of Science and Technology of China); Pengkun Wang (University of Science and Technology of China); Yang Wang (University of Science and Technology of China)

**MLSP-P12-5: InfoHarmonizer Graph Contrastive Clustering**

Zhongyang Zhou (Chongqing Normal University); Haomin Wu (Chongqing Normal University); Zihao Feng (chongqing normal university); Feiyu Chen (Chongqing Normal University); Bin Tang (Chongqing Normal University)

**MLSP-P12-6: DrLLM: Prompt-Enhanced Distributed Denial-of-Service Resistance Method with Large Language Models**

Zhenyu Yin (Shenyang Institute of Computing Technology Co.,Ltd. Chinese Academy of Sciences); Shang Liu (UCAS); Guangyuan Xu (UCAS)

**MLSP-P12-7: PatchST: A Patch Spatial-Temporal Network for Large-Scale Traffic Forecasting**

Jinrun Li (Beijing University of Posts and Telecommunications); Gaowei Zhang (Beijing University of Posts and Telecommunications); Wei Wang (Beijing University of Posts and Telecommunications); Yi Wang (Beijing University of Posts and Telecommunications)

**MLSP-P12-8: Weighted Density for The Win: Accurate Subspace Density Clustering**

Maixuan Peng (Guangdong University of Technology); Yuyang Wu (Wilfrid Laurier University); Yang Lu (Xiamen University); Mengke Li (Guangdong Laboratory of Artificial Intelligence and Digital Economy (SZ)); Yiqun Zhang (Guangdong University of Technology); Yiu-Ming Cheung (Hong Kong Baptist University)

**MLSP-P12-9: Robust Qualitative Data Clustering via Learnable Multi-Metric Space Fusion**

Sen Feng (Guangdong University of Technology); Mingjie Zhao (Guangdong University of Technology); Zhanpei Huang (Guangdong University of Technology); Yuzhu Ji (Guangdong University of Technology); Yiqun Zhang (Guangdong University of Technology); Yiu-Ming Cheung (Hong Kong Baptist University)

**MLSP-P12-10: Sociologically-Informed Graph Neural Network for Opinion Prediction**

Fan Yang (Institute of Automation, CAS); Jie Bai (Institute of Automation, CAS); Linjing Li (Institute of Automation, Chinese Academy of Sciences); Daniel Zeng (Institute of Automation, Chinese Academy of Sciences; University of Arizona)



### **MLSP-P12-11: Label Relationship Graph-Enhanced Class Hierarchy for Incremental Classification of Remote Sensing Images**

Yang Chu (Zhejiang University); Yuntao Qian (Zhejiang University)

### **SAM-P2: Signal and Image Processing for Remote Sensing and Imaging Modalities**

**Room: Rm. 206**

**Type: Poster**

**May 25th 13:00-14:30**

### **SAM-P2-1: A Novel Underwater Acoustic Signal Denoising Model Based on Complex Convolution Dual-branch Multi-scale Attention Network**

Jianxun Tang (Guilin University of Electronic Technology); Zhe Chen (Guilin University of Electronic Technology); Mingsong Chen (Guilin University of Electronic Technology)

### **SAM-P2-2: A PARAMETRIC NON-NEGATIVE COUPLED CANONICAL POLYADIC DECOMPOSITION ALGORITHM FOR HYPERSPECTRAL SUPER-RESOLUTION**

Xiyuan Liu (Dalian University of Technology); Xiaofeng Gong (Dalian University of Technology); Lei Wang (Dalian University of Technology); Wei Feng (Dalian University of Technology); Qiuhua Lin (Dalian University of Technology)

### **SAM-P2-3: Band Prompting Aided SAR and Multi-Spectral Data Fusion Framework for Local Climate Zone Classification**

Haiyan Lan (Harbin Engineering University); Shujun Li (Harbin Engineering University); Mingjie Xie (Beihang University); Xuanjia Zhao (Harbin Engineering University); Hongning Liu (DLUT); Pengming Feng (CASC); Dongli Xu (University of Sydney); Guangjun He (CASC); Jian Guan (Harbin Engineering University)

### **SAM-P2-4: Divide-and-Conquer Variational Bayesian Inference for Multi-task Learning of High-resolution SAR Imagery**

Lei Yang (Civil Aviation University of China); Ming Sun (Civil Aviation University of China); Zhongwei Hu (Civil Aviation University of China); Zenan Zhang (Civil Aviation University of China); Wenxuan Yuan (Civil Aviation University of China)

### **SAM-P2-5: Multi-scale Feature Interaction and Adaptive Experts for Panoptic Segmentation in Remote Sensing Images**

Zhenkun Sun (Nanjing University of Science and Technology); Jia Liu (Nanjing University of Science and Technology); Wenhua Zhang (Nanjing University of Science and Technology); Fang Liu (Nanjing University of Science and Technology); Jingxiang Yang (Nanjing University of Science and Technology); Liang Xiao (Nanjing University of Science and Technology)

### **SAM-P2-6: Self-supervised Hyperspectral and Multispectral Fusion via Deep Low-Rank Prior and Learnable Degradation Networks**

Na Liu (BUPT); Lianming Xu (BUPT); Suxian Fu (BUPT); Li Wang (BUPT)

### **SAM-P2-7: Joint Semantic Segmentation of Optical and SAR Image in Hazy Environments via Cross-modal Information Rectification and Cross-attention Fusion**

Xinyue Fan (Beijing Normal University); Libao Zhang (Beijing Normal University)

### **SAM-P2-8: Distributed-Robust Source Localization in Wireless Acoustic Sensor Networks**

Xu Wang (Inner Mongolia University); De Hu (Inner Mongolia University); Quintuya Si (Inner Mongolia University)

**SAM-P2-9: Adapting Single-Channel Pre-trained Transformer Models for Multi-Channel Sound Event Localization and Detection**

Changjiang He (Harbin institute of Technology); Siyao Cheng (Harbin institute of Technology); Jiahua Bao (Harbin Institute of Technology); Jie Liu (Harbin Institute of Technology)

**SAM-P2-10: Diversity Matters: Co-training for Semi-Supervised Change Detection in Remote Sensing Images**

Mao Zan (ucas); Xin Li (Peng Cheng Laboratory); Ze Luo (Computer Network Information Center, Chinese Academy of Sciences); Yingchao Piao (Computer Network Information Center)

**SAM-P2-11: Comprehensive Perturbation Consistency for Semi-Supervised Change Detection in Remote Sensing Images**

Mao Zan (ucas); Xin Li (Peng Cheng Laboratory); Ze Luo (Computer Network Information Center, Chinese Academy of Sciences); Yingjuan Tang (Beijing Insitute of Technology); Dongmei Jiang (Pengcheng Lab)

**SAM-P2-12: Steerable Differential Polynomial Beamforming**

Feng Jiang (Nanjing University of Aeronautics and Astronautics); Huawei Chen (Nanjing University of Aeronautics and Astronautics)

**SPTM-P: Advanced Signal Processing: Theory, Graphs, and Optimization**

**Room: Rm. 206**

**Type: Poster**

**May 25th 13:00-14:30**

**SPTM-P-1: Enhancing DETR Efficiency with Inter-Object Relationship and Semantic Spectral Decomposition-Based Distillation**

Ziyu Huang (National University of Singapore)

**SPTM-P-2: DeepPreNet: A Deep Learning Pre-Processing Method for speech Distortion Correction in Parametric Array Loudspeaker**

Wenyao Ma (Institute of Acoustics, Chinese Academy of Sciences); Zhu Yunxi (Institute of Acoustics, Chinese Academy of Sciences); Fengyuan Hao (Key Laboratory of Noise and Vibration Research, Institute of Acoustics, Chinese Academy of Sciences; University of Chinese Academy of Sciences); Liwen Qin (institute of acoustics of the Chinese academy of sciences); Fengyi Fan (University of Chinese Academy of Sciences); Jun Yang (Institute of Acoustics, Chinese Academy of Sciences)

**SPTM-P-3: Generalization Guarantee of Decentralized Learning with Heterogeneous Data**

Haoxiang Ye (Sun Yat-Sen University); Tao Sun (National University of Defense Technology); Qing Ling (Sun Yat-Sen University)

**SPTM-P-4: Beyond Jensen's Inequality: Speeding Up ML Estimation of Generalized Hyperbolic Distributions**

Chenyu Gao (ShanghaiTech University); Ziping Zhao (ShanghaiTech University)

**SPTM-P-5: Network Games Induced Prior for Graph Topology Learning**

Chenyue Zhang (The Chinese University of Hong Kong); Shangyuan Liu (The Chinese University of Hong Kong); Hoi-To Wai (Chinese University of Hong Kong); Anthony Man-Cho So (The Chinese University of Hong Kong)

**SPTM-P-6: Graph Learning with Low-rank and Diagonal Structures: A Riemannian Geometric Approach**

Xiang Zhang (Southeast University); Qiao Wang (School of Information Science and Engineering, Southeast University)

### **SPTM-P-7: MSE-BASED SAMPLING OF BANDLIMITED PRODUCT GRAPH SIGNALS VIA JOINT LOW-PASS IMPULSE RESPONSES**

Fen Wang (Xidian University); Baoyi Xu (Xidian University); Xuyao Kang (Xidian University); Peng Ren (Xidian University); Long Yang (Xidian University)

### **SPTM-P-8: Sparse PCA with Oracle Rate in High Dimensions**

Wenfu Zhong (Shanghaitech University); Ziping Zhao (ShanghaiTech University)

### **SPTM-P-9: High-Efficiency Modulation Classification with Temporal-frequency Analysis Based on Multi-Channel Filter Bank**

Yifan Dai (Xidian University); Xin Gao (No.8511 Research Institute of CASIC); Ke Jing (National Time Service Center); Bin Tian (Xidian University)

### **SPTM-P-10: Basis Function Learning for Variable-Length and Continuous-Indexed Signals**

Siyuan Li (Zhejiang University); Lei Cheng (Zhejiang University); Feng Yin (The Chinese University of Hong Kong, Shenzhen); Jianlong Li (Zhejiang University); Peter Gerstoft (UCSD)

### **SPTM-P-11: Local Adaptive Time-Frequency Bidirectional Synchrosqueezing Transform**

Cuiwentong Xu (Xi'an Jiaotong University); Yuhe Liao (Xi'an Jiaotong University)

### **SPTM-P-12: Can Fairness and Robustness Be Simultaneously Achieved Under Byzantine Attacks?**

Huigan Zheng (Sun Yat-sen University); Runhua Wang (Sun Yat-sen University); Xiao Wang (Peng Cheng Laboratory); Qing Ling (Sun Yat-Sen University)

### **SPTM-P-13: Under-Counted Matrix Completion Without Detection Features**

Tri Nguyen (Oregon State University); Shahana Ibrahim (University of Central Florida); Rebecca Hutchinson (Oregon State University); Xiao Fu (Oregon State University)

### **CI-P: Computational Imaging: Methods, Enhancement, and Physics-Based Approaches**

**Room: Rm. 206**

**Type: Poster**

**May 25th 13:00-14:30**

### **CI-P-1: Optimizing Multimodal Image Fusion: A Novel Approach with Nystrom Attention Mechanisms in Transformer Models**

Yubin Zeng (Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences); Ze Wen (Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences); Shuqian Fan (Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences)

### **CI-P-2: A Novel Split Deep Unfolding Transformer for Pan-Sharpness**

Jiannan Chen (Tsinghua Shenzhen International Graduate School); Zhizhuo Jiang (Tsinghua Shenzhen International Graduate School); Xueqian Wang (Tsinghua University); Yaowen Li (Tsinghua Shenzhen International Graduate School); Huajie Wang (Tsinghua Shenzhen International Graduate School); Yu Liu (Tsinghua University)

### **CI-P-3: GCAT: Gated Convolutional Attention Transformer for Efficient Image Super-Resolution**

Zhijian Wu (East China Normal University); Feng Kaiyi (North China Electric Power University); Dingjiang Huang (School of Data Science and Engineering, East China Normal University)

**CI-P-4: EvaSR: Rethinking Efficient Visual Attention Design for Image Super-Resolution**

Zhijian Wu (East China Normal University); Zhang Chenhan (Trenton Collegiate Institute); Dingjiang Huang (School of Data Science and Engineering, East China Normal University)

**CI-P-5: Mask-guided Multi-scale Spatial-Spectral Transformer for Snapshot Compressive Imaging**

Heyuan Yin (Nanjing University of Science and Technology); Jingxiang Yang (Nanjing University of Science and Technology); Jia Liu (Nanjing University of Science and Technology); Liang Xiao (Nanjing University of Science and Technology)

**CI-P-6: Spectral Low-Rank Attention with Flow-Based Refinement for Spectral Reconstruction**

Yiwen Wang (Southwestern University of Finance and Economics); Zixin Tang (Southwestern University of Finance and Economics); Yexun Hu (School of Computing and Artificial Intelligence, Southwestern University of Finance and Economics); Guisong Liu (Southwestern University of Finance and Economics); Tai-Xiang Jiang (School of Computing and Artificial Intelligence, Southwestern University of Finance and Economics)

**CI-P-7: Passive Non-Line-of-Sight Imaging with Parallel Encoder**

Xiaolong Du (USTC); Ruixu Geng (University of Science and Technology of China); Jiarui Zhang (University of Science and Technology of China); Yan Chen (University of Science and Technology of China); Yang Hu (University of Science and Technology of China)

**CI-P-8: Learning Rank Constrained Exposure Correction from Unpaired Data**

Zhuoyue Gong (Sun Yat-sen University); Qing Zhang (Sun Yat-sen University)

**CI-P-9: BlurPaint: Image Inpainting using Blurring Diffusion Models**

Linux Chen (Xinjiang University); Zhiqing Guo (Xinjiang University); Liejun Wang (Xinjiang University); Ke Lu (University of Chinese Academy of Sciences)

**Panel Discussion: How to write technical papers and making presentations**

**Room:** Rm. 107

**Type:** SPS Activity

**May 25th 14:15-15:15**

**Presenter:** Prof. Haizhou Li, Prof. Jane Z. Wang and Prof. Min Wu

**Abstract:** In this session, leading experts and seasoned professionals will share guidelines and insights on writing high-quality technical papers and delivering effective presentations. Participants will gain a deeper understanding of the structure, style, and clarity required for impactful academic writing, as well as practical tips on how to design and deliver engaging, professional presentations.

**Panel Discussion: The Path to IEEE Senior Member and Fellow Recognition**

**Room:** Rm. 107

**Type:** SPS Activity

**May 25th 15:30-16:30**

**Presenter:** Prof. Haizhou Li, Prof. Jane Z. Wang and Prof. Min Wu

**Abstract:** In this session, leading experts and seasoned professionals will share guidelines and personal experiences about the journey to achieving IEEE Senior Member status and the prestigious elevation to IEEE Fellow. It aims to demystify the process and inspire participants to actively pursue these significant career milestones.

**Biography:** Prof. Haizhou Li received the B.Sc, M.Sc, and Ph.D degrees in electrical and electronic engineering from South China University of Technology, Guangzhou, China in 1984, 1987, and 1990 respectively. He is now a Presidential Chair Professor

and Associate Dean (Research) at the School of Data Science, The Chinese University of Hong Kong (Shenzhen). Dr. Li is also with the Department of Electrical and Computer Engineering, National University of Singapore (NUS), Singapore.

Dr. Li has worked on speech and language technology in academia and industry since 1988. He has taught in The University of Hong Kong (1988-1989), South China University of Technology in Guangzhou, China (1990-1994), Nanyang Technological University in Singapore (2006-2016), University of Eastern Finland (2009), and University of New South Wales (since 2011). He was a Visiting Professor at CRIN/INRIA in France (1994-1995). Prior to joining CUHKSZ and NUS, he was a Research Manager in Apple-ISS Research Centre (1996-1998), Research Director of Lernout & Hauspie Asia Pacific (1999-2001), Vice President of InfoTalk Corp. Ltd and General Manager of InfoTalk Technology (Singapore) Pte Ltd (2001-2003), the Principal Scientist and Department Head of Human Language Technology at the Institute for Infocomm Research (2003-2016), and the Research Director of the Institute for Infocomm Research (2014-2016), the Agency for Science, Technology and Research, Singapore. He co-founded Baidu-I2R Research Centre in Singapore (2012). Dr. Li was known for his technical contributions to several award-winning speech products, such as Apple's Chinese Dictation Kits for Macintosh (1996) and Lernout & Hauspie's Speech-Pen-KeyBoard Text Entry Solution for Asian languages (1999). He was the architect of a series of major technology deployments that include TELEFIQS voice-automated call centre service in Singapore Changi International Airport (2001), voiceprint engine for Lenovo A586 Smartphone (2012), and Baidu Music Search (2013).

Dr. Li's research interests include automatic speech recognition, natural language processing and information retrieval. He has served as the Editor-in-Chief of IEEE/ACM TRANSACTIONS ON AUDIO, SPEECH AND LANGUAGE PROCESSING (2015-2018), Associate Editor (2008-2012) and Senior Area Editor (2014-2016) of IEEE/ACM TRANSACTIONS ON AUDIO, SPEECH AND LANGUAGE PROCESSING, Associate Editor (2012-2013) of ACM TRANSACTIONS ON SPEECH AND LANGUAGE PROCESSING, Computer Speech and Language (2012-2017), Springer International Journal of Social Robotics (2008-2016), and a Member of IEEE Speech and Language Processing Technical Committee (2013-2015), Awards Board (2021-2023), and Publications Board (2015-2018) of IEEE Signal Processing Society. He was the President of the International Speech Communication Association (ISCA, 2015-2017), the President of Asia Pacific Signal and Information Processing Association (APSIPA, 2015-2016), the President of the Chinese and Oriental Language Information Processing Society (COLIPS, 2015-2017), the President of the Asian Federation of Natural Language Processing (AFNLP, 2017-2018). He was the General Chair of ACL 2012, INTERSPEECH 2014, IWSDS 2019, ASRU 2019, the Local Arrangement Chair of SIGIR 2008 and ACL-IJCNLP 2009, and the Technical Program Chair of ISCSLP 1998, APSIPA Annual Summit and Conference 2010, IEEE Spoken Language Technology Workshop 2014, and IEEE ChinaSIP 2015. He has been appointed the General Chair of 2022 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2022) in Singapore.

Dr. Li was the recipient of National Infocomm Awards 2002, Institution of Engineers Singapore (IES) Prestigious Engineering Achievement Award 2013 and 2015, President's Technology Award 2013, and MTI Innovation Activist Gold Award 2015 in Singapore. He was named one of the two Nokia Visiting Professors in 2009 by Nokia Foundation, IEEE Fellow in 2014 for leadership in multilingual, speaker and language recognition, ISCA Fellow in 2018 for contributions to multilingual speech information processing, and Bremen Excellence Chair Professor in 2019. Dr. Li is a member of ACL, ACM, and APSIPA.

**Biography:** Dr. Min Wu received a B.E. degree in electrical engineering and a B.A. degree in economics from Tsinghua University, Beijing, China, in 1996 (both with the highest honors), and an M.S. degree and Ph.D. degree in electrical engineering from Princeton University in 1998 and 2001, respectively. She was with NEC Research Institute and Signafy, Inc. Princeton, NJ, in 1998, and with the Media Security Group, Panasonic Information & Networking Laboratories, Princeton, NJ, in 1999. Since Fall 2001, she has been a faculty member of the Electrical and Computer Engineering Department and the Institute of Advanced Computer Studies (UMIACS) at the University of Maryland, College Park. She is serving as Associate Dean for Graduate Affairs at the A. James Clark School of Engineering and affiliated with the Institute of Systems Research (ISR).

At UMD, Dr. Wu leads the Media, Analytics, and Security Team (MAST), with main research interests in information security and forensics, multimedia signal processing, and applications of data science and machine learning for health and IoT. She was elected as IEEE Fellow, AAAS Fellow, and Fellow of the National Academy of Inventors. She was a founding member of APSIPA

and elected to serve on its Board of Governors. She chaired the IEEE Technical Committee on Information Forensics and Security, and served as Editor-in-Chief of the IEEE Signal Processing Magazine. She was elected to serve as President of the IEEE Signal Processing Society for 2024-2025, as the first woman of color to take on this leadership role in the technical society's 75-year history.

**Biography:** Prof. Jane Z. Wang has been a Professor in the Department of Electrical and Computer Engineering at UBC since 2004. Dr. Wang received her BSc from Tsinghua University, China, in 1996, with the highest honour, and her MSc and PhD from the University of Connecticut in 2000 and 2002 (under the supervision of Dr. Peter Willett), respectively, all in electrical engineering. While at the University of Connecticut, Dr. Wang received the Outstanding Engineering Doctoral Student Award. She has been a Research Associate of The Electrical and Computer Engineering Department and at The Institute for Systems Research at the University of Maryland, College Park, working with Dr. K. J. Ray Liu's group.

She is an IEEE Fellow, a Fellow of the Canadian Academy of Engineering (FCAE) and a member of the College of New Scholars, Artists and Scientists of the Royal Society of Canada. Her research interests are in the broad areas of signal/image processing and machine learning, with current focuses on digital media and biomedical data analytics. She has published 180+ journal papers and 120+ peer-reviewed conference papers. She has been key Organizing Committee Member for numerous IEEE conferences and workshops (e.g., the co-Technical Chair for ChinaSIP2014, GlobalSIP2017 and ICIP2021, and the co-General Chair of MMSP2018 and DSLW2021). She has been Associate Editor for the IEEE TSP, SPL, TMM, TIFS, TBME, and SPM, and Area Editor of SPM and Editor-in-Chief of IEEE SPL.

#### **SPTM-O: Matrix Factorization and Distributed Signal Processing for Multi-Agent Systems**

**Room: Rm. 103**

**Type: Oral**

**May 25th 15:00-16:30**

#### **SPTM-O-1: A Geometry-Based Node Activation Method for Relative Localization**

Licheng Wang (Department of Electronic Engineering, Tsinghua University); Yi Li (Department of Electronic Engineering, Tsinghua University); Hanying Zhao (Department of Electronic Engineering, Tsinghua University); Yuan Shen (Tsinghua University)

#### **SPTM-O-2: A Block Term Decomposition Model Based Algorithm for Tensor Completion of Multidimensional Harmonic Signals**

Lei Wang (Dalian University of Technology); Xiao-Feng Gong (Dalian University of Technology); Xiyuan Liu (Dalian University of Technology); Wei Feng (Dalian University of Technology); Qihua Lin (Dalian University of Technology)

#### **SPTM-O-3: CR-CLIP: Image-Text Contrast Regression for Generalized Gaze Estimation**

Yitong Zhu (Institute of Software, Chinese Academy of Sciences); Xurong Xie (Institute of Software, Chinese Academy of Sciences); Naiming Yao (Institute of Software, Chinese Academy of Sciences); Hui Chen (Institute of Software, Chinese Academy of Sciences); Feng Tian (Institute of Software, Chinese Academy of Sciences)

#### **IFS-O2: Adversarial Robustness and Watermarking**

**Room: Rm. 104**

**Type: Oral**

**May 25th 15:00-16:30**

### **IFS-O2-1: Agentic Copyright Watermarking against Adversarial Evidence Forgery with Purification-Agnostic Curriculum Proxy Learning**

Erjin Bao (National Institute of Informatics); Ching-Chun Chang (National Institute of Informatics); Hanrui Wang (National Institute of Informatics); Isao Echizen (National Institute of Informatics)

### **IFS-O2-2: Membership Encoding for Black-Box Neural Network Watermarking**

Hangwei Zhang (Shanghai Jiao Tong University); Fangqi Li (SEIEE, Shanghai Jiao Tong University); Shilin Wang (SEIEE, Shanghai Jiaotong University)

### **IVMSP-O4: Image and Video Processing and Quality**

**Room: Rm. 105**

**Type: Oral**

**May 25th 15:00-16:30**

### **IVMSP-O4-1: Integrating Adaptive Sampling for Optimal Learned Video Cmpression**

Wuyang Cong (Nanjing University); Yuzhuo Kong (Nanjing University); Ming Lu (Nanjing University); Lizhong Wang (Samsung); Weijing Shi (Samsung); Zhan Ma (Nanjing University)

### **IVMSP-O4-2: Boosting Text-To-Image Generation via Multilingual Prompting in Large Multimodal Models**

Yongyu Mu (Northeastern University); Hengyu Li (Northeastern University); Junxin Wang (Dalian Jiaotong University); Xiaoxuan Zhou (Northeastern University); Chenglong Wang (Northeastern University); Yingfeng Luo (Northeastern University); Qiaozhi He (Northeastern University); Tong Xiao (Northeastern University); Guocheng Chen (Northeastern University); Jingbo Zhu (Northeastern University, China)

### **IVMSP-O4-3: CLIPGaze: Zero-Shot Goal-Directed Scanpath Prediction Using CLIP**

Yantao Lai (Nanjing University of Aeronautics and Astronautics); Rong Quan (Nanjing University of Aeronautics and Astronautics); Dong Liang (Nanjing University of Aeronautics and Astronautics); Jie Qin (Nanjing University of Aeronautics and Astronautics)

### **IVMSP-O4-4: multilevel semantic-aware model for ai-generated video quality assessment**

Jiaze Li (zhejiang university); Haoran Xu (Zhejiang University); Shiding Zhu (Zhejiang University); Junwei He (University of Chinese Academy of Sciences); Haozhao Wang (Huazhong University of Science and Technology)

### **IVMSP-O4-5: MambaMOT: State-Space Model as Motion Predictor for Multi-Object Tracking**

Hsiang-Wei Huang (University of Washington); Cheng-Yen Yang (University of Washington); Wenhao Chai (University of Washington); Zhongyu Jiang (University of Washington); Jenq-Neng Hwang (University of Washington)

### **BISP-O2: Medical image analysis**

**Room: Rm. 108 & 109**

**Type: Oral**

**May 25th 15:00-16:30**

### **BISP-O2-1: Convolutional Prompting for Broad-Domain Retinal Vessel Segmentation**

Qijie Wei (Renmin University of China); Weihong Yu (Peking Union Medical College Hospital); Xirong Li (Renmin University of China)

### **BISP-O2-2: HFE-RWKV: High-Frequency Enhanced RWKV Model for Efficient Left Ventricle Segmentation in Pediatric Echocardiograms**

Zi Ye (Institute of Intelligent Software, Guangzhou); Tianxiang Chen (University of Science and Technology of China); Ziyang Wang (University of Oxford); Hanwei Zhang (Institute of Intelligent Software, Guangzhou); Lijun Zhang (Institute of Software, Chinese Academy of Sciences)

### **BISP-O2-3: An Exceptional Dataset For Rare Pancreatic Tumor Segmentation**

Wenqi Li (Fudan University); Yingli Chen (Fudan University Shanghai Cancer center); Keyang Zhou (Fudan University); Xiaoxiao Hu (School of Computer Science, Fudan University); Zilu Zheng (Fudan University); Yue Yan (University of Illinois at Urbana-Champaign); Xinpeng Zhang (School of Computer Science, Fudan University); Wei Tang (Fudan University Shanghai Cancer Center); Zhenxing Qian (School of Computer Science, Fudan University)

### **BISP-O2-4: Revolutionizing Disease Diagnosis with Simultaneous functional PET/MR and Deeply Integrated Brain Metabolic, Hemodynamic and Perfusion Networks**

Luoyu Wang (ShanghaiTech University); Yitian Tao (ShanghaiTech University); Qing Yang (ShanghaiTech University); Yan Liang (ShanghaiTech University); Siwei Liu (Zhongshan Hospital); Hongcheng Shi (Zhongshan Hospital); Dinggang Shen (ShanghaiTech University); Han Zhang (ShanghaiTech University)

### **BISP-O2-5: LABEL-SAM: A Semi-Automatic Interactive Annotation Model for Aortic Dissection Segmentation in 3D CTA Image**

Wenjie Cai (University of Science and Technology of China); Tao Tang (Southwest University of Science and Technology); Balachander J (Hindusthan College of Engineering and Technology); Lingming Kong (The First Affiliated Hospital of USTC, Division of Life Sciences and Medicine, University of Science and Technology of China); Ying Zhou (Mianyang Central Hospital); Qingfeng Wang (Southwest University of Science and Technology); Jing Li (University of Science and Technology of China)

### **BISP-O3: Applications and emerging methods in biomedical image and signal processing**

**Room: Rm. 205**

**Type: Oral**

**May 25th 15:00-16:30**

### **BISP-O3-1: Pathological Prior-Guided Multiple Instance Learning For Mitigating Catastrophic Forgetting in Breast Cancer Whole Slide Image Classification**

Weixi Zheng (School of Computer Science, Wuhan University); Aoling Huang (Department of Pathology, Renmin Hospital of Wuhan University); Jingping Yuan (Department of Pathology, Renmin Hospital of Wuhan University); Haoyu Zhao (Wuhan University); Zhou Zhao (School of Computer Science, Central China Normal University); Yongchao Xu (School of Computer Science, Wuhan University); Thierry G'eraud (EPITA Research Laboratory, Le Kremlin-Bicetre)

### **BISP-O3-2: FusionClassNet: A Multi-Scale Feature Fusion Network with Contrastive Loss-Driven Classification for Enhanced Lung Tumor Image Representations**

Hong Liu (South China Normal University); Chengchuang Lin (South China Normal University); Lewen Nie (South China Normal University); Peng Yonglin (South China Normal University); Zhang Qizhi (South China Normal University); Gansen Zhao (South China Normal University)

### **BISP-O3-3: CAT-Net: A Co-Adaptive Transfer Learning Network for BCI-Assisted Neurorehabilitation**

Shuailei Zhang (Nanyang Technological University); Yi Ding (Nanyang Technological University); Muyun Jiang (Nanyang Technological University); Ning Tang (National University Hospital); Effie Chew (National University Hospital); Kai Keng Ang (Institute for Infocomm Research); Cuntai Guan (Nanyang Technological University)



**MLSP-O4: Self-supervised Learning, transfer learning and meta-learning****Room: Rm. 207****Type: Oral****May 25th 15:00-16:30****MLSP-O4-1: Reinforced Domain Selection for Continuous Domain Adaptation**

Hanbing Liu (Tsinghua University); Huaze Tang (Tsinghua University); Yanru Wu (Tsinghua University); Yang Li (Tsinghua-Berkeley Shenzhen Institute, Tsinghua University); Xiao-Ping Zhang (Tsinghua University)

**MLSP-O4-2: Point-UMAE: Unet-like Masked Autoencoders for Point Cloud Self-supervised Learning**

Hongliang Zeng (South China University of Technology); Zhang Ping (South China University of Technology); Fang Li (South China University of Technology); Tingyu Ye (South China University of Technology); Jiahua Wang (South China University of Technology); Xianbo Yang (South China University of Technology)

**MLSP-O4-3: Pruning for Sparse Diffusion Models based on Gradient Flow**

Ben Wan (Shanghai Jiao Tong University); Tianyi Zheng (Shanghai Jiao Tong University); Zhaoyu Chen (Fudan University); Yuxiao Wang (Shanghai Jiao Tong University); Jia Wang (Shanghai Jiao Tong University)

**MLSP-O4-4: Universal Training of Neural Networks to Achieve Bayes Optimal Classification Accuracy**

Mohammadreza Tavasoli Naeini (University of Michigan); Ali Bereyhi (University of Toronto); Morteza Noshad Iranzad (University of Michigan); Ben Liang (University of Toronto); Alfred Hero (University of Michigan)

**MLSP-O4-5: So far yet so near: Time series data augmentation with exploring non-semantic boundaries based on reinforcement learning**

Haoran Li (Nankai University); Zhibo Zhang (Nankai University); Jiarong Kang (Nankai University); Xun Jiang (UESTC); Xiaoli Gong (Nankai University); Jin Zhang (Nankai University); Zhe Sun (Juntendo University); Andrzej Cichocki (Polish Academy of Science)

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