IEEE International Joint Conference on Biometrics

IEEE International Joint Conference on Biometrics 2024

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Welcome Message

Welcome to the 2024 edition of the IEEE International Joint Conference on Biometrics (IJCB). IEEE IJCB is the premier international forum for research on biometrics and related technologies and combines two major biometrics conferences, the IEEE International Conference on Biometrics Theory, Applications and Systems (BTAS), and the IAPR International Conference on Biometrics (ICB). The blending of these two conferences is made possible through a special agreement between the IEEE Biometrics Council and the IAPR Technical Committee on Biometrics (TC-4), and is being held as a fully in-person event in Buffalo, New York, USA. We are very excited to have you with us, to be able to meet face-to-face, exchange ideas and discuss the latest advancements in biometrics research.

The IJCB conference series continues to attract high-quality submissions on a broad range of topics related to biometrics and supporting technologies. This year, the conference received 174 papers, which underwent a rigorous peer-review procedure overseen by the IJCB 2024 Program Chairs and 18 Area Chairs. More than 196 reviewers helped with the reviewing process, provided comments on the submissions, and participated in the discussions during the rebuttal phase. Ultimately, 56 (32.3%) highest-quality papers were accepted for presentation at IJCB 2024, out of which 22 were scheduled as orals, and the remaining 34 as posters. Papers co-authored by either Program Chairs were handled with chair conflicts enabled in CMT. Five competitions on different biometrics-related problems were also accepted to be part of IJCB this year in which globally, around 60 teams participated. These competitions produced five summary papers that are included in the technical program of the conference.

Seven special sessions were also held in the scope of IJCB 2024, and we thank the special session organizers for enriching the regular conference program with posters and talks on several timely topics. The special sessions are:

- Generative AI for Futuristic Biometrics by Sudipta Banerjee (NYU), Vitomir Struc (Univ. of Ljubljana), Nasir Memon (NYU) and Kiran Raja (NTNU)
- Recent Advances in Detecting Manipulation Attacks on Biometric Systems (ADMA-2024) by Abhijit Das (BITS Pilani), Raghavendra Ramachandra (NTNU), Naser Damer (Fraunhofer IGD), Vitomir Štruc (University of Ljubljana), Marija Ivanovska (University of Ljubljana)
- Face Morphing Attack and Detection Techniques (FMADT-2024) by Chen Liu (Clarkson University), Christoph Busch, (HDA/NTNU), Mei Ngan (NIST), Srirangaraj Setlur (University at Buffalo), Jeremy Dawson (West Virginia University)
- Recognition at Long Range and from High Altitude by Scott McCloskey (Kitware), Vishal Patel (Johns Hopkins University), Ben Riggan (University of Nebraska), Srirangaraj (Ranga) Setlur (University at Buffalo)
- Multimodal Human Behavior Understanding and Generation (MUG-2024) by Zitong Yu (Great Bay University, China), Siyang Song (University of Leicester, UK), Weicheng Xie (Shenzhen University, China), Xin Liu (Lappeenranta-Lahti University of Technology, Finland), Linlin Shen (Shenzhen University, China)
- Responsible AI for Biometrics (AI4BIO) by Shu Hu (Purdue University), Xin Wang (SUNY Albany)
- Face Recognition in the Era of Synthetic Images and Its Boundless Vulnerabilities (SIBV-SS) by Akshay Agarwal (IISER Bhopal, India), Gaurav Goswami (IBM)

The special sessions selected 48 papers for presentation based on a peer-review procedure overseen by the special session organizers.

Following the tradition of previous IJCBs, a call was also issued for presentation of papers published in

major journals on topics of interest to the biometrics community. In response to this call, multiple applications were received and three journal paper presentations were selected to be part of the IJCB 2024 program. These journal papers come from top-tier venues, including the IEEE Transactions on Biometrics, Behavior, and Identity Science, the go-to journal for biometrics-related research. The technical program of IJCB also consists of 2 demos that will be presented in parallel to the poster presentations.

In addition to the paper presentations and demos, IJCB also hosts keynotes from leading researchers and winners of awards from IJCB's sponsoring societies. Abhijit Bose from CapitalOne will give a talk titled: "New Challenges and Opportunities in the Age of Generative AI", Elham Tabassi from National Institute of Standards and Technology will give a keynote on "AI Risk Management: Enabling Trust", Rui Zhao from AmazonOne will give a keynote on "Amazon One - Technology Behind the Experience", and Michael King from Florida Institute of Technology will share a keynote address on "Facing the Future: Navigating the Promise and Pitfalls of Automated Face Recognition". There will also be a panel discussion on "Building Responsible Biometric Systems" with panelists: Stephanie Schuckers, UNC-Charlotte; Vishesh Mistry, Tech5; Joel Brogan, Oak Ridge National Laboratories; Ambuj Neupane, Government Services Administration (GSA); and Udo Mahlmeister, CLEAR.

The conference will also have talks by the winner of the IAPR Senior Biometrics Investigator Award (SBIA), the 2024 IEEE Biometrics Council Meritorious Service Award recipient, and 2024 IEEE Biometrics Council Best Dissertation Award. All the winners will be announced during the conference.

IJCB 2024 will feature four tutorials: Foundational GenAI Models in Biometrics by Mayank Vatsa (IIT Jodhpur) and Anush Sanakaran (Microsoft Security AI Research), Biometric Privacy and Security by Vishnu Boddeti (MSU) and Amina Bassit (MSU), Face Recognition Progression: Synthetic Images to Vulnerabilities by Akshay Agarwal (IISER Bhopal) and Chaitanya Roygaga (Lehigh University), and Qualitative Methods for Biometrics Research: Exploring User Behavior and System Design byTempestt Neal (University of South Florida). These tutorials will allow participants to gain insights on timely technical topics, such as Foundational GenAI Models in Biometrics and Biometric Privacy and Security, but also learn new skills and improve their paper writing capabilities. Finally, a Doctoral Consortium is also planned that will give young researchers the opportunity to meet with established researchers and leaders from academia and discuss their work and career opportunities.

There will be ample opportunity to make new acquaintances and socialize with old colleagues during the social events of IJCB 2024. These include a trip to Niagara Falls, one of the most visited waterfalls in the USA, a reception at the conference, and a gala dinner in a historic hotel of Buffalo. We hope these events will give you the chance to make new friends and make your stay in Buffalo as memorable as possible.

We are grateful for the support from our sponsors and supporters. This year, the University at Buffalo, Institute for Artificial Intelligence and Data Science is a Diamond sponsor; Visa is a Gold Sponsor; and Amazon One, Tech5 and NeuroTechnology are Silver Sponsors. We also highly appreciate the contributions of the IEEE Biometrics Council through its DEI travel grant program that allowed us to support researchers from various underrepresented groups in attending IJCB 2024. To all the sponsors and supporters, thank you! Without you, this conference would not have been possible.

We also wish to thank all members of the Organizing Committee for their hard work and effort in making IJCB 2024 a success: the Finance Chair Ifeoma Nwogou, University at Buffalo - SUNY, Jeremy Dawson WVU, and Tempestt Neal USF; Tutorial chairs Aparna Bharati, Lehigh University; Anup Namboodri IIIT Hyderabad, and Deen Dayal Mohan, Yahoo; Award Committee Chairs - Davide Maltoni, University of Bologna, Italy and Vijaya Kumar, Carnegie Mellon University; Doctoral Consortium Chairs - Christoph Busch, Norway, Nasser Nassarbadi, West Virginia University and Mark Nixon, University of Southampton;

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We also thank conference secretaries for their hard work and our student volunteers for helping in the conference logistics, along with the local organizing chair, Ifeoma Nwogou, University at Buffalo.

IEEE IJCB 2024 is the eighth edition of the IJCB conference series and is financially sponsored by the IEEE Biometrics Council and technically co-sponsored by IAPR. Welcome!

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International Joint Conference on Biometrics 2024: Detailed Conference Program

Sunday, 15 September 2024

9:30 – 16:00	Tutorial 1 – Foundation Models Presenters: Anush Sankaran (Microsoft Security AI Research) and Mayank Vatsa (IIT Jodhpur)
9:30 – 11:50	Tutorial 2 – Face Recognition Progression: Synthetic Images to Vulnerabilities Presenters: Akshay Agarwal (IISER Bhopal) and Chaitanya Roygaga (Lehigh University)
9:15 – 14:00	Doctoral Consortium DC Chairs: Mark Nixon (University of Southampton), Christoph Busch (Norwegian University of Science and Technology), Nasser Nasrabadi (West Virginia University)
11:00 - 11:15	Coffee Break
12:30 - 13:30	Lunch
13:30 – 16:00	Tutorial 3 – Biometric Privacy and Security Presenters: Vishnu Boddeti (Michigan State University) and Amina Bassit (Michigan State University)
13:30 – 16:00	Tutorial 4 – Qualitative Methods for Biometrics Research: Exploring User Behavior and System Design Presenters: Tempestt Neal (University of South Florida)
15:00 - 15:15	Coffee Break

Monday, 16 September 2024

7:30 – 8:30	Breakfast and Registration
8:30 – 9:00	IJCB 2024 Opening session
9:00 – 9:50	Keynote 1 – New Challenges and Opportunities in the Age of Generative AI Speaker: Abhijit Bose, SVP AI/ML Platforms, Capital One Session Chair: Venu Govindaraju, SUNY Buffalo
9:50 – 11:00	Oral session – Face Analysis Session Chair: Rama Chellappa, Johns Hopkins University and Richa Singh, IIT Jodhpur

- Occlusion-aware Cross-Attention Fusion for Video-based Occluded Cloth-Changing Person Re-Identification
  Vuong D Nguyen (University of Houston); Pranav Mantini (University of Houston); Shishir Shah (University of Houston)
- A Relative Data Diversity Measure for Synthetic Face Images
  Cancan Zhang (Lehigh University); Chaitanya Roygaga (Lehigh University); Aparna Bharati (Lehigh University)
- Video Anomaly Detection in Overlapping Data: The More Cameras, the Better?
  SILAS SANTIAGO LOPES PEREIRA (IFCE); José Everardo B Maia (UECE); Hugo Proenca (U-Beira Interior)
- Towards Zero-Shot Interpretable Human Recognition: A 2D-3D Registration Framework
  Henrique Jesus (University of Beira Interior); Hugo Proenca (U-Beira Interior)
- Boosting Unconstrained Face Recognition with Targeted Style Adversary
  Mohammad Saeed Ebrahimi Saadabadi (West Virginia University); Sahar Rahimi Malakshan (West Virginia University); Seyed Rasoul Hosseini (West Virginia University); Nasser Nasrabadi (West Virginia University)
- Biometric Authentication Based on Enhanced Remote Photoplethysmography Signal Morphology
  Zhaodong Sun (University of Oulu); Xiaobai Li (Zhejiang University); Jukka Komulainen (University of oulu, finland); Guoying Zhao (University of Oulu)

11:00 – 11:15	Coffee break
11:15 – 12:15	Special session on Recognition at Long Range and from High Altitude Organizers: Scott McCloskey (Kitware), Vishal Patel (Johns Hopkins University), Ben Riggan (University of Nebraska), Srirangaraj (Ranga) Setlur (University at Buffalo) Session Chairs: Srirangaraj (Ranga) Setlur (University at Buffalo) and Patrick Flynn (University of Notre Dame)

- From Data to Insights: A Covariate Analysis of the IARPA BRIAR Dataset for Multimodal Biometric Recognition Algorithms at Altitude and Range
  David Bolme (Oak Ridge National Labs); Deniz Aykac (Oak Ridge National Laboratory); Ryan Shivers (Oak Ridge National Laboratory); Joel R Brogan (Oak Ridge National Laboratory); Nell Barber (Oak Ridge National Laboratory); Robert Zhang (Oak Ridge National Lab); Laura Davies (Oak Ridge National Laboratory); David Cornett (Oak Ridge National Laboratory)
- Enhancing Face Recognition in Low-Quality Images Based on Restoration and 3D Multiview Generation
  Xiang Zhang (State University of New York at Binghamton); Xiaotian Li (Binghamton University); Taoyue Wang (State University of New York at Binghamton); Lijun Yin (State University of New York at Binghamton)
- HyperGait: A Video-based Multitask Network for Gait Recognition and Human Attribute Estimation at Range and Altitude
  Zhaoyang Wang (Johns Hopkins University); Jiang Liu (Johns Hopkins University); Ram Prabhakar Kathirvel (Johns Hopkins University); Chun Pong Lau (City University of Hong Kong); Rama Chellappa (Johns Hopkins University)
- Template-based Multi-Domain Face Recognition
  Anirudh Nanduri (University of Maryland); Rama Chellappa (Johns Hopkins University)
- Quo Vadis RankList-based System in Face Recognition?
  Xinyi Zhang (University of Zürich); Manuel Günther (University of Zurich)

12:15 – 12:45	Poster Spotlight* Session Chair: Aparna Bharati, Lehigh University and Marta Gomez Barrero, Universität der Bundeswehr München
12:45 – 14:00	Lunch
14:00 – 14:40	IEEE Biometrics Council Service Award Recipient Talk Session Chair: Nasir Memon, New York University, President IEEE Biometrics Council
14:40 – 15:20	Poster Spotlight* Session Chair: Emanuela Marasco, George Mason University, USA and Sunpreet Arora, Visa

*Poster spotlights will be split between the two times.

- A Reference-Based 3D Semantic-Aware Framework for Accurate Local Facial Attribute Editing
  Yu-Kai Huang (Carnegie Mellon University); Yutong Zheng (Carnegie Mellon University); Yen-Shuo Su (Carnegie Mellon University); Anudeepsekhar Bolimera (Carnegie Mellon University); Han Zhang (CMU); Fangyi Chen (Carnegie Mellon University); Marios Savvides (Carnegie Mellon University)
- Longitudinal Evaluation of Child Face Recognition and the Impact of Underlying Age
  Surendra Singh (Clarkson University); Keivan Bahmani (Clarkson University); Stephanie Schuckers (Clarkson University)
- Radial Distortion in Face Images: Detection and Impact
  Wassim Kabbani (NTNU); Tristan Le Pessot (ENSICAEN); Kiran Raja (NTNU); Raghavendra Ramachandra (NTNU, Norway); Christoph Busch (Norwegian University of Science and Technology)
- Evaluating Face Recognition Performance on Synthetic Data: A Comprehensive Analysis of Methodologies and Benchmarks

Ángela Sánchez-Pérez (Facephi); Enrique Mas-Candela (University of Alicante); Jorge Calvo-Zaragoza (University of Alicante)

- Revisiting Linearization of Spatial Maps in SoTA Face Recognition Backbone
  Aman Bhatta (University of Notre Dame); Haiyu Wu (University of Notre Dame); Kagan Ozturk (University of Notre Dame); Kevin W Bowyer (University of Notre Dame)
- Modality Agnostic Heterogeneous Face Recognition with Switch Style Modulators
  Anjith George (Idiap Research Institute); Sébastien Marcel (IDIAP)
- Face Helps Person Re-Identification: Multi-modality Person Re-Identification Based on Vision-Language Models
  Meng Zhang (Fujitsu Research & Development Center); Rujie Liu (Fujitsu Research & Development Center Co., Ltd.); Abe Narishige (Fujitsu)
- Is Face Super Resolution Truly Pushing the Boundaries of Face Recognition?
  Muskan Dosi (IIT Jodhpur); Udaybhan Rathore (INDIA INSTITUTE OF SCIENCE EDUCATION AND RESEARCH BHOPAL); Chiranjeev Chiranjeev (IIT Jodhpur); Akshay Agarwal (IISER Bhopal); Richa Singh (IIT Jodhpur); Mayank Vatsa (IIT Jodhpur)
- Discovering Interpretable Feature Directions in the Embedding Space of Face Recognition Models
  Richard O Plesh (Clarkson University); Janez Križaj (University of Ljubljana); Keivan Bahmani (Clarkson University); Mahesh Banavar (Clarkson University); Vitomir Struc (University of Ljubljana); Stephanie Schuckers (Clarkson University)
- Latent Fingerprint Matching via Dense Minutia Descriptor
  Zhiyu Pan (Tsinghua University); Yongjie Duan (Tsinghua University, China); Xiongjun Guan (Tsinghua University); Jianjiang Feng (Tsinghua University); Jie Zhou (Tsinghua University)
- PCR-HIQA: Perceptual Classifiability Ratio for Hand Image Quality Assessment
  Lazaro Janier Gonzalez-Soler (Hochschule Darmstadt); Marcel Grimmer (Hochschule Darmstadt); Daniel Fischer (Hochschule Darmstadt); Christian Rathgeb (Hochschule Darmstadt); Christoph Busch (Hochschule Darmstadt)
- Watchlist Challenge: 3rd Open-set Face Detection and Identification
  Furkan Kasım (University of Zurich); Manuel Günther (University of Zurich)
- Human Identification at a Distance: Challenges, Methods and Results on the Competition HID 2024
  Shiqi Yu (Southern University of Science and Technology); Weiming Wu (South China University of Technology); Jiacong Hu (South China University of Technology); Zepeng Wang (Shanghai Jiao Tong University); Jingjie Wang (Beijing Jiaotong University); Meng Zhang (Fujitsu); Runsheng Wang (Huazhong University of Science and Technology); Yunfei Ni (Huazhong University of Science and Technology); Yongzhen Huang (School of Artificial Intelligence, Beijing Normal University); Liang Wang (NLPR, China); Md Atiqur Rahman Ahad (University of East London)
- Face Liveness Detection Competition (LivDet-Face)-2024
  Lambert A Igene (Clarkson University); Afzal Hossain (Clarkson University); Stephanie Schuckers (Clarkson University); Mohammad Zahir Uddin Chowdhury (Clarkson University); Humaira Rezaie (Clarkson University); Ayden Rollins (Clarkson University); Jesse Dykes (Clarkson University); Rahul Vijaykumar (Clarkson University); Sebastien Marcel (Idiap Research Institute); Juan E. Tapia (hda); carlos aravena (IDVisionCenter (IDVC)); Daniel Schulz (IDVisionCenter (IDVC)); Nima Karimian (WVU); banafsheh adami (west virginia university); Diogo Nunes (University of Coimbra); João S. Marcos (Instituto de Sistemas e Robótica - Universidade de Coimbra); Nuno Gonçalves (University of Coimbra); Lovro Sikošek (University of Ljubljana); Borut Batagelj; Nima Schei (Hummingbirds AI); David Pabon (Hummingbirds AI); Manuela Tiedemann (DERMALOG Identification Systems GmbH); Vasiliy Pryadchenko (ID R&D Inc); Aleksandr Alenin (ID R&D Inc); Alhasan Alkhaddour (ID R&D); Anton Pimenov (ID RnD); Artem Tregubov (ID R&D); Igor Avdonin (ID R&D); Maxim Lazantsev (ID R&D); Mikhail Pozigun (ID R&D)

- Latent in the Wild Fingerprint Recognition Competition
  Xinwei Liu (Zhejiang Wanli University); Renfang Wang (Zhejiang Wanli University); Tim Oblak (University of Ljubljana); Lara Anžur (University of Ljubljana); Peter Peer (University of Ljubljana); Marko Lange (DERMALOG Identification Systems GmbH); David Stumpf (DERMALOG Identification Systems GmbH); Sven Utcke (DERMALOG Identification Systems GmbH); Evaldas Borcovas (Neurotechnology); Kiran Raja (NTNU)
- First competition on Presentation Attack Detection on ID Card
  Juan E. Tapia (hda); Naser Damer (Fraunhofer Institute for Computer Graphics Research IGD and TU Darmstadt); Christoph Busch (Hochschule Darmstadt); Juan Manuel Espín López (Facephi); Javier Barrachina (Facephi); Alvaro S. Rocamora (Facephi Biometria SA); Krištof Ocvirk (University of Ljubljana); Leon Alessio (University of Ljubljana); Borut Batagelj; Sushrut Patwardhan (Norwegian University of Science and Technology (NTNU)); Raghavendra Mudgalgundurao (NTNU -NBL Lab); Kiran Raja (NTNU); daniel schulz (ID VisionCenter (IDVC)); Carlos Aravena (ID VisionCenter (IDVC))

Special Session Posters-Only: Multimodal Human Behavior Understanding and Generation

- CPL-CLIP: Compound Prompt Learning for Flexible-Modal Face Anti-Spoofing
  Ying Zhang (University of Chinese Academy of Sciences), Xiangyu Zhu (Chinese Academy of Sciences), Ajian Liu (CASIA), Xun Lin (Beihang University), Jun Wan (NLPR), Jing Zhang (Institute of Automation of the Chinese Academy of Sciences), Zhen Lei (NLPR, CASIA, China)
- Attention-based Dual-Branch Network for Micro-Expression Recognition with Global-Local Feature Fusion
  Yupeng Qi (Xinjiang University), Mayire Ibrayim (Xinjiang University), Askar Hamdulla (Xinjiang University)
- Partial Fingerprint Matching via Feature Similarity and Pre-training
  Jiachen Yu (Xidian University), Linkai Niu (Xidian University), Ce Gao (Xidian University), Zhicheng Cao (Xidian University), Heng Zhao (Xidian University)
- Identity-preserving 3D Facial Completion under Skull Constraints
  Longtao Yu (Qingdao University), Junli Zhao (Qingdao University), Fuqing Duan (Beijing Normal University), Chenlei Lv (Shenzhen University), Dantong Li (Cardiff University), Zhenkuan Pan (Qingdao University), Mingquan Zhou (Beijing Normal University)
- Adversarial Robustness in RGB-Skeleton Action Recognition: Leveraging Attention Modality Reweighter
  Chao Liu (Tianjin University), Xin Liu (LUT University), Zitong Yu (Great Bay University), Yonghong Hou (Tianjin University), Huanjing Yue (Tianjin University), Jingyu Yang (Tianjin University)
- Robust Facial Reactions Generation: An Emotion-Aware Framework with Modality Compensation
  Guanyu Hu (Xi'an Jiaotong University), Jie Wei (China Mobile), Siyang Song (University of Cambridge), Dimitrios Kollias (Queen Mary University London), Xinyu Yang (Xi'an Jiaotong University), Zhonglin Sun (Queen Mary University of London), Odysseus Kaloidas (London School of Economics)

Special Session Posters-Only: Responsible AI for Biometrics (AI4BIO)

- TMFD: Two-Stage Meta-learning Feature Disentanglement Framework for DeepFake Detection
  Xiaogang Zhu (Nanchang University); Bo Lin (Nanchang University); Xinan He (Nanchang University); Jianfeng Xu (Nanchang University); FENG DING (Nanchang University)
- Contextual reinforcement learning for unsupervised deformable multimodal medical images registration
  Yang Zheng (Chengdu University of Information Technology); Hongjiang Xian (Chengdu University of Information Technology); Zhikun Shuai (Chengdu University of Information Technology); Xin Wang (University at Albany, SUNY); Shu Hu (Purdue University); Jing Hu (Chengdu University of Information Technology)
- Controllable Privacy in Face Recognition: A Filter-based Approach
  Zohra Rezgui (University of Twente); Nicola Strisciuglio (University of Twente); Raymond Veldhuis (University of Twente)

- DiversiNet: Mitigating Bias in Deep Classification Networks across Sensitive Attributes through Diffusion-Generated Data
  Basudha Pal (Johns Hopkins University); ANIKET ROY (Johns Hopkins University); Ram Prabhakar Kathirvel (Johns Hopkins University); Alice O'Toole (University of Texas at Dallas); Rama Chellappa (Johns Hopkins University)

TBIOM Award Papers

- Best Student Paper Award
- Best Paper Award

15:20 – 15:35 Coffee break

15:35 – 16:35 Special session on Multimodal Human Behavior Understanding and Generation
Organizers: Zitong Yu (Great Bay University, China), Siyang Song (University of Leicester, UK), Weicheng Xie (Shenzhen University, China), Xin Liu (Lappeenranta-Lahti University of Technology, Finland), Linlin Shen (Shenzhen University, China)
Session Chair: Shiqi Yu, Southern University of Science and Technology, Shenzhen

- La-SoftMoE CLIP for Unified Physical-Digital Face Attack Detection
  Hang Zou (China Telecom Corporation Limited Beijing Research Institute), Chenxi Du (Southern University of Science and Technology), Hui Zhang (Tianjin University of Science & Technology), Yuan Zhang (China Telecom), Ajian Liu (NLPR, CASIA), Jun Wan (NLPR, CASIA), Zhen Lei (NLPR, CASIA)
- EditHuman: Fine-Grained Text-Driven Human Video Editing
  Kaiduo Zhang (Institute of Automation, Chinese Academy of Sciences), Muyi Sun (CRIPAC, Institute of Automation, Chinese Academy of Sciences), Junxing Hu (University of Chinese Academy of Sciences; Institute of Automation, Chinese Academy of Sciences), Kunbo Zhang (Institute of Automation, Chinese Academy of Sciences), Zhenan Sun (Institute of Automation, Chinese Academy of Sciences)
- CLIP-Guided Bidirectional Prompt and Semantic Supervision for Dynamic Facial Expression Recognition
  Junliang Zhang (Shenzhen University), Xu Liu (Shenzhen University), Yu Liang (Shenzhen University), Xiaole Xian (Shenzhen University), Weicheng Xie (Shenzhen University), Linlin Shen (Shenzhen University), Siyang Song (University of Cambridge)
- Cross-Modality Gait Recognition: Bridging LiDAR and Camera Modalities for Human Identification
  Rui Wang (Southern University of Science and Technology), Chuanfu Shen (Southern University of Science and Technology), George Huang (The Hong Kong Polytechnic University), Manuel Marín-Jiménez (University of Córdoba), Shiqi Yu (Southern University of Science and Technology)
- DDAP: Dual-Domain Anti-Personalization against Text-to-Image Diffusion Models (Oral)
  Jing Yang (Northwestern Polytechnical University), Runping Xi (Northwestern Polytechnical University), Yingxin Lai (Great Bay University), Xun Lin (Great Bay University), Zitong Yu (Great Bay University)

16:35 – 18:00 Poster Session (Main conference + Special Sessions) + Demos
All conference papers will be presenting posters. Full poster list at the end of the program

18:00 – 20:00 Reception

Tuesday, 17 September 2024

8:00 – 9:00 Breakfast and Registration

9:00 – 9:50 Keynote 2 – AI Risk Management: Enabling trust
Speaker: Elham Tabassi, NIST
Session Chair: Patrick Flynn, University of NotreDame

9:50 – 11:00 Oral session – Fingerprint and Iris Recognition

Session Chair: Davide Maltoni, University of Bologna and Andreas Uhl, University of Salzburg

- Unsupervised Fingerphoto Presentation Attack Detection With Diffusion Models
  *Hailin Li (NTNU); Raghavendra Ramachandra (NTNU, Norway); Mohamed Ragab (Institute for Infocomm Research, A*STAR, Singapore); Soumik Mondal (A*STAR); Yong Kiam Tan (A*STAR); Mi Mi Aung Khin (A*STAR)*
- FDWST: Fingerphoto Deblurring using Wavelet Style Transfer
  David C Keaton (West Virginia University); Amol S Joshi (West Virginia University); Jeremy M Dawson (West Virginia University); Nasser Nasrabadi (West Virginia University)
- Learning a Robust Minutiae Extractor via an Ensemble of Expert Models
  Arhan A Mulay (Michigan State University); Steven A Grosz (Michigan State University); Anil Jain (Michigan State University)
- Privacy-Safe Iris Presentation Attack Detection
  Mahsa Mitcheff (University of Notre Dame); Patrick Tinsley (University of Notre Dame); Adam Czajka (University of Notre Dame)
- LAMDA: Label Agnostic Mixup for Domain Adaptation in Iris Recognition
  Prithviraj Dhar (Meta); Khushi Gupta (Meta Platforms Inc); Rakesh Ranjan (Meta)

11:00 – 11:15 Coffee break

11:15 – 12:15 Special session on Recent Advances in Detecting Manipulation Attacks on Biometric Systems (ADMA-2024)

Organizers: Abhijit Das (BITS Pilani), Raghavendra Ramachandra (NTNU), Naser Damer (Fraunhofer IGD), Vitomir Štruc (University of Ljubljana), Marija Ivanovska (University of Ljubljana)

Session Chair: Raghavendra Ramachandra, NTNU

- Analysis of Backdoor Attacks on Deepfake Detection
  Yuran Qiu (National Institute of Informatics), Huy Hong Nguyen (National Institute of Informatics), Qingyao Liao (National Institute of Informatics)
- Faking Fluent: Unveiling the Achilles' Heel of Multilingual Deepfake Detection
  Rishabh Ranjan (IIT Jodhpur), Bikash Dutta (IIT Jodhpur), Mayank Vatsa (IIT Jodhpur), Richa Singh (IIT Jodhpur)
- Exploring Self-Supervised Vision Transformers for Deepfake Detection: A Comparative Analysis
  Huy Hong Nguyen (National Institute of Informatics), Junichi Yamagishi (National Institute of Informatics), Isao Echizen (National Institute of Informatics)
- Few-Shot Learning: Expanding ID Cards Presentation Attack Detection to Unknown ID Countries
  Juan Tapia (HDA, Germany), Alvaro Sanchez (Facephi), Juan Manuel Espín López (Facephi)

12:15 – 12:45 Poster Spotlight

Session Chair: *Oleg Komogortsev (Texas State University)* and Koichi Ito, Tohoku University

*Poster spotlights for main conference papers which are not giving an oral presentation

- On the Trustworthiness of Face Morphing Attack Detectors
  Rouqaiah H Al-Refai (Paderborn University); Clara Biagi (Paderborn University); Cong Chen (TU Darmstadt); Kiran Raja (NTNU); Raghavendra Ramachandra (NTNU, Norway); Christoph Busch (Hochschule Darmstadt); Philipp Terhörst (Paderborn University)
- Deep Generative Attacks and Countermeasures for Data-Driven Offline Signature Verification
  An Ngo (Bucknell University); Rajesh Kumar (Bucknell University); Phuong Cao (Bucknell University)
- RuleBoost: A Neuro-Symbolic Framework for Robust Deepfake Detection
  Muhammad Anas Raza (Oakland University); Khalid Mahmood Malik (University of Michigan-Flint); Ijaz ul Haq (University of Michigan-Flint)

- Flexible-Modal Deception Detection with Audio-Visual Adapter
  Zhaoxu Li (Nanyang Technological University); Zitong Yu (Great Bay University); Xun Lin (Beihang University); Nithish Muthuchamy Selvaraj (Nanyang Technological University); Xiaobao Guo (Nanyang Technological University); Bingquan Shen (DSO); Wai-Kin Adams Kong (Nanyang Technological University); Alex Kot (Nanyang Technological University)
- Contactless Fingerprint Biometric Anti-Spoofing: An Unsupervised Deep Learning Approach
  Banafsheh Adami (West Virginia University); Mohammadreza Hosseinzadehketilateh (West Virginia University); Nima Karimian (West Virginia University)
- Greedy-DiM: Greedy Algorithms for Unreasonably Effective Face Morphs
  Zander W Blasingame (Clarkson University); Chen Liu (Clarkson University)
- ConvNext-PNet: An interpretable and explainable deep-learning model for deepfakes detection
  Hafsa Ilyas (University of Engineering and Technology Taxila); Ali Javed (University of Engineering and Technology Taxila); Khalid Mahmood Malik (University of Michigan-Flint)
- BLIP-Adapter: Bridging Vision-Language Models with Adapters for Face Anti-spoofing
  Bin Zhang (Institute of Information Engineering, Chinese Academy of Sciences, and also with the School of Cyber Security, University of Chinese Academy of Sciences.); Xiangyu Zhu (Chinese Academy of Sciences); Gao Li (China Mobile Communications Co., Ltd); Xiao-Yu Zhang (Institute of Information Engineering, Chinese Academy of Sciences); Zhen Lei (NLPR, CASIA, China)
- Straight Through Gumbel Softmax Estimator based Bimodal Neural Architecture Search for Audio-Visual Deepfake Detection
  Aravinda Reddy PN (Indian Institute of Technology Kharagpur,West Bengal India); Raghavendra Ramachandra (NTNU, Norway); Krothapalli Sreenivasa Rao (Indian Institute of Technology Kharagpur); Pabitra Mitra (IIT Kharagpur); Vinod Rathod (Indian Institute of Technology Kharagpur)
- Grains of Saliency: Optimizing Saliency-based Training of Biometric Attack Detection Models
  Colton R Crum (University of Notre Dame); Adam Czajka (University of Notre Dame); Samuel J Webster (University of Notre Dame)
- A Novel and Responsible Dataset for Face Presentation Attack Detection on Mobile Devices
  Nathan Ramoly (IDnow); Alain Komaty (Idiap Research Institute); Vedrana Krivokuca (Idiap); Lara Younes (IDnow); Ahmad Montaser Awal (IDNow); Sébastien Marcel (IDIAP)
- V-MAD: Video-based Morphing Attack Detection in operational scenarios
  Guido Borghi (University of Modena and Reggio Emilia); Annalisa Franco (University of Bologna); Nicolò Di Domenico (University of Bologna); Matteo Ferrara (University of Bologna); Davide Maltoni (University of Bologna)
- On the Impact of Face Image Quality on Morphing Attack Detection
  Annalisa Franco (University of Bologna); Matteo Ferrara (University of Bologna); Chengcheng Liu (Xi'an Jiaotong University); Christoph Busch (Norwegian University of Science and Technology); Davide Maltoni (University of Bologna)
- Continuous learning: a feasible solution for continuous authentication using PPG ?
  Benjamin Vignau (Laboratoire d'Informatique Fondamentalle d'Orléans); Patrice Clémente (Laboratoire d'Informatique Fondamentale d'Orléans); Joseph Kawalec (Coeur-Net); Pascal Berthomé (Laboratoire d'Informatique Fondamentale d'Orléans)
- On the influence of regularization techniques on label noise robustness: Self-supervised speaker verification as a use case
  Abderrahim Fathan (Computer Research Institute of Montreal (CRIM), Montreal, Quebec, Canada); Xiaolin Zhu (Independent Researcher); Jahangir Alam (Computer Research Institute of Montreal (CRIM), Montreal (Quebec) Canada)

- On Cropping for Gait Recognition: Does Constant-velocity Locomotion Assumption Improve Gait Recognition Accuracy?
  Tappei Okimura (Osaka University); Xiang Li (Osaka University); Chi Xu (Osaka University); Prof. Yasushi Yagi (Osaka University)*
- Useckit: An Open-Source Deep-Learning Toolkit Bundling State-Of-The-Art Algorithms for Evaluating Behavioral Biometrics
  Jonathan Liebers (University of Duisburg-Essen); Tristan Kley (University of Duisburg-Essen); Carina Liebers (University of Duisburg-Essen); Uwe Gruenefeld (University of Duisburg-Essen); Stefan Schneegass (University of Duisburg-Essen)
- DIOR: Dataset for Indoor-Outdoor Reidentification - Long Range 3D/2D Skeleton Gait Collection Pipeline, Semi-Automated Gait Keypoint Labeling and Baseline Evaluation Methods
  Yuyang Chen (University at Buffalo); Praveen Raj Masilamani (State University of New York at Buffalo); Bhavin Jawade (University at Buffalo); Srirangaraj Setlur (University at Buffalo, SUNY); Karthik Dantu (SUNY Buffalo)
- Long-Range Biometric Identification in Real World Scenarios: A Comprehensive Evaluation Framework Based on Missions
  Deniz Aykac (Oak Ridge National Laboratory); Joel R Brogan (Oak Ridge National Laboratory); Nell Barber (Oak Ridge National Laboratory); Ryan Shivers (Oak Ridge National Laboratory); Robert Zhang (Oak Ridge National Lab); Dallas Sacca (Oak Ridge National Laboratory); Ryan Tipton (Oak Ridge National Laboratory); James Goddard Jr (Oak Ridge National Laboratory); Gavin F Jager (Oak Ridge National Laboratory); Austin Garrett (Oak Ridge National Laboratory); Matt Love (Cadre5); David Cornett (Oak Ridge National Laboratory); David Bolme (Oak Ridge National Labs)
- Identity-Preserving GAN for Cross-Spectral Iris Recognition
  Hannah B Anderson (West Virginia University); Moktari Mostofa (U.S. Food and Drug Administration); Nasser Nasrabadi (West Virginia University); Jeremy M Dawson (West Virginia University)
- Adaptive Deep Iris Feature Extractor at Arbitrary Resolutions
  Yuho Shoji (NEC corporation); Yuka Ogino (Biometrics Research Laboratories, NEC); Takahiro Toizumi (NEC corporation); Atsushi Ito (NEC Corporation)
- Assessing the Reliability of Biometric Authentication on Virtual Reality Devices
  Ketan Kotwal (Idiap Research Institute); Gokhan Ozbulak (Idiap); Sébastien Marcel (IDIAP)

Special Session Posters-Only:- Generative AI for Futuristic Biometrics

- Contextual Cross-Modal Attention for Audio-Visual Deepfake Detection and Localization
  Vinaya Sree Katamneni and Ajita Rattani (University of North Texas)
- Synthetic Forehead Creases Biometric Generation for Reliable User Verification
  Abhishek Tandon, Geetanjali Geetanjali, Gaurav Jaswal, Aditya Nigam and Raghavendra Ramachandra (Indian Institute of Technology Mandi and Norwegian Technological University)
- Enhancing Drug Abuse Face Recognition: A Study on Image Corruption and Restoration
  Hruturaj Mahendra Dhake (IISER Bhopal) and Akshay Aggarwal (IISER Bhopal)
- A Secure and Private Ensemble Matcher Using Multi-vault Obfuscated Templates
  Subhabrata Mukherjee, Babak Poorebrahim Gilkalaye and Reza Derakshani (University of Missouri Kansas)
- Difficulties in Using Synthetic Data for Presentation Attack Detection in Finger Vein Recognition: The Role of Model Fingerprints
  Michael Hafner, Aleksander Radovic, Moritz Langer, Stefan Findenig, Andreas Vorderleitner and Andreas Uhl (University of Salzburg)
- CLIP4Sketch: Enhancing Sketch to Mugshot Matching through Dataset Augmentation Using Diffusion Models

K. Jain, S. A. Grosz, A. Namboodiri and A.K. JainKushal Kumar Jain (IIIT-Hyderabad), Steven Grosz (Michigan State University), Anoop M. Namboodiri (IIIT-Hyderabad), Anil K. Jain (Michigan State University)

Special Session Poster-Only: Face Morphing Attack and Detection Techniques (FMADT)

- Towards Federated Learning for Morphing Attack Detection
  Marta Robledo-Moreno (Universidad Autónoma de Madrid), Guido Borghi (University of Modena and Reggio Emilia), Nicolò Di Domenico (University of Bologna), Annalisa Franco (University of Bologna), Kiran Raja (NTNU), Davide Maltoni (University of Bologna)
- Kin-Wolf: Kinship-established Wolfs in Indirect Synthetic Attack
  Pallabi Ghosh (University of Florida), Sumaiya Shomaji (University of Kansas), Mengdi Zhu (University of Florida), Damon Woodard (University of Florida), Domenic Forte (University of Florida)
- The Impact of Print-Scanning in Heterogeneous Morph Evaluation Scenarios
  Richard Neddo (Clarkson University), Zander Blasingame (Clarkson University), Chen Liu (Clarkson University)

12:45 – 14:00	Lunch
14:00 – 14:40	IAPR SBIA 2024 Award Recipient Talk Session Chair: Arun Ross, Michigan State University
14:40 – 15:20	Poster Spotlight* Session Chair: Akshay Agrawal, IISER Bhopal Ajita Rattani, University of North Texas
15:20 – 15:35	Coffee break
15:35 - 16:35	Special session – Face Morphing Attack and Detection Techniques (FMADT-2024) Organizers: Chen Liu (Clarkson University), Christoph Busch, (HDA/NTNU), Mei Ngan (NIST), Srirangaraj Setlur (University at Buffalo), Jeremy Dawson (West Virginia University) Session Chair: Srirangaraj Setlur, University at Buffalo and Jeremy Dawson, West Virginia University
15:35 - 15:50	Invited Speaker: Mei Ngan, Computer Scientist, NIST

- LADIMO: Face Morph Generation through Biometric Template Inversion with Latent Diffusion
  Marcel Grimmer (NTNU), Christoph Busch (Norwegian University of Science and Technology)
- MorFacing: A Benchmark for Estimation Face Recognition Robustness to Face Morphing Attacks
  Iurii Medvedev (University of Coimbra), Nuno Gonçalves (University of Coimbra)
- Facial Demorphing via Identity Preserving Image Decomposition
  Nitish Shukla (Michigan State University), Arun Ross (Michigan State University)
- Evaluating the Effectiveness of Attack-Agnostic Features for Morphing Attack Detection
  Laurent Colbois (Idiap Research Institute), Sébastien Marcel (IDIAP)

16:35 - 18:00	Poster Session (Main conference + Special Sessions), TBIOM Award Papers and Journal Presentations - *All conference papers will be presenting posters. Full poster list at the end of the program*
18:30 – 21:30	Banquet Dinner

Wednesday, 18 September 2024

8:00 – 9:00	Breakfast and Registration
9:00 – 9:50	Keynote 3 – Amazon One - Technology Behind the Experience Speaker: Rui Zhao, Amazon Session Chair: Nalini Ratha, SUNY Buffalo
9:50 – 11:00	Oral session 3 – Behavioral Analysis Session Chairs: Adam Czajka, University of Notre Dame and Ifeoma Nwogou, SUNY

Buffalo

- DSTER: A Dual-Stream Transformer-based Emotion Recognition Model through Keystrokes Dynamics
  Sicong Chen (Syracuse University); Shruti Rao (Syracuse University); Brijesh Tiwari (Syracuse University); Vir V Phoha (Syracuse University)
- Progressive Self-supervised Representation Learning for 3D Facial Expression Recognition
  Hebeizi Li (Beihang University); Hongyu Yang (Beihang University); Di Huang (Beihang University, China)
- Distillation-guided Representation Learning for Unconstrained Gait Recognition
  Yuxiang Guo (Johns Hopkins University); Siyuan Huang (Johns Hopkins University); Ram Prabhakar Kathirvel (Johns Hopkins University); Chun Pong Lau (City University of Hong Kong); Rama Chellappa (Johns Hopkins University); Cheng Peng (Johns Hopkins University)
- Context Encoded Multi-Modal Attention Network for Detecting Audio Spoofing
  Rishabh Ranjan (IITJ); Mayank Vatsa (IIT Jodhpur); Richa Singh (IIT Jodhpur)
- Establishing a Baseline for Gaze-driven Authentication Performance in VR: A Breadth-First Investigation on a Very Large Dataset
  Dillon J Lohr (Texas State University); Michael Proulx (Meta Reality Labs Research); Oleg Komogortsev (Texas State University)
- Keystroke Dynamics Against Academic Dishonesty in the Age of LLMs
  Debnath Kundu (Indraprastha Institute of Information Technology, Delhi); Atharva Mehta (IIITD); Rajesh Kumar (Bucknell University); Naman Lal (MIDAS Lab, IIIT Delhi); Avinash Anand (IIIT Delhi); Apoorv Singh (MIDAS, IIIT Delhi); Rajiv Ratn Shah (IIIT Delhi)

11:00- 11:15 Coffee Break

11:15 - 12:15 Oral Session 4: Fairness of Biometric Algorithms
Session Chair: Mayank Vatsa, IIT Jodhpur and Ioannis Kakadiaris, University of Houston

- Score Normalization for Demographic Fairness in Face Recognition
  Yu Linghu (University of Zurich); Tiago de Freitas Pereira (ams OSRAM); Christophe Ecabert (Idiap); Sebastien Marcel (Idiap Research Institute); Manuel Günther (University of Zurich)
- Demographic Fairness Transformer for Bias Mitigation in Face Recognition
  Ketan Kotwal (Idiap Research Institute); Sébastien Marcel (IDIAP)
- A Self-Supervised Learning Pipeline for Demographically Fair Facial Attribute Classification
  Sreeraj Ramachandran (Wichita State University); Ajita Rattani (Univ. of North Texas)
- Mitigating the Impact of Attribute Editing on Face Recognition
  Sudipta Banerjee (New York University); Sai Pranaswi Mullangi (New York University); Shruti G Wagle (New York University); Chinmay Hegde (New York University); Nasir Memon (New York University)
- A large-scale study of performance and equity of commercial remote identity verification technologies across demographics
  Kaniz Fatima (Clarkson University); Michael Schuckers (St. Lawrence University); Gerardo Cruz-Ortiz (U.S. General Services Administration); Daqing Hou (Clarkson University); Sandip Purnapatra (Clarkson University); Tiffany Andrews (U.S. General Services Administration); Ambuj Neupane (U.S. General Services Administration); Brandeis Marshall (DataedX); Stephanie Schuckers (Clarkson University)

12:15 - 12:30 IEEE Biometrics Council Best Dissertation Award
Session Chair: Stephanie Schuckers (University of North Carolina at Charlotte)

12:30 - 13:00 Journal Paper Presentations
Session Chair: Daqing Hou, Clarkson University

- Leveraging Diffusion for Strong and High-Quality Face Morphing Attacks (TBIOM Jan'24)
  Zander W Blasingame (Clarkson University); Chen Liu (Clarkson University)
- SSPRA: A Robust Approach to Continuous Authentication Amidst Real-world Adversarial Challenges (TBIOM April'24)

Sicong Chen (Syracuse University); Jingyu Xin (Syracuse University); Vir V Phoha (Syracuse University)

- Analyzing the Impact of Demographic and Operational Variables on 1-to-Many Face ID Search (TBIOM June'24)
  Gabriella Pangelinan (Florida Institute of Technology); Aman Bhatta (University of Notre Dame); Haiyu Wu (University of Notre Dame); Michael C. King (Florida Institute of Technology); Kevin W. Bowyer (University of Notre Dame)

13:00 –14:00 Lunch

14:00 – 14:45 Keynote 4 – Facing the Future: Navigating the Promise and Pitfalls of Automated Face Recognition
Speaker: Dr. Michael King, Florida Institute of Technology
Session Chair: Adam Czajka, University of Notre Dame

14:45 - 15:45 Building Responsible Biometric Systems - Panel Discussion
Panelists: Stephanie Schuckers, UNC-Charlotte; Vishesh Mistry, Tech5; Joel Brogan, Oak Ridge National Laboratories ; Ambuj Neupane, Government Services Administration (GSA); Udo Mahlmeister, CLEAR

15:45 - 16:00 Coffee Break

16:00 - 17:00 Special session on Responsible AI for Biometrics (AI4BIO)
Organizers: Shu Hu (Purdue University), Xin Wang (SUNY Albany)
Session Chair: David Bolme, Oak Ridge National Laboratory Human Analysis

- LabellessFace: Fair Metric Learning for Face Recognition without Attribute Labels
  Tetsushi Ohki (Shizuoka University); Yuya Sato (Shizuoka University); Koichi Ito (Tohoku University); Masakatsu Nishigaki (Shizuoka University)
- Discerning the Chaos: Detecting Adversarial Perturbations while Disentangling Intentional from Unintentional Noises
  Anubhooti Jain (IIT Jodhpur); Susim M Roy (IIT, Jodhpur); Kwanit Gupta (IIT, Jodhpur); Mayank Vatsa (IIT Jodhpur); Richa Singh (IIT Jodhpur)
- A Human-Centered Risk Evaluation of Biometric Systems Using Conjoint Analysis
  Tetsushi Ohki (Shizuoka University); Abe Narishige (Fujitsu); Uchida Hidetsugu (Fujitsu); Shigefumi Yamada (Fujitsu)
- Benchmarking In-the-wild Soft Biometric Attribute Identification
  Manju R A (Indian Institute of Science Education and Research (IISER)); Akshay Agarwal (IISER Bhopal)
- Are Object Recognition Models Effective and Unbiased for Biometric Recognition?
  Vishesh Kumar (IISER, Bhopal); Akshay Agarwal (IISER Bhopal)

17:00 - 17:50 Special Session on Generative AI for Futuristic Biometrics
Organizers: Sudipta Banerjee (NYU), Vitomir Struc (Univ. of Ljubljana), Nasir Memon (NYU) and Kiran Raja (NTNU)
Session Chair: Sudipta Banerjee (NYU) and Kiran Raja (NTNU)

- *GenPalm:Contactless Palmprint Generation with Diffusion Models*
  Steven A Grosz and Anil Jain (Michigan State University)
- *Passersby-Anonymizer: Safeguard the Privacy of Passersby in Social Videos*
  Jingzhe Ma, Haoyu Luo, Zixu Huang, Dongyang Jin, Rui Wang, Johann A. Brifa, Norman Poh and Shiqi Yu (Southern University of Science and Technology and University of Melbourne)
- *ChatGPT Meets Iris Biometrics*
  Parisa Farmanifard and Arun Ross (Michigan State University)
- *Multi-Masked Prompt Learning for Clothing-Change Person Re-identification*
  Kazuki Osamura, Uchida Hidetsugu, Shijie Nie and Abe Narishige (Fujitsu)

17:50 - 18:00 Closing Session

Poster Details on Day 1 and Day 2

Poster Session - Day 1

- Score Normalization for Demographic Fairness in Face Recognition
  Ketan Kotwal (Idiap Research Institute); Sébastien Marcel (IDIAP)
- Demographic Fairness Transformer for Bias Mitigation in Face Recognition
  Ketan Kotwal (Idiap Research Institute); Sébastien Marcel (IDIAP)
- A Self-Supervised Learning Pipeline for Demographically Fair Facial Attribute Classification
  Sreeraj Ramachandran (Wichita State University); Ajita Rattani (Univ. of North Texas)
- Mitigating the Impact of Attribute Editing on Face Recognition
  Sudipta Banerjee (New York University); Sai Pranaswi Mullangi (New York University); Shruti G Wagle (New York University); Chinmay Hegde (New York University); Nasir Memon (New York University)
- A Reference-Based 3D Semantic-Aware Framework for Accurate Local Facial Attribute Editing
  Yu-Kai Huang (Carnegie Mellon University); Yutong Zheng (Carnegie Mellon University); Yen-Shuo Su (Carnegie Mellon University); Anudeepsekhar Bolimera (Carnegie Mellon University); Han Zhang (CMU); Fangyi Chen (Carnegie Mellon University); Marios Savvides (Carnegie Mellon University)
- Longitudinal Evaluation of Child Face Recognition and the Impact of Underlying Age
  Surendra Singh (Clarkson University); Keivan Bahmani (Clarkson University); Stephanie Schuckers (Clarkson University)
- A large-scale study of performance and equity of commercial remote identity verification technologies across demographics
  Kaniz Fatima (Clarkson University); Michael Schuckers (St. Lawrence University); Gerardo Cruz-Ortiz (U.S. General Services Administration); Daqing Hou (Clarkson University); Sandip Purnapatra (Clarkson University); Tiffany Andrews (U.S. General Services Administration); Ambuj Neupane (U.S. General Services Administration); Brandeis Marshall (DataedX); Stephanie Schuckers (Clarkson University)
- Towards Zero-Shot Interpretable Human Recognition: A 2D-3D Registration Framework
  Henrique Jesus (University of Beira Interior); Hugo Proenca (U-Beira Interior)
- A Relative Data Diversity Measure for Synthetic Face Images
  Cancan Zhang (Lehigh University); Chaitanya Roygaga (Lehigh University); Aparna Bharati (Lehigh University)
- Progressive Self-supervised Representation Learning for 3D Facial Expression Recognition
  Hebeizi Li (Beihang University); Hongyu Yang (Beihang University); Di Huang (Beihang University, China)
- Boosting Unconstrained Face Recognition with Targeted Style Adversary
  Mohammad Saeed Ebrahimi Saadabadi (West Virginia University); Sahar Rahimi Malakshan (West Virginia university); Seyed Rasoul Hosseini (West Virginia University); Nasser Nasrabadi (West Virginia University)
- Radial Distortion in Face Images: Detection and Impact
  Wassim Kabbani (NTNU); Tristan Le Pessot (ENSICAEN); Kiran Raja (NTNU); Raghavendra Ramachandra (NTNU, Norway); Christoph Busch (Norwegian University of Science and Technology)
- Evaluating Face Recognition Performance on Synthetic Data: A Comprehensive Analysis of Methodologies and Benchmarks
  Ángela Sánchez-Pérez (Facephi); Enrique Mas-Candela (University of Alicante); Jorge Calvo-Zaragoza (University of Alicante)
- Revisiting Linearization of Spatial Maps in SoTA Face Recognition Backbone
  Aman Bhatta (University of Notre Dame); Haiyu Wu (University of Notre Dame); Kagan Ozturk (University of Notre Dame); Kevin W Bowyer (University of Notre Dame)

- Modality Agnostic Heterogeneous Face Recognition with Switch Style Modulators
  Anjith George (Idiap Research Institute); Sébastien Marcel (IDIAP)
- Face Helps Person Re-Identification: Multi-modality Person Re-Identification Based on Vision-Language Models
  Meng Zhang (Fujitsu Research & Development Center); Rujie Liu (Fujitsu Research & Development Center Co., Ltd.); Abe Narishige (Fujitsu)
- Is Face Super Resolution Truly Pushing the Boundaries of Face Recognition?
  Muskan Dosi (IIT Jodhpur); Udaybhan Rathore (INDIA INSTITUTE OF SCIENCE EDUCATION AND RESEARCH BHOPAL); Chiranjeev Chiranjeev (IIT Jodhpur); Akshay Agarwal (IISER Bhopal); Richa Singh (IIT Jodhpur); Mayank Vatsa (IIT Jodhpur)
- Discovering Interpretable Feature Directions in the Embedding Space of Face Recognition Models
  Richard O Plesh (Clarkson University); Janez Križaj (University of Ljubljana); Keivan Bahmani (Clarkson University); Mahesh Banavar (Clarkson University); Vitomir Struc (University of Ljubljana); Stephanie Schuckers (Clarkson University)
- Latent Fingerprint Matching via Dense Minutia Descriptor
  Zhiyu Pan (Tsinghua University); Yongjie Duan (Tsinghua University, China); Xiongjun Guan (Tsinghua University); Jianjiang Feng (Tsinghua University); Jie Zhou (Tsinghua University)
- Learning a Robust Minutiae Extractor via an Ensemble of Expert Models
  Arhan A Mulay (Michigan State University); Steven A Grosz (Michigan State University); Anil Jain (Michigan State University)
- Unsupervised Fingerphoto Presentation Attack Detection With Diffusion Models
  *Hailin Li (NTNU); Raghavendra Ramachandra (NTNU, Norway); Mohamed Ragab (Institute for Infocomm Research , A*STAR, Singapore); Soumik Mondal (A*STAR); Yong Kiam Tan (A*STAR); Mi Mi Aung Khin (A*STAR)*
- FDWST: Fingerphoto Deblurring using Wavelet Style Transfer
  David C Keaton (West Virginia University); Amol S Joshi (West Virginia University); Jeremy M Dawson (West Virginia University); Nasser Nasrabadi (West Virginia University)
- UFQA: Utility guided Fingerphoto Quality Assessment
  Amol S Joshi (West Virginia University); Ali Dabouei (Carnegie Mellon University); Jeremy M Dawson (West Virginia University); Nasser Nasrabadi (West Virginia University)
- PCR-HIQA: Perceptual Classifiability Ratio for Hand Image Quality Assessment
  Lazaro Janier Gonzalez-Soler (Hochschule Darmstadt); Marcel Grimmer (Hochschule Darmstadt); Daniel Fischer (Hochschule Darmstadt); Christian Rathgeb (Hochschule Darmstadt); Christoph Busch (Hochschule Darmstadt)
- Biometric Authentication Based on Enhanced Remote Photoplethysmography Signal Morphology
  Zhaodong Sun (University of Oulu); Xiaobai Li (Zhejiang University); Jukka Komulainen (University of oulu, finland); Guoying Zhao (University of Oulu)
- Watchlist Challenge: 3rd Open-set Face Detection and Identification
  Furkan Kasım (University of Zurich); Manuel Günther (University of Zurich)
- Human Identification at a Distance: Challenges, Methods and Results on the Competition HID 2024
  Shiqi Yu (Southern University of Science and Technology); Weiming Wu (South China University of Technology); Jiacong Hu (South China University of Technology); Zepeng Wang (Shanghai Jiao Tong University); Jingjie Wang (Beijing Jiaotong University); Meng Zhang (Fujitsu); Runsheng Wang (Huazhong University of Science and Technology); Yunfei Ni (Huazhong University of Science and Technology); Yongzhen Huang (School of Artificial Intelligence, Beijing Normal University); Liang Wang (NLPR, China); Md Atiqur Rahman Ahad (University of East London)
- Face Liveness Detection Competition (LivDet-Face)-2024

Lambert A Igene (Clarkson University); Afzal Hossain (Clarkson University); Stephanie Schuckers (Clarkson University); Mohammad Zahir Uddin Chowdhury (Clarkson University); Humaira Rezaie (Clarkson University); Ayden Rollins (Clarkson University); Jesse Dykes (Clarkson University); Rahul Vijaykumar (Clarkson University); Sebastien Marcel (Idiap Research Institute); Juan E. Tapia (hda); carlos aravena (IDVisionCenter (IDVC)); Daniel Schulz (IDVisionCenter (IDVC)); Nima Karimian (WVU); banafsheh adami (west virginia university); Diogo Nunes (University of Coimbra); João S. Marcos (Instituto de Sistemas e Robótica - Universidade de Coimbra); Nuno Gonçalves (University of Coimbra); Lovro Sikošek (University of Ljubljana); Borut Batagelj; Nima Schei (Hummingbirds AI); David Pabon (Hummingbirds AI); Manuela Tiedemann (DERMALOG Identification Systems GmbH); Vasiliy Pryadchenko (ID R&D Inc); Aleksandr Alenin (ID R&D Inc); Alhasan Alkhaddour (ID R&D); Anton Pimenov (ID RnD); Artem Tregubov (ID R&D); Igor Avdonin (ID R&D); Maxim Lazantsev (ID R&D); Mikhail Pozigun (ID R&D)

- Latent in the Wild Fingerprint Recognition Competition

  Xinwei Liu (Zhejiang Wanli University); Renfang Wang (Zhejiang Wanli University); Tim Oblak (University of Ljubljana); Lara Anžur (University of Ljubljana); Peter Peer (University of Ljubljana); Marko Lange (DERMALOG Identification Systems GmbH); David Stumpf (DERMALOG Identification Systems GmbH); Sven Utcke (DERMALOG Identification Systems GmbH); Evaldas Borcovas (Neurotechnology); Kiran Raja (NTNU)
- First competition on Presentation Attack Detection on ID Card

  Juan E. Tapia (hda); Naser Damer (Fraunhofer Institute for Computer Graphics Research IGD and TU Darmstadt); Christoph Busch (Hochschule Darmstadt); Juan Manuel Espín López (Facephi); Javier Barrachina (Facephi); Alvaro S. Rocamora (Facephi Biometria SA); Krištof Ocvirk (University of Ljubljana); Leon Alessio (University of Ljubljana); Borut Batagelj; Sushrut Patwardhan (Norwegian University of Science and Technology (NTNU)); Raghavendra Mudgalgundurao (NTNU -NBL Lab); Kiran Raja (NTNU); daniel schulz (ID VisionCenter (IDVC)); Carlos Aravena (ID VisionCenter (IDVC))

Special Session: Multimodal Human Behavior Understanding and Generation

- La-SoftMoE CLIP for Unified Physical-Digital Face Attack Detection

  Hang Zou (China Telecom Corporation Limited Beijing Research Institute), Chenxi Du (Southern University of Science and Technology), Hui Zhang (Tianjin University of Science & Technology), Yuan Zhang (China Telecom), Ajian Liu (NLPR, CASIA), Jun Wan (NLPR, CASIA), Zhen Lei (NLPR, CASIA)
- EditHuman: Fine-Grained Text-Driven Human Video Editing

  Kaiduo Zhang (Institute of Automation, Chinese Academy of Sciences), Muyi Sun (CRIPAC, Institute of Automation, Chinese Academy of Sciences), Junxing Hu (University of Chinese Academy of Sciences; Institute of Automation, Chinese Academy of Sciences), Kunbo Zhang (Institute of Automation, Chinese Academy of Sciences), Zhenan Sun (Institute of Automation, Chinese Academy of Sciences)
- CLIP-Guided Bidirectional Prompt and Semantic Supervision for Dynamic Facial Expression Recognition

  Junliang Zhang (Shenzhen University), Xu Liu (Shenzhen University), Yu Liang (Shenzhen University), Xiaole Xian (Shenzhen University), Weicheng Xie (Shenzhen University), Linlin Shen (Shenzhen University), Siyang Song (University of Cambridge)
- Cross-Modality Gait Recognition: Bridging LiDAR and Camera Modalities for Human Identification

  Rui Wang (Southern University of Science and Technology), Chuanfu Shen (Southern University of Science and Technology), George Huang (The Hong Kong Polytechnic University), Manuel Marín-Jiménez (University of Córdoba), Shiqi Yu (Southern University of Science and Technology)
- DDAP: Dual-Domain Anti-Personalization against Text-to-Image Diffusion Models

  Jing Yang (Northwestern Polytechnical University), Runping Xi (Northwestern Polytechnical University), Yingxin Lai (Great Bay University), Xun Lin (Great Bay University), Zitong Yu (Great Bay University)
- CPL-CLIP: Compound Prompt Learning for Flexible-Modal Face Anti-Spoofing

Ying Zhang (University of Chinese Academy of Sciences), Xiangyu Zhu (Chinese Academy of Sciences), Ajian Liu (CASIA), Xun Lin (Beihang University), Jun Wan (NLPR), Jing Zhang (Institute of Automation of the Chinese Academy of Sciences), Zhen Lei (NLPR, CASIA, China)

- Attention-based Dual-Branch Network for Micro-Expression Recognition with Global-Local Feature Fusion
  Yupeng Qi (Xinjiang University), Mayire Ibrayim (Xinjiang University), Askar Hamdulla (Xinjiang University)
- Partial Fingerprint Matching via Feature Similarity and Pre-training
  Jiachen Yu (Xidian University), Linkai Niu (Xidian University), Ce Gao (Xidian University), Zhicheng Cao (Xidian University), Heng Zhao (Xidian University)
- Identity-preserving 3D Facial Completion under Skull Constraints
  Longtao Yu (Qingdao University), Junli Zhao (Qingdao University), Fuqing Duan (Beijing Normal University), Chenlei Lv (Shenzhen University), Dantong Li (Cardiff University), Zhenkuan Pan (Qingdao University), Mingquan Zhou (Beijing Normal University)
- Adversarial Robustness in RGB-Skeleton Action Recognition: Leveraging Attention Modality Reweighter
  Chao Liu (Tianjin University), Xin Liu (LUT University), Zitong Yu (Great Bay University), Yonghong Hou (Tianjin University), Huanjing Yue (Tianjin University), Jingyu Yang (Tianjin University)
- Robust Facial Reactions Generation: An Emotion-Aware Framework with Modality Compensation
  Guanyu Hu (Xi'an Jiaotong University), Jie Wei (China Mobile), Siyang Song (University of Cambridge), Dimitrios Kollias (Queen Mary University London), Xinyu Yang (Xi'an Jiaotong University), Zhonglin Sun (Queen Mary University of London), Odysseus Kaloidas (London School of Economics)

Special Session - Recognition at Long Range and from High Altitude (LRR-2024)

- From Data to Insights: A Covariate Analysis of the IARPA BRIAR Dataset for Multimodal Biometric Recognition Algorithms at Altitude and Range
  David Bolme (Oak Ridge National Labs); Deniz Aykac (Oak Ridge National Laboratory); Ryan Shivers (Oak Ridge National Laboratory); Joel R Brogan (Oak Ridge National Laboratory); Nell Barber (Oak Ridge National Laboratory); Robert Zhang (Oak Ridge National Lab); Laura Davies (Oak Ridge National Laboratory); David Cornett (Oak Ridge National Laboratory)
- Enhancing Face Recognition in Low-Quality Images Based on Restoration and 3D Multiview Generation
  Xiang Zhang (State University of New York at Binghamton); Xiaotian Li (Binghamton University); Taoyue Wang (State University of New York at Binghamton); Lijun Yin (State University of New York at Binghamton)
- HyperGait: A Video-based Multitask Network for Gait Recognition and Human Attribute Estimation at Range and Altitude
  Zhaoyang Wang (Johns Hopkins University); Jiang Liu (Johns Hopkins University); Ram Prabhakar Kathirvel (Johns Hopkins University); Chun Pong Lau (City University of Hong Kong); Rama Chellappa (Johns Hopkins University)
- Template-based Multi-Domain Face Recognition
  Anirudh Nanduri (University of Maryland); Rama Chellappa (Johns Hopkins University)
- Quo Vadis RankList-based System in Face Recognition?
  Xinyi Zhang (University of Zürich); Manuel Günther (University of Zurich)

Special Session - Responsible AI for Biometrics (AI4BIO)

- LabellessFace: Fair Metric Learning for Face Recognition without Attribute Labels
  Tetsushi Ohki (Shizuoka University); Yuya Sato (Shizuoka University); Koichi Ito (Tohoku University); Masakatsu Nishigaki (Shizuoka University)
- Discerning the Chaos: Detecting Adversarial Perturbations while Disentangling Intentional from Unintentional Noises

Anubhooti Jain (IIT Jodhpur); Susim M Roy (IIT, Jodhpur); Kwanit Gupta (IIT, Jodhpur); Mayank Vatsa (IIT Jodhpur); Richa Singh (IIT Jodhpur)

- A Human-Centered Risk Evaluation of Biometric Systems Using Conjoint Analysis
  Tetsushi Ohki (Shizuoka University); Abe Narishige (Fujitsu); Uchida Hidetsugu (Fujitsu); Shigefumi Yamada (Fujitsu)
- Are Object Recognition Models Effective and Unbiased for Biometric Recognition?
  Vishesh Kumar (IISER, Bhopal); Akshay Agarwal (IISER Bhopal)
- TMFD: Two-Stage Meta-learning Feature Disentanglement Framework for DeepFake Detection
  Xiaogang Zhu (Nanchang University); Bo Lin (Nanchang University); Xinan He (Nanchang University); Jianfeng Xu (Nanchang University); FENG DING (Nanchang University)
- Contextual reinforcement learning for unsupervised deformable multimodal medical images registration
  Yang Zheng (Chengdu University of Information Technology); Hongjiang Xian (Chengdu University of Information Technology); Zhikun Shuai (Chengdu University of Information Technology); Xin Wang (University at Albany, SUNY); Shu Hu (Purdue University); Jing Hu (Chengdu University of Information Technology)
- Benchmarking In-the-wild Soft Biometric Attribute Identification
  Manju R A (Indian Institute of Science Education and Research (IISER)); Akshay Agarwal (IISER Bhopal)
- Controllable Privacy in Face Recognition: A Filter-based Approach
  Zohra Rezgui (University of Twente); Nicola Strisciuglio (University of Twente); Raymond Veldhuis (University of Twente)
- DiversiNet: Mitigating Bias in Deep Classification Networks across Sensitive Attributes through Diffusion-Generated Data
  Basudha Pal (Johns Hopkins University); ANIKET ROY (Johns Hopkins University); Ram Prabhakar Kathirvel (Johns Hopkins University); Alice O'Toole (University of Texas at Dallas); Rama Chellappa (Johns Hopkins University)
- Controllable Privacy in Face Recognition: A Filter-based Approach
  Zohra Rezgui (University of Twente); Nicola Strisciuglio (University of Twente); Raymond Veldhuis (University of Twente)

TBIOM Award Papers

- Best Student Paper Award
- Best Paper Award

Journal Session Papers

- Leveraging Diffusion for Strong and High-Quality Face Morphing Attacks (TBIOM Jan'24)
  Zander W Blasingame (Clarkson University); Chen Liu (Clarkson University)
- SSPRA: A Robust Approach to Continuous Authentication Amidst Real-world Adversarial Challenges (TBIOM April'24)
  Sicong Chen (Syracuse University); Jingyu Xin (Syracuse University); Vir V Phoha (Syracuse University)
- Analyzing the Impact of Demographic and Operational Variables on 1-to-Many Face ID Search (TBIOM June'24)
  Aman Bhatta (University of Notre Dame)

Demo

- DeepFake-O-Meter v2.0: An Open Platform for DeepFake Detection
  Chengzhe Sun and Siwei Lyu (University at Buffalo)
- Demorphing: Extracting Component Faces from Facial Morphs
  Nitish Shukla and Arun Ross (Michigan State University)

Poster Session - Day 2

- Context Encoded Multi-Modal Attention Network for Detecting Audio Spoofing
  Rishabh Ranjan (IITJ); Mayank Vatsa (IIT Jodhpur); Richa Singh (IIT Jodhpur)
- Privacy-Safe Iris Presentation Attack Detection
  Mahsa Mitcheff (University of Notre Dame); Patrick Tinsley (University of Notre Dame); Adam Czajka (University of Notre Dame)
- Video Anomaly Detection in Overlapping Data: The More Cameras, the Better?
  SILAS SANTIAGO LOPES PEREIRA (IFCE); José Everardo B Maia (UECE); Hugo Proenca (U-Beira Interior)
- On the Trustworthiness of Face Morphing Attack Detectors
  Rouqaiah H Al-Refai (Paderborn University); Clara Biagi (Paderborn University); Cong Chen (TU Darmstadt); Kiran Raja (NTNU); Raghavendra Ramachandra (NTNU, Norway); Christoph Busch (Hochschule Darmstadt); Philipp Terhörst (Paderborn University)
- Deep Generative Attacks and Countermeasures for Data-Driven Offline Signature Verification
  An Ngo (Bucknell University); Rajesh Kumar (Bucknell University); Phuong Cao (Bucknell University)
- RuleBoost: A Neuro-Symbolic Framework for Robust Deepfake Detection
  Muhammad Anas Raza (Oakland University); Khalid Mahmood Malik (University of Michigan-Flint); Ijaz ul Haq (University of Michigan-Flint)
- Flexible-Modal Deception Detection with Audio-Visual Adapter
  Zhaoxu Li (Nanyang Technological University); Zitong Yu (Great Bay University); Xun Lin (Beihang University); Nithish Muthuchamy Selvaraj (Nanyang Technological University); Xiaobao Guo (Nanyang Technological University); Bingquan Shen (DSO); Wai-Kin Adams Kong (Nanyang Technological University); Alex Kot (Nanyang Technological University)
- Contactless Fingerprint Biometric Anti-Spoofing: An Unsupervised Deep Learning Approach
  Banafsheh Adami (West Virginia University); Mohammadreza Hosseinzadehketilateh (West Virginia University); Nima Karimian (West Virginia University)
- Greedy-DiM: Greedy Algorithms for Unreasonably Effective Face Morphs
  Zander W Blasingame (Clarkson University); Chen Liu (Clarkson University)
- ConvNext-PNet: An interpretable and explainable deep-learning model for deepfakes detection
  Hafsa Ilyas (University of Engineering and Technology Taxila); Ali Javed (University of Engineering and Technology Taxila); Khalid Mahmood Malik (University of Michigan-Flint)
- BLIP-Adapter: Bridging Vision-Language Models with Adapters for Face Anti-spoofing
  Bin Zhang (Institute of Information Engineering, Chinese Academy of Sciences, and also with the School of Cyber Security, University of Chinese Academy of Sciences.); Xiangyu Zhu (Chinese Academy of Sciences); Gao Li (China Mobile Communications Co., Ltd); Xiao-Yu Zhang (Institute of Information Engineering, Chinese Academy of Sciences); Zhen Lei (NLPR, CASIA, China)
- Straight Through Gumbel Softmax Estimator based Bimodal Neural Architecture Search for Audio-Visual Deepfake Detection
  Aravinda Reddy PN (Indian Institute of Technology Kharagpur,West Bengal India); Raghavendra Ramachandra (NTNU, Norway); Krothapalli Sreenivasa Rao (Indian Institute of Technology Kharagpur); Pabitra Mitra (IIT Kharagpur); Vinod Rathod (Indian Institute of Technology Kharagpur)
- Grains of Saliency: Optimizing Saliency-based Training of Biometric Attack Detection Models
  Colton R Crum (University of Notre Dame); Adam Czajka (University of Notre Dame); Samuel J Webster (University of Notre Dame)
- A Novel and Responsible Dataset for Face Presentation Attack Detection on Mobile Devices
  Nathan Ramoly (IDnow); Alain Komaty (Idiap Research Institute); Vedrana Krivokuca (Idiap); Lara Younes (IDnow); Ahmad Montaser Awal (IDNow); Sébastien Marcel (IDIAP)
- V-MAD: Video-based Morphing Attack Detection in operational scenarios

Guido Borghi (University of Modena and Reggio Emilia); Annalisa Franco (University of Bologna); Nicolò Di Domenico (University of Bologna); Matteo Ferrara (University of Bologna); Davide Maltoni (University of Bologna)

- On the Impact of Face Image Quality on Morphing Attack Detection
  Annalisa Franco (University of Bologna); Matteo Ferrara (University of Bologna); Chengcheng Liu (Xi'an Jiaotong University); Christoph Busch (Norwegian University of Science and Technology); Davide Maltoni (University of Bologna)
- Occlusion-aware Cross-Attention Fusion for Video-based Occluded Cloth-Changing Person Re-Identification
  Vuong D Nguyen (University of Houston); Pranav Mantini (University of Houston); Shishir Shah (University of Houston)
- Keystroke Dynamics Against Academic Dishonesty in the Age of LLMs
  Debnath Kundu (Indraprastha Institute of Information Technology, Delhi); Atharva Mehta (IIITD); Rajesh Kumar (Bucknell University); Naman Lal (MIDAS Lab, IIIT Delhi); Avinash Anand (IIIT Delhi); Apoorv Singh (MIDAS, IIIT Delhi); Rajiv Ratn Shah (IIIT Delhi)
- Establishing a Baseline for Gaze-driven Authentication Performance in VR: A Breadth-First Investigation on a Very Large Dataset
  Dillon J Lohr (Texas State University); Michael Proulx (Meta Reality Labs Research); Oleg Komogortsev (Texas State University)
- Distillation-guided Representation Learning for Unconstrained Gait Recognition
  Yuxiang Guo (Johns Hopkins University); Siyuan Huang (Johns Hopkins University); Ram Prabhakar Kathirvel (Johns Hopkins University); Chun Pong Lau (City University of Hong Kong); Rama Chellappa (Johns Hopkins University); Cheng Peng (Johns Hopkins University)
- DSTER: A Dual-Stream Transformer-based Emotion Recognition Model through Keystrokes Dynamics
  Sicong Chen (Syracuse University); Shruti Rao (Syracuse University); Brijesh Tiwari (Syracuse University); Vir V Phoha (Syracuse, University)
- Continuous learning: a feasible solution for continuous authentication using PPG ?
  Benjamin Vignau (Laboratoire d'Informatique Fondamentalle d'Orléans); Patrice Clémente (Laboratoire d'Informatique Fondamentale d'Orléans); Joseph Kawalec (Coeur-Net); Pascal Berthomé (Laboratoire d'Informatique Fondamentale d'Orléans)
- On the influence of regularization techniques on label noise robustness: Self-supervised speaker verification as a use case
  Abderrahim Fathan (Computer Research Institute of Montreal (CRIM), Montreal, Quebec, Canada); Xiaolin Zhu (Independent Researcher); Jahangir Alam (Computer Research Institute of Montreal (CRIM), Montreal (Quebec) Canada)
- On Cropping for Gait Recognition: Does Constant-velocity Locomotion Assumption Improve Gait Recognition Accuracy?
  Tappei Okimura (Osaka University); Xiang Li (Osaka University); Chi Xu (Osaka University); Prof. Yasushi Yagi (Osaka University)
- Useckit: An Open-Source Deep-Learning Toolkit Bundling State-Of-The-Art Algorithms for Evaluating Behavioral Biometrics
  Jonathan Liebers (University of Duisburg-Essen); Tristan Kley (University of Duisburg-Essen); Carina Liebers (University of Duisburg-Essen); Uwe Gruenefeld (University of Duisburg-Essen); Stefan Schneegass (University of Duisburg-Essen)
- DIOR: Dataset for Indoor-Outdoor Reidentification - Long Range 3D/2D Skeleton Gait Collection Pipeline, Semi-Automated Gait Keypoint Labeling and Baseline Evaluation Methods
  Yuyang Chen (University at Buffalo); Praveen Raj Masilamani (State University of New York at Buffalo); Bhavin Jawade (University at Buffalo); Srirangaraj Setlur (University at Buffalo, SUNY); Karthik Dantu (SUNY Buffalo)

- Long-Range Biometric Identification in Real World Scenarios: A Comprehensive Evaluation Framework Based on Missions
  Deniz Aykac (Oak Ridge National Laboratory); Joel R Brogan (Oak Ridge National Laboratory); Nell Barber (Oak Ridge National Laboratory); Ryan Shivers (Oak Ridge National Laboratory); Robert Zhang (Oak Ridge National Lab); Dallas Sacca (Oak Ridge National Laboratory); Ryan Tipton (Oak Ridge National Laboratory); James Goddard Jr (Oak Ridge National Laboratory); Gavin F Jager (Oak Ridge National Laboratory); Austin Garrett (Oak Ridge National Laboratory); Matt Love (Cadre5); David Cornett (Oak Ridge National Laboratory); David Bolme (Oak Ridge National Labs)
- LAMDA: Label Agnostic Mixup for Domain Adaptation in Iris Recognition
  Prithviraj Dhar (Meta); Khushi Gupta (Meta Platforms Inc); Rakesh Ranjan (Meta)
- Adaptive Deep Iris Feature Extractor at Arbitrary Resolutions
  Yuho Shoji (NEC corporation); Yuka Ogino (Biometrics Research Laboratories, NEC); Takahiro Toizumi (NEC corporation); Atsushi Ito (NEC Corporation)
- Identity-Preserving GAN for Cross-Spectral Iris Recognition
  Hannah B Anderson (West Virginia University); Moktari Mostofa (U.S. Food and Drug Administration); Nasser Nasrabadi (West Virginia University); Jeremy M Dawson (West Virginia University)
- Assessing the Reliability of Biometric Authentication on Virtual Reality Devices
  Ketan Kotwal (Idiap Research Institute); Gokhan Ozbulak (Idiap); Sébastien Marcel (IDIAP)
- Motion Magnified 3-D Residual-in-Dense Network for DeepFake Detection
  Aman Mehra (IIIT-Delhi); Akshay Agarwal (IIIT-Delhi); Mayank Vatsa (IIT Jodhpur); Richa Singh (IIT Jodhpur)
- On the Relation Between ROC and CMC
  Raymond N. J. Veldhuis (Norwegian University of Science and Technology, Gjøvik, Norway); Kiran Raja (Norwegian University of Science and Technology, Gjøvik, Norway)

Special Session - Generative AI for Futuristic Biometrics

- GenPalm:Contactless Palmprint Generation with Diffusion Models
  A Grosz and Anil Jain (Michigan State University)
- Passersby-Anonymizer: Safeguard the Privacy of Passersby in Social Videos
  Jingzhe Ma, Haoyu Luo, Zixu Huang, Dongyang Jin, Rui Wang, Johann A. Brifa, Norman Poh and Shiqi Yu (Southern University of Science and Technology and University of Melbourne)
- ChatGPT Meets Iris Biometrics
  Parisa Farmanifard and Arun Ross (Michigan State University)
- Multi-Masked Prompt Learning for Clothing-Change Person Re-identification
  Kazuki Osamura, Uchida Hidetsugu, Shijie Nie and Abe Narishige (Fujitsu)
- Contextual Cross-Modal Attention for Audio-Visual Deepfake Detection and Localization
  Vinaya Sree Katamneni and Ajita Rattani (University of North Texas)
- Synthetic Forehead Creases Biometric Generation for Reliable User Verification
  Abhishek Tandon, Geetanjali Geetanjali, Gaurav Jaswal, Aditya Nigam and Raghavendra Ramachandra (Indian Institute of Technology Mandi and Norwegian Technological University)
- Enhancing Drug Abuse Face Recognition: A Study on Image Corruption and Restoration
  Hruturaj Mahendra Dhake and Akshay Aggarwal
- A Secure and Private Ensemble Matcher Using Multi-vault Obfuscated Templates
  Subhabrata Mukherjee, Babak Poorebrahim Gilkalaye and Reza Derakshani (University of Missouri Kansas)
- Difficulties in Using Synthetic Data for Presentation Attack Detection in Finger Vein Recognition: The Role of Model Fingerprints
  Michael Hafner, Aleksander Radovic, Moritz Langer, Stefan Findenig, Andreas Vorderleitner and Andreas Uhl (University of Salzburg)

- CLIP4Sketch: Enhancing Sketch to Mugshot Matching through Dataset Augmentation Using Diffusion Models
  K. Jain, S. A. Grosz, A. Namboodiri and A.K. JainKushal Kumar Jain (IIIT-Hyderabad), Steven Grosz (Michigan State University), Anoop M. Namboodiri (IIIT-Hyderabad), Anil K. Jain (Michigan State University)

Special Session - Face Morphing Attack and Detection Techniques (FMADT)

- LADIMO: Face Morph Generation through Biometric Template Inversion with Latent Diffusion
  Marcel Grimmer (NTNU), Christoph Busch (Norwegian University of Science and Technology)
- Towards Federated Learning for Morphing Attack Detection
  Marta Robledo-Moreno (Universidad Autónoma de Madrid), Guido Borghi (University of Modena and Reggio Emilia), Nicolò Di Domenico (University of Bologna), Annalisa Franco (University of Bologna), Kiran Raja (NTNU), Davide Maltoni (University of Bologna)
- MorFacing: A Benchmark for Estimation Face Recognition Robustness to Face Morphing Attacks
  Iurii Medvedev (University of Coimbra), Nuno Gonçalves (University of Coimbra)
- Kin-Wolf: Kinship-established Wolfs in Indirect Synthetic Attack
  Pallabi Ghosh (University of Florida), Sumaiya Shomaji (University of Kansas), Mengdi Zhu (University of Florida), Damon Woodard (University of Florida), Domenic Forte (University of Florida)
- Evaluating the Effectiveness of Attack-Agnostic Features for Morphing Attack Detection
  Laurent Colbois (Idiap Research Institute), Sébastien Marcel (IDIAP)
- Facial Demorphing via Identity Preserving Image Decomposition
  Nitish Shukla (Michigan State University), Arun Ross (Michigan State University)
- The Impact of Print-Scanning in Heterogeneous Morph Evaluation Scenarios
  Richard Neddo (Clarkson University), Zander Blasingame (Clarkson University), Chen Liu (Clarkson University)

Special Session - Recent Advances in Detecting Manipulation Attacks on Biometric Systems (ADMA-2024)

- Analysis of Backdoor Attacks on Deepfake Detection
  Yuran Qiu (National Institute of Informatics), Huy Hong Nguyen (National Institute of Informatics), Qingyao Liao (National Institute of Informatics)
- Faking Fluent: Unveiling the Achilles' Heel of Multilingual Deepfake Detection
  Rishabh Ranjan (IIT Jodhpur), Bikash Dutta (IIT Jodhpur), Mayank Vatsa (IIT Jodhpur), Richa Singh (IIT Jodhpur)
- Generalized Deepfakes Detection with Reconstructed-Blended Images and Multi-scale Feature Reconstruction Network
  YuYang Sun (The University of Tokyo), Huy Nguyen (National Institute of Informatics), Chun-Shien Lu (Academia Sinica) , ZhiYong Zhang (Sun Yat-sen University) , Lu Sun (South China University of Technology), Isao Echizen (National Institute of Informatics)
- Exploring Self-Supervised Vision Transformers for Deepfake Detection: A Comparative Analysis
  Huy Hong Nguyen (National Institute of Informatics), Junichi Yamagishi (National Institute of Informatics), Isao Echizen (National Institute of Informatics)
- Few-Shot Learning: Expanding ID Cards Presentation Attack Detection to Unknown ID Countries
  Juan Tapia (HDA, Germany), Alvaro Sanchez (Facephi), Juan Manuel Espín López (Facephi)