

IEEE MIPR'23, August 30-September 1, 2023, Singapore

Program-at-a-glance

August 30	August 31	September 1
9:00-10:30 Welcome & Tutorial 1	9:00-10:30 Welcome & Keynote 1	9:00-10:30 Welcome & Keynote 2
10:30-11:00 Coffee Break	10:30-11:00 Coffee Break	10:30-11:00 Coffee Break
11:00-12:30 Tutorial 2	11:00-12:40 Oral Session: Multimedia Retrieval and Knowledge Distillation	11:00-12:40 Oral Session: Algorithmic Fairness & Novel Applications
12:30-13:30 Lunch Break	12:40-13:40 Lunch Break	12:40-13:40 Lunch Break
13:30-14:30 Workshop 1: MCAUIS	13:40-14:55 Oral Session: Machine Learning for Multimedia 1	13:40-14:55 Oral Session: Multimedia Forensics & Deepfakes
14:30-15:00 Coffee Break	14:55-15:25 Coffee Break	14:55-15:25 Coffee Break
15:00-16:00 Workshop 2: BDH	15:25-17:05 Oral Session: Machine Learning for Multimedia 2	15:25-16:40 Oral Session: Multimedia Authentication, Encryption & Streaming
		16:40-17:00 Demo Session
17:30-21:00 Cocktail Reception	17:15 Bus-pickup for Banquet (18:00-21:00)	17:00-17:15 Closing Remarks & Best Paper Award Announcement

Detailed Program

August 30, 2023	
9:00-17:00	Registration Venue: Outside Meeting Room 20 (COM3 -02-59)
August 30, 2023, 9:00-10:30	
Session: Tutorial 1: Deep Learning-Based Approaches for Steel Surface Inspection Systems Speaker: Fityanul Akhyar, Telkom University, Indonesia Venue: Meeting Room 20 COM 3 Level 2	
9:00-10:30	Tutorial 1
10:30-11:00	Coffee Break
August 30, 2023, 11:00-12:30	
Session: Tutorial 2: Learning for Multimedia Processing: From Sparse Modeling to Physics-Driven Deep Neural Networks Speakers: Bihan Wen, Nanyang Technological University, Singapore Saiprasad Ravishankar, Michigan State University, USA Venue: Meeting Room 20 COM 3 Level 2	
11:00-12:30	Tutorial 2
12:30-13:30	Lunch Break
August 30, 2023, 13:30-14:30	
Session: Workshop 1: MCAUIS: Multimedia Computing for Automated Urban Intelligent Systems Chair: Amitesh Rajput (Birla Institute of Technology and Science, Pilani, India) Venue: Meeting Room 20 COM 3 Level 2	
13:30-13:35	Welcome from the Chair
13:35-14:00	Attention-enabled Deep Neural Network for Enhancing UAV-Captured Pavement Imagery in Poor Visibility Chaitanya Kapoor (Birla Institute of Technology and Science, Pilani, India); Aadith Warriar (Birla Institute of Technology and Science, Pilani, India); Mohit Singh (Birla Institute of Technology and Science, Pilani, India); Pratik Narang (Birla Institute of Technology and Science, Pilani, India); Harish Puppala (SRM University, India); R Srinivas

	(Birla Institute of Technology and Science, Pilani, India); Ajit Pratap Singh (Birla Institute of Technology and Science, Pilani, India)
14:00-14:25	Computer Vision and IoT-enabled Robotic Platform for Automated Crack Detection in Bridges Navneeth P. Sagar (Birla Institute of Technology and Science, Pilani, India); Harkrit Singh Nagpal (Birla Institute of Technology and Science, Pilani, India); Amit Umesh Chougule (Birla Institute of Technology and Science, Pilani, India); Vinay Chamola (Birla Institute of Technology and Science, Pilani, India); Biplab Sikdar (National University of Singapore, Singapore)
14:25-14:30	MCAUIS Workshop Closing Remarks
14:30-15:00	Coffee Break
August 30, 2023, 15:00-16:00 Session: Workshop 2: BDH: Big Data in Healthcare Chair: Gaurav Bhatnagar (IIT, Jodhpur, India) Venue: Meeting Room 20 COM 3 Level 2	
15:00-15:05	Welcome from the Chair
15:05-15:30	Toward Transparent Sequence Models with Model-Based Tree Markov Model Chan Hsu (National Sun Yat-sen University, Taiwan); Wei-Chun Huang (Kaohsiung Veterans General Hospital, Taiwan); Jun-Ting Wu (National Sun Yat-sen University, Taiwan); Chih-Yuan Li (National Sun Yat-sen University, Taiwan); Yihuang Kang (National Sun Yat-sen University, Taiwan)
15:30-15:55	Prediction of Muscle Power in Elderly Using Functional Screening Data Vivek Vijay (Indian Institute of Technology, Jodhpur, India); Brajesh Shukla (GLA University, India); Sandeep Kumar Yadav (Indian Institute of Technology, Jodhpur, India); Pankaj Yadav (Indian Institute of Technology, Jodhpur, India)
15:55-16:00	BDH Workshop Closing Remarks

August 30, 2023, 17:30-21:00 Session: Cocktail Reception for Conference Participants Venue: Della & Seng Gee Guild Hall, NUSS Kent Ridge, level 1	
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August 31, 2023	
8:30-17:00	Registration Venue: Outside Della & Seng Gee Guild Hall, NUSS Kent Ridge, level 1
August 31, 2023, 9:00-10:30 Session: Keynote 1 Chair: Roger Zimmermann (National University of Singapore, Singapore) Venue: Della & Seng Gee Guild Hall, NUSS Kent Ridge, level 1	
9:00-9:10	Welcome from the Conference Chair
9:10-10:30	Keynote Speaker: Hermann Hellwagner (University of Klagenfurt, Austria) Title: Advances in Edge-Based and In-Network Media Processing for Adaptive Video Streaming
10:30-11:00	Coffee Break
August 31, 2023, 11:00-12:40 Session: Multimedia Retrieval and Knowledge Distillation Chair: Pradeep K. Atrey (University at Albany, State University of New York, USA) Venue: Della & Seng Gee Guild Hall, NUSS Kent Ridge, level 1	

11:00-11:25	Bridging the Capacity Gap for Online Knowledge Distillation Maorong Wang (The University of Tokyo, Japan); Hao Yu (Boston University, USA); Ling Xiao (The university of Tokyo, Japan); Toshihiko Yamasaki (The University of Tokyo, Japan)
11:25-11:50	Visual Sentiment Analysis by Distillation of Instance-based Sentiment Vectors Kyoko Sudo (Toho University, Japan); Masaki Saito (Toho University, Japan)
11:50-12:15	Towards Robust and Truly Large-Scale Audio--Sheet Music Retrieval Luis Carvalho (Johannes Kepler University, Austria); Gerhard Widmer (Johannes Kepler University, Austria)
12:15-12:40	Visual Passage Score Aggregation for Image Retrieval Takahiro Komamizu (Nagoya University, Japan)
12:40-13:40	Lunch Break
August 31, 2023, 13:40-14:55 Session: Machine/Deep Learning for Multimedia 1 Chair: Yin Yifang, Institute for Infocomm Research, A*STAR, Singapore Venue: Della & Seng Gee Guild Hall, NUSS Kent Ridge, level 1	
13:40-14:05	Atmospheric Turbulence Correction via Variational Deep Diffusion Xijun Wang (Northwestern University, USA); Santiago López-Tapia (Northwestern University, USA); Aggelos Katsaggelos (Northwestern University, USA)
14:05-14:30	Transformer Based Image-Text Consistency Analysis for Infographic Articles Yuwei Chen (University at Albany, State University of New York, USA); Ming-Ching Chang (University at Albany, State University of New York, USA)
14:30-14:55	Improving Detection of Diabetic Retinopathy in Low-resolution Images via Latent diffusion Jasper Kyle Catapang (University of Birmingham, UK); Darby Santiago (University of the Philippines, Manila, Philippines); Iris Thiele Isip-Tan (University of the Philippines, Manila, Philippines)
14:55-15:25	Coffee Break
August 31, 2023, 15:25-17:05 Session: Machine/Deep Learning for Multimedia 2 Chair: Ming-Ching Chang (University at Albany, State University of New York, USA) Venue: Della & Seng Gee Guild Hall, NUSS Kent Ridge, level 1	
15:25-15:50	Adaptive Auto-Cinematography in Open Worlds Zixiao Yu (Michigan State University, USA); Xinyi Wu (Northwestern University, USA); Haohong Wang (TCL Research America, USA); Aggelos Katsaggelos (Northwestern University, USA); Jian Ren (Michigan State University, USA)
15:50-16:15	Dual-stream Multi-Modal Graph Neural Network for Few-Shot Learning Wenli Zhang (Tsinghua University, China); Luping Shi (Tsinghua University, China)
16:15-16:40	Two-Stage Dual Augmentation with CLIP for Improved Text-to-Sketch Synthesis Zhenfei Zhang (University at Albany, State University of New York, USA); Ming-Ching Chang (University at Albany, State University of New York, USA)
16:40-17:05	Message Passing Neural Network based Light Field Image Compression Bach Nguyen (Shibaura Institute of Technology, Japan); Chanh Minh Tran (Shibaura Institute of Technology, Japan); Tho Nguyen Duc (Shibaura Institute of Technology, Japan); Tan Xuan Phan (Shibaura Institute of Technology, Japan); Eiji Kamioka (Shibaura Institute of Technology, Japan)

August 31, 2023, 18:00-21:00
Session: Banquet
Venue: Haw Par Villa
Note: Chartered Bus will leave at 17:15 from NUSS Guild house to Haw Par Villa. Bus will leave at 9pm to Buona Vista MRT Station.

September 1, 2023	
September 1, 2023, 9:00-10:30 Session: Keynote 2 Chair: Xiaoli Li (Institute for Infocomm Research, A*STAR, Singapore) Venue: Della & Seng Gee Guild Hall, NUSS Kent Ridge, level 1	
9:00-9:10	Welcome from the Conference Chair
9:10-10:30	Keynote Speaker: Abdulmotaleb El Saddik (University of Ottawa, Canada) Title: The Metaverse: AI-Powered Universe of Persistent Digital Twins
10:30-11:00	Coffee Break
September 1, 2023, 11:00-12:40 Session: Algorithmic Fairness & Novel Applications Chair: Gaurav Bhatnagar (Indian Institute of Technology, Jodhpur, India) Venue: Della & Seng Gee Guild Hall, NUSS Kent Ridge, level 1	
11:00-11:25	Learning Fashion Compatibility with Color Distortion Prediction Ling Xiao (The University of Tokyo, Japan); Xiaofeng Zhang (Institute of Engineering Thermophysics, University of Chinese Academy of Sciences, China); Toshihiko Yamasaki (The University of Tokyo, Japan)
11:25-11:50	Toward Fairness Across Skin Tones in Dermatological Image Processing Vivek K. Singh (Rutgers University, USA); Abdulaziz A Almuzaini (Rutgers University, USA); Srujan Dendukuri (Rutgers University, USA)
11:50-12:15	Toward a More Robust Fine-grained Fashion Retrieval Ling Xiao (The University of Tokyo, Japan); Xiaofeng Zhang (Institute of Engineering Thermophysics, University of Chinese Academy of Sciences, China); Toshihiko Yamasaki (The University of Tokyo, Japan)
12:15-12:40	A Multi-stage Bias Reduction Framework for Eye Gaze Detection Omkar N. Kulkarni (University at Albany, State University of New York, USA), Shashank Arora (University at Albany, State University of New York, USA), Aryan Mishra (Westview High School, Portland, USA), Vivek K. Singh (Rutgers University, USA), Pradeep K. Atrey (University at Albany, State University of New York, USA)
12:40-13:40	Lunch Break
September 1, 2023, 13:40-14:55 Session: Multimedia Forensics & Deepfakes Chair: Haoliang Li (City University of Hong Kong) Venue: Della & Seng Gee Guild Hall, NUSS Kent Ridge, level 1	
13:40-14:05	Enhancing General Face Forgery Detection via Vision Transformer with Low-Rank Adaptation Chenqi Kong (City University of Hong Kong); Haoliang Li (City University of Hong Kong); Shiqi Wang (City University of Hong Kong)
14:05-14:30	No Matter Small or Big Lip Motion: DeepFake Detection with Regularized Feature Learning on Semantic Information Zhiyuan Yang (Nanyang Technological University, Singapore); Lap-Pui Chau (The Hong Kong Polytechnic University); Bihan Wen (Nanyang Technological University, Singapore)
14:30-14:55	Attacking Identity Semantics in DeepFakes via Deep Feature Fusion Bing Fan (Nanchang University, China); Zihan Jiang (Nanchang University, China); Shu Hu (Carnegie Mellon University, USA); Feng Ding (Nanchang University, China)
14:55-15:25	Coffee Break
September 1, 2023, 15:25-16:40 Session: Multimedia Authentication, Encryption & Streaming	

Chair: Chih-Fan Hsu (Inventec Corp., Taiwan) Venue: Della & Seng Gee Guild Hall, NUSS Kent Ridge, level 1	
15:25-15:50	A Modified Logistic Map Inspired Image Encryption Scheme Yashmita Sangwan (Indian Institute of Technology, Jodhpur, India); Vishnu Bharadwaj Bayari Parkala (Indian Institute of Technology, Jodhpur, India); Gaurav Bhatnagar (Indian Institute of Technology, Jodhpur, India)
15:50-16:15	Region-aware Photo Assurance System for Image Authentication Ke-Han Li (National Taiwan University, Taiwan); Chih-Fan Hsu (Inventec Corp., Taiwan); Feng-Hao Liu (Florida Atlantic University, USA); Ming-Ching Chang (University at Albany, State University of New York, USA); Shao-Yi Chien (National Taiwan University, Taiwan); Wei-Chao Chen (Inventec Corp., Taiwan)
16:15-16:40	iStream: A Flexible Container-Based Testbed for Multimedia Streaming Navid Akbari (University of Calgary, Canada); Reza Hedayati Majdabadi (University of Calgary, Canada); Mohd Akram Ansari (University of Calgary, Canada); Mea Wang (University of Calgary, Canada); Diwakar Krishnamurthy (University of Calgary, Canada)
September 1, 2023, 16:40-17:00 Session: Demos Chair: Na Zheng (National University of Singapore, Singapore) Venue: Della & Seng Gee Guild Hall, NUSs Kent Ridge, level 1	
16:40-16:50	EasyColor: Interactive Colorization by User's Edge-Masks and Strokes Zeyu Zhou (Nanjing University of Science and Technology, China); Rong Jin (Nanjing University of Science and Technology, China); Longquan Dai (Nanjing University of Science and Technology, China); Xiaoyu Du (Nanjing University of Science and Technology, China)
16:50-17:00	Bayesian Belief Network Analysis on Self-Driving Cars Vivek Verma (Infinity Tech Group Inc., USA)
September 1, 2023, 17:00-17:15 Session: Closing Remarks & Best Paper Award Chair: Pradeep K. Atrey (University at Albany, State University of New York, USA) Venue: Della & Seng Gee Guild Hall, NUSS Kent Ridge, level 1	
17:00-17:10	Closing Remarks from the Conference Chair
17:10-17:15	Best Paper Award Announcement