

## LIST OF ORAL PAPERS FOR ICPR-2024

December 02, 2024 (11:00 - 12:30 IST)

### Oral Session 1

Session Number	Category	Authors	Paper Title
1-A	Classification	Akhmedova, Shakhnaz; Körber, Nils	Next Generation Loss Function for Image Classification
		Xia, Yulong; Zhang, Jianwei	ORA-Trans: Object region attention transformer based on key tokens selector with structure feature modeling for fine-grained visual classification
		Srivastava, Adit ; Ramagiri, Aravind; Gupta, Puneet; Gupta , Vivek	SANGAM: Synergizing Local and Global Analysis for simultaneous WBC Classification and Segmentation
		Cao, Zongjing; Li, Yan; Shin, Byeong-Seok	Attention-Guided Energy-based Model for Out-of-Distribution Data Detection
1-B	Representation Learning	Yang, Chuhong; Li, Bin; Wu, Nan	DSparsE: Dynamic Sparse Embedding for Knowledge Graph Completion
		Chen, Shangyu; Yang, Xiaohao; Fang, Pengfei; Harandi, Mehrtash; Phung, Dinh Q; Cai, Jianfei	Stereographic Projection for Embedding Hierarchical Structures in Hyperbolic Space
		Cheng, Zhen; Zhu, Fei; Zhang, Xu-Yao; Liu, Cheng-Lin	Delving into Feature Space: Improving Adversarial Robustness by Feature Spectral Regularization
		Huang, Zhixin; He, Yujiang; Nivarthi, Chandana Priya; Sick, Bernhard; Gruhl, Christian	Time-Series Representation Learning via Heterogeneous Spatial-Temporal Contrasting for Remaining Useful Life Prediction
1-C	Human behavior from images and videos	Kim, Hye-Geun; Na, You-Kyoung; Joe, Hae-Won; Moon, Yong-Hyuk; Cho, Yeong-Jun	Re-identification Based on the Spatial-temporal Fusion Network
		Hasan, Kazi Reyazul; Adnan, Muhammad Abdullah	EMPATH: MediaPipe-aided Ensemble Learning with Attention-based Transformers for Accurate Recognition of Bangla Word-Level Sign Language
		Lee, Ming-Han; Zhang, Yu Chen; WU, KUN-RU; Tseng, Yu-Chee	GolfPose: From Regular Posture to Golf Swing Posture
		Xu, Jingwen; Wei, Xiaoge; Yuen, PongChi	Multi-Scale Value-Density Transformer with Medical Semantic Guidance for Disease Risk Prediction based on Clinical Time Series
1-D	Text detection and recognition	Muth, Markus; Sablatnig, Robert; Peer, Marco; Kleber, Florian	Advancing Handwritten Text Detection by Synthetic Text
		Mathew, Minesh; Mondal, Ajoy; Jawahar, C.V.	Towards Deployable OCR Models for Indic Languages
		Xu, Shuo; Zhuang, Zeming; Li, Mingjun; Su, Feng	Arbitrary-Shaped Scene Text Recognition with Deformable Ensemble Attention
		Han, Zhiwang; Yadikar, Nurbiya; Xuebin, Xu; Aysa, Alimjan ; Ubul, Kurban	Oracle Character Recognition Based on Attention Enhancement and Multi-scale Feature Fusion

December 02, 2024 (16:30 - 18:30 IST)

### Oral Session 2

Session Number	Category	Authors	Paper Title
2-A	Classification and adaptation	Vavilthota, Venkata R; Ramanathan, Ranjith; Aakur, Sathyanarayanan N	Capturing Temporal Components for Time Series Classification
		Gupta, Ravi Kant; Das, Shounak ; Sethi, Amit	IDAL: Improved Domain Adaptive Learning for Natural Images Dataset
		Gupta, Ravi Kant; P, Chirag; Wagle, Mukta G; Jeevan P, Pranav ; Sethi, Amit	CHATTY: Coupled Holistic Adversarial Transport Terms with Yield for Unsupervised Domain Adaptation
		Makhija, Shradha; Mandal, Srimanta; Pandya, Utkarsh; Chirakkal, Sanid; Putrevu, Deepak	PolSAR Image Classification Using Complex-Valued Squeeze and Excitation Network
		Mahmud, Hasanul I; Desai, Kevin; Lama, Palden; Prasad, Sushil	EncodeNet: A Framework for Boosting DNN Accuracy with Entropy-driven Generalized Converting Autoencoder
2-B	Neural networks and deep learning - I	Jiu, Mingyuan; zhu, hailong; Sahbi, Hichem	Deep Multi-order Context-aware Kernel Network for Multi-label Classification
		chen, qiyun; diao, boyu; Yang, Yu; xu, yongjun	SCP: A Structure Combination Pruning method via Structured Sparse for Deep Convolutional Neural Networks
		jarraya, zakaria; Rousseau, Francois; Benaichouche, Simon; Drumetz, Lucas; Ben Salem, Douraied	On divergence-free neural ODE for classification
		Becker, Marlon; Butz, Marco; Lemli, David; Schuck, Carsten; Risse, Benjamin	Learning Proposal Distributions in Simulated Annealing via Template Networks: A Case Study in Nanophotonic Inverse Design
		Bennabhaktula, Guru Swaroop; Alegre, Enrique; Strisciuglio, Nicola; Azzopardi, George	PushPull-Net: Inhibition-driven ResNet robust to image corruptions
2-C	Motion and video analysis	Zhou, Xuan; Kundu, Souvik; Chen, Dake; Huang, Jie; A. Beerel, Peter	What makes vision transformers robust towards bit-flip attack?
		Liu, Yunfeng; Jung, Cheolkon	DWT-SALF: Subband Adaptive Neural Network Based In-Loop Filter for VVC Using Cyclic DWT
		Benaglia, Riccardo; Porrello, Angelo; Buzzega, Pietro; CALDERARA, SIMONE; Cucchiara, Rita	Trajectory Forecasting through Low-Rank Adaptation of Discrete Latent Codes
		Hannan, Tanveer; Koner, Rajat; Bernhard, Maximilian; Shit, Suprosanna; Menze, Bjoern; Tresp, Volker; Schubert, Matthias; Seidl, Thomas	GRAtt-VIS: Gated Residual Attention for Video Instance Segmentation
		Liao, Bor-Chen; Wu, Jie-Syuan; Hsu, Gee-Sern; Kang, Jiunn-Horng ; Tang, Chen-Lung	3D Pose-based Evaluation of the Risk of Sarcopenia
Zang, Han; Xu, Tianyang; Zhu, Xue-Feng; Song, Xiaoning; Wu, Xiao-Jun; Kittler, Josef	Attention-based Patch Matching and Motion-driven Point Association for Accurate Point Tracking		
Guo, Song; Liu, Rujie; Narishige, Abe	RTAT: A Robust Two-stage Association Tracker for Multi-Object Tracking		
Roy, Debadiya; Fernando, Basura	Predicting the Next Action by Modeling the Abstract Goal		

2-D	Image and video processing	Ko, Seonggwan; Cho, Donghyeon	CSSR: Cross-and Self-Feature Transformer with High-Frequency Feature Alignment for Reference-Based Super-Resolution
		Li, Bing; Yu, Wei; Zheng, Naishan; Huang, Jie; Zhao, Feng	Unsupervised Low-light Image Enhancement via Spectral Consistency
		Li, Tianyi; Tian, Ming; Gao, Changxin; Sang, Nong	Self-Distilled Dual-Network with Pixel Screening Loss for Blind Image Deblurring
		Mo, Fanbin; Huang, Yixiang; Wu, Ming; Zhu, Xun; Zhang, Chuang	MMSISP: A Satellite Image Sequence Prediction Network with Multi-Factor Decoupling and Multi-Modal Fusion
		He, Runlin; Zhou, Gang; Xue, Tianhao; Liu, Zhaoxi; Jia, Zhenhong	Deformable Multi-Scale Network for Snow Removal in Video
		Li, Mingjun; Zhuang, Zeming; Xu, Shuo; Su, Feng	MPGTSRN: Scene Text Image Super-Resolution Guided by Multiple Visual-Semantic Prompts

December 03, 2024 (10:00 - 11:00 IST)

Oral Session 3

Session Number	Category	Authors	Paper Title
3-A	Clustering	Cui, Jianbin; Chu, Lingyang	Interpretable Deep Graph-level Clustering: A Prototype-based Approach
		Bangde, Yashwant; Saini, Naveen	Multi-view Ensemble Clustering-based Podcast Recommendation in Indian Regional Setting
		Lin, Houshen; Hou, Jian; Yuan, Huaqiang	Adaptive Nearest Neighbor Density Peak Clustering Based On Fuzzy Logic
3-B	Online and continual learning	Kim, Minha; Bhaumik, Kishor Kumar; Ahsan Ali, Amin; Woo, Simon S	MIXAD: Memory-Induced Explainable Time Series Anomaly Detection
		Mosconi, Matteo; Sorokin, Andriy; Panariello, Aniello; Porrello, Angelo; Bonato, Jacopo; Cotogni, Marco; Sabetta, Luigi; CALDERARA, SIMONE; Cucchiara, Rita	Efficient Continual Human Action Recognition using Skeletons
		Feillet, Eva; Popescu, Adrian; Hudelot, Céline	Recommendation of data-free class-incremental learning algorithms by simulating future data
3-C	Action and behavior recognition	Zou, Yishan; Nugent, Chris; Burns, Matthew; Xi, Xiaoming; Liu, Meng	Towards Open-set Egocentric Action Recognition with Uncertainty Estimation
		SURESH DASS, SHARANA DHARSHIKGAN; Barua, Hrishav Bakul; Krishnasamy, Ganesh; Paramesran, Raveendran; Phan, Raphael CW	ActNetFormer: Transformer-ResNet Hybrid Method for Semi-Supervised Action Recognition in Videos
		Shin, Jongmin; Maiti, Abhishek; Zou, Yuliang; Choi, Jinwoo	Multi-Teacher Invariance Distillation for Domain-Generalized Action Recognition
3-D	Computer aided diagnostics	Yang, Ge; Qing, Linbo; Zhang, Yanteng; Gao, Feng; Gao, Li; He, Xiaohai; Peng, Yonghong	An attention transformer-based method for the modelling of functional connectivity and the diagnosis of autism spectrum disorder
		Wang, Shiyun; Xu, Yongchao	Auxiliary Information Guided Segmentation for the Clinical Target Volume of Cervical Cancer
		Macias, Eric Macias; Morales, Aythami; Pruenza, Cristina; Fierrez, Julian	Privacy-Preserving Statistical Data Generation: Application to Sepsis Detection

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Oral Session 4

Session Number	Category	Authors	Paper Title
4-A	Graph models	Wang, Yongyu; Zhuang, Xiaotian	Mitigating the Impact of Noisy Edges on Graph-Based Algorithms via Adversarial Robustness Evaluation
		Yin, Naiyu; Yu, Yue; Gao, Tian; Ji, Qiang	Efficient Nonlinear DAG Learning under Projection Framework
		Wu, Qi; Yang, Yingguang; He, Buyun; liu, hao; Yang, Renyu; Liao, Yong; Zhou, Pengyuan	BotSCL: Heterophily-aware Social Bot Detection with Supervised Contrastive Learning
4-B	Few-shot and zero-shot learning	Nair, Nilah Ravi; Matei, Arthur; Krön, Dennis; Moya Rueda, Fernando; Reining, Christopher; Fink, Gernot A.	Augmentation of Human Activity Data: Convert, Generate, Transform
		Chen, Liangyuan; He, Zhenan; Zhang, Hai	Image Domain Translation for Few-Shot Learning
		Sinha, Abhishek Kumar; Mishra, Deepak; S, Manthira Moorthi	Towards Adversarial Robustness and Reducing Uncertainty Bias through Expert Regularized Pseudo-Bidirectional Alignment in Transductive Zero Shot Learning
4-C	Fine-grained recognition	Zhou, Beichen; Bi, Qi; Ding, Jian; Xia, Gui-Song	Boosting Fine-Grained Oriented Object Detection via Text Features
		Moratelli, Nicholas; Cornia, Marcella; Baraldi, Lorenzo; Cucchiara, Rita	Fluent and Accurate Image Captioning with a Self-Trained Reward Model
		Frank, Hannah; Vetter, Karl; Varga, Leon; Wolff, Lars; Zell, Andreas	Hyperspectral Imaging for Characterization of Construction Waste Material in Recycling Applications
4-D	3D vision	Wan, Junkang; Miao, Yubin; Wu, Hang	Multimodal Point Cloud Completion via Residual Attention Feature Fusion
		Pathak, Stuti; McDonald, Thomas M; Sels, Seppe; Penne, Rudi	GP-PCS: One-shot Feature-Preserving Point Cloud Simplification with Gaussian Processes on Riemannian Manifolds
		Nakano, Gaku	Inverse DLT method for One-sided Radially Distortion Homography

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Oral Session 5

Session Number	Category	Authors	Paper Title
5-A	Deep learning - I	Liu, Zhoufeng; li, bingrui; Ding, Shumin; Xi, Jiangtao; Li, Chunlei	Cross-Domain Calibration and Boundary Denoising Network for Weakly Supervised Semantic Segmentation
		Yang, Jie; Jing, LiWei; Xu, Yuanzhuo; Wu, Shaowu; Drew, Steve; Niu, Xiaoguang	Label-expanded Feature Debiasing for Single Domain Generalization
		Oehri, Sven; Ebert, Nikolas; Abdullah, Ahmed; Stricker, Didier; Wasenmüller, Oliver	GenFormer - Generated Images are All You Need to Improve Robustness of Transformers on Small Datasets
		Lu, GuangTong; Du, Weidong; Li, Fanzhang	EFLD-NET: Enhancing Few-Shot Learning With Local Descriptors
		Bylander, Karl; Nyström, Ingela; Bengtsson Bernander, Karl	Equivariant Neural Networks for TEM Virus Images Improves Data Efficiency
		Liu, Jie; LI, QILIN; An, Senjian; Ezard, Brad; Li, Ling	EdgeConvFormer: an unsupervised anomaly detection method for multivariate time series
		Iqbal, Owais ; Chakraborty, Omprakash; Hussain, Aftab; Panda, Rameswar; Das, Abir	SITAR: Semi-Supervised Image Transformer for Action Recognition
		Hirner, Dominik; Fraundorfer, Friedrich	SAda-Net: A Self-Supervised Adaptive Stereo Estimation CNN for Remote Sensing Image Data

5-B	Weakly supervised and partial label learning	Jiang, Xiaoheng; Xiao, Penghui; Yan, Feng; Lu, Yang; Jin, Shaohui; Xu, Mingliang	Context Mutual Evolution Network for Weakly Supervised Surface Defect Detection
		Borah, Parashjyoti; Dutta, Aparajita	Conditional Probability-based Feature Embedding for Genomic Sequence Data
		Xu, Fankang; Qian, Wenbin; Cai, Xingxing; Huang, Jintao; CHEUNG, Yiu-ming; Ding, Weiping	Label Disambiguation-based Feature Selection for Partial Multi-Label Learning
		Wang, Naihao; Yang, Yukun; Yang, Haixin; Li, Ruirui	Enhancing Fairness and Robustness in Label-Noise Learning through Advanced Sample Selection and Adversarial Optimization
5-C	Object detection and recognition	Marichal, Henry; Passarella, Diego N.; Randall, Gregory	Automatic Wood Pith Detector: Local Orientation Estimation and Robust Accumulation
		Maglo, Adrien; Audigier, Romaric	Early Features Distributions Alignment in Visible-to-thermal Unsupervised Domain Adaptation for Object Detection
		Purkayastha, Kunal; Sarkar, Shashwat ; Palaiahnakote, Shivakumara; Pal , Umapada; Ghosal, Palash	DATR: Domain Agnostic Text Recognizer
		Wang, Jinzhong; Tian, Xuetao; Dai, Shun; Zhuo, Tao; Zeng, Haorui; Liu, Hongjuan; Liu, Jiaqi; Zhang, Xiuwei; Zhang, Yanning	RGB-T Object Detection via Group Shuffled Multi-receptive Attention and Multi-modal Supervision
		Zhong, WenLong; Zhang, Yunfei ; Wu, Si	Environment-Independent Fusion for Robust Object Detection in Adverse Environments
		Quan, Yitong; Kiefer, Benjamin; Messmer, Martin; Akupati, Charan; Graser, Rainer; Zell, Andreas	Robust Single-Cam Surround View Object Detection and Localization Using Memory Maps
5-D	Biometrics and benchmarking	Pandey, Anurag; Singh, Pushap; Bhavsar, Arnav; Nigam, Aditya; Acharya, Dr. Divya; Verma, Basu	SIGN-Diffusion: Generating User Specific Online Signature For Digital Verification
		Chen, Hongxu; Xiong, Jianghao; Huang, YuHeng; Xie, Xiaohua; Lai, Jian-Huang	Visible-Infrared Person Search: A Novel Benchmark and Solution
		Solano Martinez, Imanol; Peña, Alejandro; Morales, Aythami; Fierrez, Julian; Tolosana, Ruben; Zamora Martinez, Francisco; San Agustin, Javier	Comprehensive Equity Index (CEI) with Application to Measure Bias in Operational Face Recognition Systems
		Bowditch, Margaux; van der Haar, Dustin T	AnnChor: A Video Dataset for Temporal Action Localization in Classical Ballet Choreography
		Che, Hekuangyi; Zhu, Dongchen; Shi, Wenjun; Zhang, Guanghui; Li, Hang; Wang, Lei; Li, Jiamao	IPHGaze: Image Pyramid Gaze Estimation with Head Pose Guidance
		Zhang, Ruoqi; Shen, Peisong; Lv, Kewei; Chen, Chi	One-factor Cancelable Biometric Template Protection Scheme for Real-valued Features

December 04, 2024 (10:00 - 11:00 IST)

Oral Session 6

Session Number	Category	Authors	Paper Title
6-A	Neural networks and deep learning - II	TURINICI, Gabriel	Optimal time sampling in physics-informed neural networks
		teng, sun; Xiao, Xiaoqiang; Zhang, Xu; Ning, Weixun	HeFormer: A Lightweight Transformer Combining Hash Estimation for Link Prediction
		Wang, Yu; Du, Bo; Wu, Shufan; Yang, Xingli	A Hyperparameter Optimization Method Based on Statistical Orthogonal Design for Neural Network Models
6-B	Multimodal and multi-label learning	Menadil, Rafael Edy; Georgescu, Mariana-Iuliana; Ionescu, Radu Tudor	Learning Using Generated Privileged Information by Text-to-Image Diffusion Models
		Chen, Wei; Li, Xiaofei; Long, Sheng; Lei, Jun; Li, Shuohao; Zhang, Jun	Feature Balance Method for Multi-modal Entity Alignment
		Rawlekar, Samyak; Bhatnagar, Shubhang; Srinivasulu, Vishnuvardhan Pogunulu; Ahuja, Narendra	Improving Multi-label Recognition using Class Co-Occurrence Probabilities
6-C	Learning for vision	Liu, Mingxuan; Roy, Subhankar; Zhong, Zhun; Sebe, Nicu; Ricci, Elisa	A Frustratingly Simple Baseline for Incremental Novel Class Discovery
		Li, Guonan; Yao, Meibao; Xiao, Xueming	Layer-wise Pruning Ratios Auto-configuration: a One-Shot Channel Pruning through Sensitivity and Spatial Analysis
		Bravo-Rocca, Gusseppe; Liu, Peini; Guitart, Jordi; Dholakia, Ajay; Ellison, David D	TADIL: Task-Agnostic Domain-Incremental Learning through Task-ID Inference using Transformer Nearest-Centroid Embeddings
6-D	Document understanding	Roy, Ayush ; Palaiahnakote, Shivakumara; Pal , Umapada; Antonacopoulos, Apostolos; Blumenstein, Michael	XLSI: A New Xception and Log Polar Transform-based Approach for Scene Text Script Identification
		li, shuai; Li, Xiao-Hui; yin, Fei; Huang, Linlin	Region-Level Layout Generation for Multi-Level Pre-trained Model based Visual Information Extraction
		Goswami, Shreya; Saini, Naveen ; Shukla, Saurabh	Incorporating Domain Knowledge in Multi-objective Optimization Framework For Automating Indian Legal Case Summarization

December 04, 2024 (16:30 - 18:30 IST)

Oral Session 7

Session Number	Category	Authors	Paper Title
7-A	Deep learning - II	Jena, Sushovan; Saini, Vishwas; Shaw, Ujjwal; Jain, Pavitra; Raihal, Abhay Singh; Banerjee, Anoushka; Joshi, Sharad; Ganesh, Ananth; Bhavsar, Arnav	Attend, Distill, Detect: Attention-aware Entropy Distillation for Anomaly Detection
		Shi, Xiaodan; Zhang, Haoran; Shibasaki, Ryosuke; Yan, Jerry	Learning Social and Physical Compliant Multi-Modal Futures
		Saha, Surojit; Joshi, Sarang; Whitaker, Ross	Matching aggregate posteriors in the variational autoencoder
		Ye, Zhengming; Hua, Yang; Zhang, Wenjie; Song, Xiaoning; Feng, Zhenhua; Wu, Xiao-Jun	A Novel Loss for Contrastive Deep Supervision
		Vemuri, Sai Karthikeya; Büchner, Tim; Niebling, Julia; Denzler, Joachim	Functional Tensor Decompositions for Physics-Informed Neural Networks
		Iwase, Shun; Maeda, Eisaku; Inoue, Nakamasa; Kataoka, Hirokatsu; Nakamura, Ryo; Yokota, Rio; Takahashi, Shuya	On the Relationship Between Double Descent of CNNs and Shape/Texture Bias Under Learning Process
		Kottler, Benedikt; Qiu, Kevin Y; Häufel, Gisela; Bulatov, Dimitri	A Stratified Pipeline for Vehicle Inpainting in Orthophotos

7-B	Image analysis and recognition	Zhang, Shizhou; Dang, Kairui; Cheng, De; Xing, Yinghui; Wu, Qirui; Kong, Dexuan; Zhang, Yanning	Dual-Branch Task Residual Enhancement With Parameter-free Attention for Zero-Shot Multi-Label Image Recognition
		Ray, Lala Shakti Swarup; Zhou, Bo; Krupp, Lars; Suh, Sungho; Lukowicz, Paul	A Synthetic Benchmarking Pipeline to Compare Camera Calibration Algorithms
		Lee, Keuntek; Park, JaeHyun; Cho, Nam Ik	Enhancing Multi-Exposure High Dynamic Range Imaging with Overlapped Codebook for Improved Representation Learning
		Yu, Huiyuan; He, Jia; Cheng, Maggie	Fast Orthogonal Matching Pursuit through Successive Regression
		Zhu, Huachao; Sun, Zhichao; Liu, Zelong; Xu, Yongchao	P2A: Transforming Proposals to Anomaly Masks
7-C	Information extraction and NLP	Faren, Yan; Peng, Yu; Xin, Chen	LTNER: Large Language Model Tagging for Named Entity Recognition with Contextualized Entity Marking
		Dehan, Farhan Noor; Fahim, Md; Rahman, A K M Mahbubur; Amin, M Ashraf; Ahsan Ali, Amin	TinyLLM Efficacy in Low-Resource Language: An Experiment on Bangla Text Classification Task
		Jeon, Jangyeong; Cho, Sangyeon; Ma, Minuk; Kim, Junyeong	ConCSE: Unified Contrastive Learning and Augmentation for Code-Switched Embeddings
		Zhu, Anran; Huang, Yubo; Lai, Xin	Navigating Data Imbalances in Cybersecurity: Identifying Malicious URLs with Multiple Labels and Extreme Data Imbalances with LGNet
		Hasan, Md. Maruf; Ahsan, Shawly; Hoque, Mohammed Moshul; Dewan, M. Ali Akber	MuLAD: Multimodal Aggression Detection from Social Media Memes Exploiting Visual and Textual Features
7-D	Biomedical imaging and brain computer interface	Lin, Zihao; Xiao, Shunxin; Chen, Zirong; Wang, Da-Han; Li, Jianmin; Zhang, Xu-Yao	SANS: Spatial-aware Neural Solver for Plane Geometry Problem
		Kundu, Souraja; Iwahori, Yuji; Bhuyan, M K; Bhatt, Manish; Kjisirikul, Boonserm; wang, aili; Ouchi, Akira; Shimizu, Yasuhiro	Cross-modality Medical Image Registration with Local-Global Spatial Correlation
		Yang, Zhiyuan; Zhang, Bo; Zeng, Zhiqiang; Yeo, Si Yong	Edge-guided and Cross-scale Feature Fusion Network for Efficient Multi-contrast MRI Super-Resolution
		Zhu, Xu; Yue, Kun; Qi, Zhiwei; Su, Yunshan; Duan, Liang	Directed Brain Network Transformer for Psychiatric Diagnosis
		Osa, Ainhoa; Balaha, Hossam Magdy; Mahmoud, Ali; Abdelrahim, Mostafa; Khudri, Mohamed; Garcia Zapirain, Begonya; El-Baz, Ayman	A Cascading Approach with Vision Transformers for Age-Related Macular Degeneration Diagnosis and Explainability
7-E	Competition Papers	Lotey, Taveena; Verma, Aman; Roy, Partha Pratim	EEG-based Mental Imagery Task Adaptation via Ensemble of Weight-Decomposed Low-Rank Adapters
		Siddhad, Gourav; Dey, Sayantan; Roy, Partha Pratim; Iwamura, Masakazu	Awake at the Wheel: Enhancing Automotive Safety through EEG-Based Fatigue Detection
		Alessia Rondinella, Francesco Guarnera, Elena Crispino, Giulia Russo, Clara Di Lorenzo, Davide Maimone, Francesco Pappalardo, Sebastiano Battiato	ICPR 2024 Competition on Multiple Sclerosis Lesion Segmentation - Methods and Results
		Xin Zhang, Liangxiu Han	ICPR 2024 Competition on Beyond Visible Spectrum: AI for Agriculture
		Boyang Li	ICPR 2024 Competition on Resource-Limited Infrared Small Target Detection Challenge: Methods and Results
		Qian Yin, Yulan Guo, Feng Zhang, Yuting Xie, Ye Zhang, Huaiyu Chen, Hanyun Wang, Han Wang, Furui Chen, Rong Yang, Silei Liu	ICPR 2024 Competition on Moving Object Detection and Tracking in Satellite Videos: Methods and Results
		Harsh Lunia, Ajoy Mondal, C.V. Jawahar	ICPR 2024 Competition on Word Image Recognition from Indic Scene Images
		Furqan Shaik, Sandeep Nagar, Sunny Manchanda, Kunal Chaudhary, Girish Varma	ICPR 2024 Competition on Safe Segmentation of Drive Scenes in Unstructured Traffic and Adverse Weather Conditions

December 05, 2024 (09:00 - 11:00 IST)

Oral Session 8

Session Number	Category	Authors	Paper Title
8-A	Deep learning and applications	Cao, Yunxiang; Chen, Li; Wang, Yubo; Feng, Zhida; Tian, Jing	DD-Net: Dynamic Network Architecture for Optimized Curve Segmentation and Reduce Computational Redundancy
		Lin, JiaQi; Ren, Qianqian; Xu, Hui	Multi-views Enhanced Spatio-Temporal Adaptive Transformer for Urban Traffic Prediction
		Song, Chengcheng; Li, Hui; Xu, Tianyang; Zhang, Zeyang; Wu, Xiao-Jun	IFFusion: Illumination-free Fusion Network for Infrared and Visible Images
		xu, ke; Zhang, Qian; Yang, Fei; jiang, zhanghao; LEE, BOON GIIN	Task Oriented Image Quality Assessment for Synthesized Images
		Gan, Dongwei; Chang, Ming; Chen, Juan	3D-EffViTCaps: 3D Efficient Vision Transformer with Capsule for Medical Image Segmentation
8-B	Vision for robotics and autonomous driving	Yin, Hang; Zhang, Yanming; Tan, JiHua; Liu, Cheng-Lin	STAFNet: Spatiotemporal-Aware Fusion Network for Air Quality Prediction
		Qian, Chenghao; Rezaei, Mahdi; Anwar, Saeed; Li, Wenjing; Hussain, Tanveer; Azarmi, Mohsen; Wang, Wei	AllWeather-Net: Unified Image Enhancement for Autonomous Driving Under Adverse Weather and Low-Light Conditions
		Yang, Zhiyuan; wang, xuekuan; Zhang, Wei; Tan, Xiao; Lu, Jincheng; Wang, Jingdong; Ding, Errui; Lai, Zhihui; zhao, cairong	Uni4DAL: A Unified Baseline for Multi-dataset 4D Auto-Labeling
		du, zetao; Yang, Jianhua; Wang, Junbo; Huang, Yan; Wang, Liang	SPK: Semantic and Positional Knowledge for Zero-shot Referring Expression Comprehension
		Wen, Congcong; Huang, Yisiyuan; Huang, Hao; Huang, Yanjia; Yuan, Shuaihang; Hao, Yu; hui, lin; Liu, Yu-Shen; Fang, Yi	Zero-shot Object Navigation with Vision-Language Models Reasoning
8-C	Audio and speech processing	Ming, Wenwen; chen, xucan; Liu, Zhe; Li, Ruihao; Yi, Wei	Hierarchical Visual Place Recognition with Semantic-guided Attention
		Chen, Zeyuan; Wang, Ziquan; Gao, Qiang; Mikawa, Masahiko; Fujisawa, Makato	Dense Reconstruction and Localization in Scenes with Glass Surfaces Based on ORB-SLAM2
		Zhou, Huali; Lin, Yuke; Liu, Dong; Li, Ming	KunquDB: An Attempt for Speaker Verification in the Chinese Opera Scenario
		Zhang, Jiang; Wang, Liejun; Yu, Yinfeng; Xu, Miaomiao; Mattursun, Alimjan	Collaborative Transformer Decoder Method for Uyghur Speech Recognition in-vehicle Environment
		V, kesavaraj; M, Anuprabha; Vuppala, Anil	End-to-End user defined keyword spotting using shifted delta coefficients
		Wang, Qinghai; Liu, Shiguang	MTIQA360: An Easily Trainable Multitasking Network for Blind Omnidirectional Image Quality Assessment

		Mukherjee, Himadri; Marciano, Matteo; Dhar, Ankita; Roy, Kaushik Zhang, Zhedong; Li, Liang; zhang, jiehua; HU, Zhenghui; Wang, Hongkui; Yan, Chenggang; Yang, Jian; Qi, Yuankai	EDM10: A Polyphonic Stereo dataset with Identical BGM for Musical Instrument Identification GENERATING HIGH-QUALITY SYMBOLIC MUSIC USING FINE-GRAINED DISCRIMINATORS
8-D	Medical imaging and applications	Thota, Gokaramaiah; K, Nagaraju; Korra, Sathya Babu	SVD-Grad-CAM: Singular Value Decomposition filtered Gradient Class Activation Map
		Varshney, Payal; Lucieri, Adriano; Balada, Christoph; Dengel, Andreas; Ahmed, Sheraz	Generating Counterfactual Trajectories with Latent Diffusion Models for Concept Discovery
		Elsharkawy, Mohamed; Abdelhalim, Ibrahim; Ghazal, Mohammed; Haq, Mohammad Z.; Haq, Rayan; Mahmoud, Ali; Thanos, Aristomenis ; Sandhu, Harpal; El-Baz, Ayman S	TransNetOCT: An efficient Transformer-Based Model for 3D-OCT Segmentation using Prior Shape Self-supervised Siamese Network Using Vision Transformer for Depth Estimation in Endoscopic Surgeries
		Agarwal, Snigdha; Sinha, Neelam	
		Azam, Mohamed; Balaha, Hossam Magdy; Gondim, Dibson; Mistry, Akshikumar; Ghazal, Mohammed; El-Baz, Ayman S	Histopathological Diagnosis of Meningioma and Solitary Fibrous Tumors Based on a Multi-scale Fusion Approach Utilizing Vision Transformer and Texture Analysis
		Dey, Shramana; Dutta, Pallabi; Bhattacharyya, Riddhasree; Pal Das, Surochita ; Mitra, Sushmita; Raman, Rajiv	Adaptive Class Learning to Screen Diabetic Disorders in Fundus Images of Eye

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Oral Session 9

Session Number	Category	Authors	Paper Title
9-A	Generative models	Liu, Yibin; Zhang, Jianyu; Zhang, Li; Li, Shijian; Pan, Gang	A Framework For Image Synthesis Using Supervised Contrastive Learning
		Nazarieh, Fatemeh; Kittler, Josef; Awais, Muhammad; Kanojia, Diptesh; Feng, Zhenhua	StableTalk: Advancing Audio-to-Talking Face Generation with Stable Diffusion And Vision Transformer
		Hung, Tso-Sung; Lai, Shang-Hong	Domain Adaptation for Machinery Fault Diagnosis Based on Critic Classifier GAN
		Zhang, Liang; Yeasin, Mohammed ; Lin, Jionghao; Hu, Xiangen; Havugimana, Felix Liu, Pan; Zhou, Jianping; Tian, Xiaohua; Lin, Zhouhan	Generative Adversarial Networks for Imputing Sparse Learning Performance SWave: Improving Vocoder Efficiency by Straightening the Waveform Generation Path
9-B	AI applications	Nguyen, Duc Minh; Yang, Hyung-Jeong; Kim, Soo-Hyung; Kim, Seung-Won	Latent Behavior Diffusion for Sequential Reaction Generation in Dyadic Setting
		Wu, Xing; Cai, Chengyou; Wang, Jianjia; Yao, Junfeng; Song, Jun	STMAE: Spatial Temporal Masked Auto-Encoder for Traffic Forecasting
		Mondal, Koustav Kumar; Das, Debasis	GUARDEV: Guided Unified Adaptive Response for Defending Electric Vehicles
		Nader, Rafic; L'Allinec, Vincent; Bourcier, Romain; Autrusseau, Florent	Vascular Models (VaMos): Application to bifurcation classification and aneurysm detection
		Dai, Weinan; Jiang, Yifeng; Liu, Yuanjing; Chen, Jinkun; Sun, Xin; Tao, Jinglei	CAB-KWS: Contrastive Augmentation: An Unsupervised Learning Approach for Keyword Spotting in Speech Technology
		Li, ShuPeng; Qi, ZhaoHui	Efficient Prescribed-time and Robust Zeroing Neural Networks for Computing Time-Variant Plural Stein Matrix Equation
9-C	Image segmentation and detection	Anita, Stefana-Lucia; TURINICI, Gabriel	Convergence of a L2 regularized Policy Gradient Algorithm for the Multi Armed Bandit
		Zhu, Xinyu; Li, Jiafeng; Wen, Ying	INJECTIONNET: Realizing Information Injection for Medical Image Segmentation with Layer Relationships
		Sharafeldein, Ahmed; Khelifi, Adel; Ghazal, Mohammed; Yaghi, Maha; Mahmoud, Ali; Contractor, Sohail ; El-Baz, Ayman S	Unsupervised Segmentation of Pulmonary Regions in 3D CT Scans Optimized using Transformer Model
		Xu, Wenbo; Wu, Yanan; Jiang, Haoran; Wang, Yang; Wu, Qiang; Zhang, Jian Liang, Wen; RAN, PEIPEI; Bai, Mengchao; Liu, Xiao; Githinji, P.Bilha; Zhao, Wei; Qin, Peiwu	Task Consistent Prototype Learning for Incremental Few-shot Semantic Segmentation
			External Prompt Features Enhanced Parameter-efficient Fine-tuning for Salient Object Detection
		Osa, Priscilla I; Zerubia, Josiane; Kato, Zoltan	AYANet: A Gabor Wavelet-based and CNN-based Double Encoder for Building Change Detection in Remote Sensing
9-D	Medical image analysis	Li, Lu; Shi, Yanjiao; Yang, Jinyu; Zhou, Qiangqiang; ZHANG, Qing; Cui, Liu	Transformer-based Depth Optimization Network for RGB-D Salient Object Detection
		Das, Abhijit; Gorade, Vandan; Mahapatra, Dwarikanath; Roy, Sudipta	SEANet: Synergistic Spatial-Spectral Residual Encoder-Decoder Network for LDCT Denoising
		Gorade, Vandan; Mittal, Sparsh; Jha, Debesh; Singhal, Rekha; Bagci, Ulas	Harmonized Spatial and Spectral Learning for Generalized Medical Image Segmentation
		Hu, Ming; Yin, Jianfu; Wang, Jing; Wang, Yuqi; Hu, Bingliang; Wang, Quan	SpecSlice-ConvLSTM:Medical Hyperspectral Image Segmentation using Spectral Slicing and ConvLSTM
		Rather, Sajad Ahmad; Roy, Partha Pratim; Das, Sujit	Chaos Theory Based Gravitational Search Algorithm For Medical Image Segmentation
		Mahato, Anuradha; Banerjee, Paromita; Jethava, Rutvik; Duggal, Bhanu; Paul, Angshuman; Vatsa, Mayank ; Singh, Richa	PSIVUS: Atherosclerotic Plaque Segmentation in Intravascular Ultrasound Images via Active Learning
Kulyabin, Mikhail; Sindel, Aline; Pedersen, Hilde; Gilson, Stuart; Baraas, Rigmor C.; Maier, Andreas K	Generalist Segmentation Algorithm for Photoreceptors Analysis in Adaptive Optics Imaging		

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Oral Session 10

Session Number	Category	Authors	Paper Title
10-A	Lightweight AI	Fu, Ruigang; Hu, Qingyong; Dong, Xiaohu; Gao, Yinghui; Li, Biao; Zhong, Ping	Lighten CARAFE: Dynamic Lightweight Upsampling with Guided Reassemble Kernels
		Pons, Ian Guarim; Yamamoto, Bruno; Reali Costa, Anna Helena; Jordao, Artur	Effective Layer Pruning Through Similarity Metric Perspective
		Nauen, Tobias C; Palacio, Sebastian; Dengel, Andreas	TaylorShift: Shifting the Complexity of Self-Attention from Squared to Linear (and Back) using Taylor-Softmax
		Addad, Youva; Lechervy, Alexis; Jurie, Frederic	Balancing Accuracy and Efficiency in Budget-Aware Early-Exiting Neural Networks
		Giraud, Rémi; Clément, Michaël	Deep Spherical Superpixels

10-B	Image processing and forensics	Liu, Ziqi; Guo, Yuan	A Coverless Steganography of Face Privacy Protection with Diffusion Models
		Dukre, Adinath Madhavrao; Deshmukh, Vivek Vilas; Kulkarni, Ashutosh C; Phutke, Shruti S; Vipparthi, Santosh Kumar; Murala, Subrahmanyam; GONDE, ANIL BALAJI	Frequency Modulated Deformable Transformer for Underwater Image Enhancement
		Tyagi, Divyani; Sandhan, Tushar	Bandwise Attention in CycleGAN for fructose estimation from hyperspectral images
10-C	Person recognition and affective computing	Huang, Sirong; Zheng, Huicheng	Confidence-Guided Feature Alignment for Cloth-Changing Person Re-identification
		Birla, Lokendra; Shukla, Sneha; Saikia, Trishna; Gupta, Puneet	HR-TRACK: An rPPG method for heartrate monitoring using Temporal Convolution Networks
		Zhao, Ziping; Liu, Shizhao; Niu, Mingyue; Wang, Haishuai; Schuller, Bjoern W.	Dense Coordinate Channel Attention Network for Depression Level Estimation from Speech
10-D	Signature verification and writer identification	Xu, Chenyang; FAN, Feiyi; Ke, Guanzhou; Guo, Changru; Wu, Qingyu; shen, jianfei	Parallel Attention Based Network for Human Activity Recognition Using Wearable Devices
		Lin, Junxiang; Chen, Zhounan; Liang, Lingyu; Peng, Wenjie; Huang, Shuangping	HANDWRITING TRAJECTORY RECOVERY VIA TRAJECTORY TRANSFORMER WITH GLOBAL RADICAL CONTEXT-AWARE MODULE
		Priya, Kumari; Adak, Chandranath; Chaudhuri, Prof. B B; Blumenstein, Michael	Handwriting Intra-Variability Across Surface Transitions: Implications for Writer Identification
		Che, Xin; Akbari, Mohammad; Li, Shaoxin; Yue, David; Zhang, Yong; Chu, Lingyang	Primary Key Free Watermarking for Numerical Tabular Datasets in Machine Learning
		Moura, Kecia G; Sabourin, Robert	Offline Handwritten Signature Verification Using a Stream-Based Approach