## MIPR 2019 Program Details

## March 28

March 28	Registration Room: Champagne Foyer
8:00 ~ 18:00	Registration

March 28	Session: Keynote 1
	Room: Champagne I
	Session Chair: Rainer Lienhart (Universitat Augsburg, Germany)
8:20 ~ 8:30	Welcome from conference chair
8:30 ~ 9:30	Keynote Speaker: John Apostolopoulos (Cisco)
	Title: Machine Learning for Networked Multimedia Systems

March 28	Session: Innovation Forum 1 - The Latest Advances in Computer Vision & Its Applications Room: Champagne I Moderator: Ting Yu (Google Cloud AI)
10:00 ~ 12:00	Speakers: Mei Han (PingAn Technology) Shuxue Quan (OPPO US Research) Lu Jiang (Google Cloud AI) Dashan Gao (12 Sigma Technologies)

March 28	Session: Multimedia and Vision 1
	Room: Champagne II
	Session Chair: Fengqing Zhu (Purdue University)
10:00 ~ 10:20	Video Object Counting Dataset
	Onalenna J Makhura (University of Botswana); John Woods (University of Essex)
10:20 ~ 10:40	A Photo Forensics-Based Prototype to Combat Revenge Porn
	Manoranjan Mohanty (University of Auckland, New Zealand); Ming Zhang (The
	University of Auckland); Giovanni Russello (The University of Auckland)
10:40 ~ 11:00	Using Amino Acids of Images for Identifying Pornographic Images
	Vijay Naidu (Auckland University of Technology ); Ajit Narayanan (Auckland
	University of Technology); Manoranjan Mohanty (University of Auckland, New
	Zealand)
11:00 ~ 11:20	FDDB-360: Face Detection in 360-degree Fisheye Images

	Jianglin Fu (Simon Fraser University); Saeed Ranjbar Alvar (Simon Fraser University); Ivan Bajic (Simon Fraser University); Rodney G Vaughan (Simon Fraser University)
11:20 ~ 11:40	CNN Based Touch Interaction Detection For Infant Speech Development Qingshuang Chen (PURDUE UNIVERSITY); Rana Abu-Zhaya (Purdue University); Amanda Seidl (PURDUE UNIVERSITY); Fengging Zhu (Purdue University)
11:40 ~ 12:00	Current Picture Referencing in Versatile Video Coding Xiaozhong Xu (Tencent America); Xiang Li (Tencent America); Shan Liu (Tencent America)

March 28	Session: Multimedia Retrieval 1
March 28	
	Room: Champagne III
	Session Chair: Ramazan Aygun (The University of Alabama in Huntsville)
10:00 ~ 10:20	ES-ESens: Detection of Event Sentences based on Evaluation of the Explicitness
	and Significance of Information
	Haihua Xie (Peking University Founder IT Group); Xiaoqing Lyu (Peking University);
	Xuefei Chen (Peking University Founder IT Group); Jinle Tong (Peking University
	Founder IT Group); Zhi Tang (Peking University)
10:20 ~ 10:40	Temporal Querying of Faces in Videos Using Bitmap Index
	Ramazan Aygun (The University of Alabama in Huntsville); Buddha R Shrestha (The
	University of Alabama in Huntsville); Haeyong Chung (The University of Alabama
	in Huntsville)
10:40 ~ 11:00	Context-Aware 3D Visualization of the Dynamic Environment
10.40 11.00	context Aware 3D visualization of the Dynamic Environment
	Sheikh Radiah (University Munich); Darius Burschka (Technical University Munich)
11:00 ~ 11:20	Bi-directional Re-ranking for Person Re-identification
11.00 11.20	Bi-unectional Re-ranking for Person Re-luentification
	Vision Chang (Dalian University) Versin Chi (Dalian University) Versusi Meng
	Yiqian Chang (Peking University); Yemin Shi (Peking University); Yaowei Wang
	(Beijing Institute of Technology); Yonghong Tian (PKU)
11:20 ~ 11:40	Thumbnail Image Selection for VOD Services
	Chun-Ning Tsao (National Taiwan University); Jing-Kai Lou (KKStream Limited);
	Homer Chen (National Taiwan University)
11:40 ~ 12:00	Color-Assisted Local Feature Pipeline for Three-Dimensional Object Retrieval
	Yang Lei (HP Labs); Jian Fan (HP Labs); Jerry Liu (HP Labs)
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March 28	Session: Innovation Forum 2 - The Future of NLP/Audio Technology Room: Champagne I Moderator: Sunil Bharitkar (HP Labs)
13:30 ~ 15:30	Speakers: Phil Hilmes (Lab126)

Vivek Kumar (Dolby Labs)
Panayiotis G. Georgiou (University of Southern California)
Kyu Jeong Han (JD AI Research)

March 28	Session: Machine Learning/Deep Learning/Data Mining 1
	Room: Champagne II
	Session Chair: Fengqing Zhu (Purdue University)
13:30 ~ 13:50	Splicing Detection And Localization In Satellite Imagery Using Conditional GANs
	Emily Bartusiak (Purdue University); Sri Yarlagadda (Purdue University); David
	Güera (Purdue University); Paolo Bestagini (Politecnico di Milano); Stefano Tubaro
	(Politecnico di Milano, Italy); Fengqing Zhu (Purdue University); Edward Delp
	(Purdue University)
13:50 ~ 14:10	Integrated detection and tracking for ADAS using deep neural network
	Mingjie Liu (Inha University)
14:10 ~ 14:30	Toward Fusing Domain Knowledge with Generative Adversarial Networks to
	Improve Supervised Learning for Medical Diagnoses
	Fu-Chieh Chang (HTC Research & Healthcare); Jocelyn Chang (Johns Hopkins
	University); Chun-Nan Chou (HTC Research); Edward Y Chang (HTC Research &
	Healthcare)
14:30 ~ 14:50	Machine Learning on Biomedical Images: Interactive Learning, Transfer Learning,
	Class Imbalance, and Beyond
	Naimul Mefraz Khan (Ryerson University); Nabila Abraham (Ryerson University );
	Marcia Hon (Ryerson University); Ling Guan (Ryerson University)
14:50 ~ 15:10	Automatic Generation of Chinese Couplets with Attention Based Encoder-Decoder
	Model
	Shengqiong Yuan (Wuhan University of Technology); Luo Zhong (Wuhan
	University of Technology, China); Lin Li (Wuhan University of Technology); Rui
	Zhang (Wuhan University of Technology)
15:10 ~ 15:30	Adversarial learning for Content-based Image Retrieval
	LING HUANG (Zhejiang University of Technology); Cong Bai (Zhejiang University of
	Technology); Yijuan Lu (Texas State University); Shengyong Chen (Zhejiang
	University of Technology); Qi Tian (Huawei Noah's Ark Lab)

March 28	Session: Novel Applications 1
	Room: Champagne III
	Session Chair: Jianquan Liu (NEC Corporation)
13:30 ~ 13:50	Detecting Speech Impairments from Temporal Visual Facial Features of Aphasia Patients

	Moritz Einfalt (University of Augsburg); Rainer Lienhart (Universitat Augsburg,
	Germany); Matthew Lee (FXPAL); Lyndon Kennedy (FXPAL)
13:50 ~ 14:10	LibROSA based assessment tool for Music Information Retrieval systems
	Preeth Raguraman (National Institute of Technology Tiruchirappalli); R. Mohan
	(NIT Trichy); Midhula Vijayan (National Institute of Technology, Tiruchirappalli)
14:10 ~ 14:30	Classification of Sleep Videos Using Deep Learning
	Jeehyun Choe (Purdue University); A. J. Schwichtenberg (Purdue University);
	Edward Delp (Purdue University)
14:30 ~ 14:50	A Novel Framework for 3D-2D Vertebra Matching
	Hanchao Yu (UIUC); Yang Fu (UIUC); Haichao Yu (UIUC); Yunchao Wei (UIUC);
	Xinchao Wang (Stevens Institute of Technology); Jianbo Jiao (UIUC); Matthew
	Bramlet (UIUC); Thenkurussi Kesavadas (UIUC); Honghui Shi (IBM Research);
	Zhangyang Wang (Texas A&M University); Bihan Wen (University of Illinois at
	Urbana-Champaign); Thomas Huang (University of Illinois at Urbana Champaign)
14:50 ~ 15:10	A Fast and Robust Re-Identification Method for Large Video Data
	Satoshi Yoshida (NEC corporation); Shoji Nishimura (NEC Corporation); Jianquan
	Liu (NEC Corporation)
15:10 ~ 15:30	On the Origin, Proliferation and Tone of Fake News
	Shivam Parikh (University at Albany,SUNY); Vikram Patil (University at Albany);
	Pradeep K. Atrey (University at Albany, SUNY)

March 28	Session: Innovation Forum 3 - Towards Autonomous Driving Room: Champagne I Moderator: Yu Huang (Singulato Inc.)
16:00 ~ 18:00	Speakers: Anurag Gangul (Plus.AI) Hao Jiang (Microsoft Cloud & AI) Junwei Bao (Innovusion) Shiyu Song (Baidu) Chang Yuan (Foresight AI)

March 28	Session: Multimedia and Vision 2
	Room: Champagne II
	Session Chair: Jerry Gibson (UC Santa Barbara)
16:00 ~ 16:20	M3S-NIR: Multi-Modal Multi-Scale Noise-Insensitive Ranking for RGB-T Saliency Detection
	Zhengzheng Tu (Anhui University); Tian Xia (Anhui University); Chenglong Li (Anhui University); Yijuan Lu (Texas State University); Jin Tang (Anhui University)
16:20 ~ 16:40	Recurrent Neural Networks for Person Re-identification Revisited

	Jean-Baptiste Boin (Stanford University); Andre Araujo (Google); Bernd Girod
	(Stanford University)
16:40 ~ 17:00	Data-specific Adaptive Threshold for Face Recognition and Authentication
	Hsin-Rung Chou (Academia Sinica); Jia-Hong Lee (Academia Sinica); Yi-Ming Chan (Academia Sinica); Chu-Song Chen (Academia Sinica)
17:00 ~ 17:20	Characterization of Mutual Information Loss in Pyramidal Image Processing
	Structures
	Jerry Gibson (UC Santa Barbara ECE); Hoontaek Oh (UC Santa Barbara ECE)
17:20 ~ 17:40	Efficient Multi-Person Hierarchical 3D Pose Estimation for Autonomous Driving
	Renshu Gu (University of Washington); Gaoang Wang (University of Washington);
	Jenq-Neng Hwang (University of WA)
17:40 ~ 18:00	Person Re-identification for Estimating Bus Passenger Flow
	Yutaka Shimada (Saitama University); Motoki Takagi (Tokyo University of Science);
	Yukinobu Taniguchi (Tokyo University of Science)
	Tukinobu Tanguchi (Tokyo oniversity of Science)

Session: Content Understanding and Analytics 1
Room: Champagne III
Session Chair: Anustup Chaudhury (Dolby Laboratories)
Minimum Audible Movement Angle in Virtual Auditory Environment: Effect of
Stimulus Frequency
Yiyuan Han (Southern University of Science and Technology); Fei Chen (Southern
University of Science and Technology)
Combining Quality Metrics for improved HDR Image Quality Assessment
Anustup Chaudhury (Dolby Laboratories); Scott Daly (Dolby Laboratories)
A Large-scale Analysis of Regional Tendency of Twitter Photos Using Only Image
Features
Tetsuya Nagano (Univ. Electro-Comm., Tokyo); Takumi Ege (Univ. Electro-Comm.,
Tokyo); Wataru Shimoda (The University of Electro-Communications, Tokyo); Keiji
Yanai (Univ. Electro-Comm., Tokyo)
Saliency Priority Using Bottom-up Features for Static and Dynamic Scenes Without
Cognitive Bias
Jila Hosseinkhani (Carleton University), Chris Joslin (Carleton University)
Self-Reproducing Video Frame Interpolation
Jiajun Deng (University of Science and Technology of China); Haichao Yu (UIUC);
Zhangyang Wang (TAMU); Xinchao Wang (Stevens Institute of Technology);
Thomas Huang (UIUC)
A Multi-label Multimodal Deep Learning Framework for Imbalanced Data
Classification

	Samira Pouyanfar (Florida International University); Tianyi Wang (Florida
	International University); Shu-Ching Chen (Florida International University)

March 28	Session: Welcome Reception
	Room: Seven's Restaurant
19:00 ~ 21:00	Welcome Reception

## March 29

March 29	Registration Room: Champagne Foyer
8:00 ~ 18:00	Registration

March 29	Session: Keynote 2 Room: Champagne I Session Chair: Mohan Kankanhalli (National University of Singapore Singapore)
8:30 ~ 9:30	Keynote Speaker: Danny Lange (Unity Technologies) Title: On the Road to Artificial General Intelligence

March 29	Session: Innovation Forum 4 - Next-Generation Video & Display Technology Room: Champagne I Moderator: Scott Daly (Dolby Labs)
10:00 ~ 12:00	Speakers: Mylene Farias (University of Brasília) Tao Chen (Dolby Labs) Marina Zannoli (Facebook Reality Labs) Aldo Badano (FDA) Ronan Boitard (MTT) Ben Bodner (LG Electronics)

March 29	Session: Multimedia and Vision 3 Room: Champagne II
	Session Chair: Changhong Fu (Nanjing University of Science and Technology)
	session chair. changhong ra (ranjing oniversity of science and recimology)
10:00 ~ 10:20	Building-Scale Virtual Reality: Another Way to Extend Real World
	Katashi Nagao (Nagoya University); Menglong Yang (Nagoya University); Xu Cao
	(Nagoya University); Yusuke Miyakawa (Nagoya University)
10:20 ~ 10:40	Gaussian Markov Random Fields-Based Features for Volumetric Texture Segmentation

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	Yasseen Almakady (University of Southampton); Sasan Mahmoodi (University of
	Southampton); Michael Bennett (University Hospital Southampton NHS
	Foundation Trust)
10:40 ~ 11:00	Blind Image Quality Prediction for Object Detection
	Lingchao Kong (University of Cincinnati); Ademola Ikusan (University of Cincinnati); Rui Dai (University of Cincinnati); Jingyi Zhu (University of Cincinnati)
11:00 ~ 11:20	Using Convolutional Neural Networks to Detect and Extract Retinal Blood Vessels in Fundoscopic Images
	Benjamin Standfield (Virginia State University); Wei-Bang Chen (Virginia State University); Yujuan Wang (State Key Laboratory of Ophthalmology, Zhongshan Ophthalmic Center, Sun Yat-sen University); Yongjin Lu (Virginia State University); Ahmed F. Abdelzaher (Virginia State University); Xiaoliang Wang (Virginia State University); Xin-Guang Yang (Henan Normal University)
11:20 ~ 11:40	Non-contact Heart Rate Monitoring for Intensive Exercise based on Singular Spectrum Analysis
	Kai Xie (Nanjing University of Science and Technology); Changhong Fu (Nanjing University of Science and Technology); Huaiguo Liang (Nanjing University of Science and Technology); Hong Hong (Nanjing University of Science and Technology); Xiaohua Zhu (Nanjing University of Science and Technology)
11:40 ~ 12:00	Automatic Tour Video Summarization Focusing on Scene Change for Advance Touristic Experience
Oral	
presentation	Yuki Kanaya (Nara Institute of Science and Technology); Shogo Kawanaka ( Nara
poster paper	Institute of Science and Technology); Hirohiko Suwa (Nara Institute of Science and
	Technology); Yutaka Arakawa (Nara Institute of Science and Technology); Keiichi Yasumoto (Nara Institute of Science and Technology, Japan)

March 29	Session: Multimedia Retrieval 2
	Room: Champagne III
	Session Chair: Yijuan Lu (Texas State University)
10:00 ~ 10:20	Supervised Deep Hashing for Cover Song Detection
	Zhaoqin Ye (International Computer Science Institute); Jaeyoung Choi (ICSI, TU
	Delft); Gerald Friedland (UC Berkeley, Lawrence Livermore National Laboratory)
10:20 ~ 10:40	Feature Enhancement in Medical Ultrasound Videos Using Multifractal and
	Adaptive Histogram Equalization Techniques
	Prerna Singh (University of Canterbury); Ramakrishnan Mukundan (University of
	Canterbury); Rex de (Canterbury District Health Board)
10:40 ~ 11:00	Self-Guided Hash Coding for Large-Scale Person Re-Identification
	Xiaobin Liu (Peking University); Shiliang Zhang (Beijing University); Ming Yang
	(horizon-robotics)
11:00 ~ 11:20	Stalker Retrieval on Surveillance Videos using Spatio-Temporal Coappearance

	Jianquan Liu (NEC Corporation); Ka Wai Yung (University of Pittsburgh); Shoji Nishimura (NEC Corporation); Takuya Araki (NEC)
11:20 ~ 11:40	Yet Another Framework for Tweet Entity Linking (YAFTEL)
	Hyoil Han (Illinois State University); Pattamon Viriyothai (Self-employed); SeungJin Lim (Merrimack College); Dominik Lameter (Illinois State University); Benjamin Mussel (Illinois State University)
11:40 ~ 12:00	Sketch/Image-Based 3D Scene Retrieval: Benchmark, Algorithm, Evaluation
	Juefei Yuan (University of Southern Mississippi); Hameed Abdul-Rashid (University of Southern Mississippi); Bo Li (University of Southern Mississippi); Yijuan Lu (Texas State University)

March 29	Session: Innovation Forum 5 - The Imminent Trends of Video Compression Room: Champagne I Moderator: Shan Liu (Tencent)
13:30 ~ 15:30	Speakers: Jim Bankoski (Google) Benjamin Bross (Heinrich Hertz Institute) Scott Janus (Intel) Ali Tabatabai (Sony)

March 29	Session: Machine Learning/Deep Learning/Data Mining 2
	Room: Champagne II
	Session Chair: Yumi Iwashita (NASA Jet Propulsion Laboratory, Japan)
13:30 ~ 13:50	Soccer Video Summarization Using Deep Learning
	Rockson Agyeman (Yeungnam University); Rafiq Muhammad (Yeungnam University); Gyu Sang Choi (Yeungnam University)
13:50 ~ 14:10	Image-Based Estimation of Real Food Size for Accurate Food Calorie Estimation
	Takumi Ege (Univ. Electro-Comm., Tokyo); Yoshikazu Ando(Univ. Electro-Comm.,
	Tokyo); Ryosuke Tanno(Univ. Electro-Comm., Tokyo); Wataru Shimoda(Univ.
	Electro-Comm., Tokyo); Keiji Yanai(Univ. Electro-Comm., Tokyo)
14:10 ~ 14:30	TU-Net and TDeepLab: Deep Learning-based Terrain Classification Robust to
	Illumination Changes, Combining Visible and Thermal Imagery
	Yumi Iwashita (NASA Jet Propulsion Laboratory, Japan); Kazuto Nakashima (Kyushu
	University); Adrian Stoica (NASA Jet Propulsion Laboratory); Ryo Kurazume
	(Kyushu University)
14:30 ~ 14:50	Efficient Incremental Training for Deep Convolutional Neural Networks
	Yudong Tao (University of Miami, USA); Yuexuan Tu (University of Miami); Mei-
	Ling Shyu (University of Miami)
14:50 ~ 15:10	Singing Voice Conversion With Non-Parallel Data

	Xin Chen (Snap Research, Snap Inc); Wei Chu (Snap Research, Snap Inc); Jinxi Guo (University of California, Los Angeles); Ning Xu (Snap Research, Snap Inc)
15:10 ~ 15:30	Very Long Term Field of View Prediction for 360-degree Video Streaming
	Chenge Li (New York University); Weixi Zhang (New York University); Yong Liu (NYU); Yao Wang (New York University)

March 29	Session: Novel Applications 2
	Room: Champagne III
	Session Chair: Qin Wang (New York Institute of Technology - Nanjing Site)
12.20 ~ 12.50	
13:30 ~ 13:50	Automated Athlete Haptic Training System for Soccer Sprinting
	Fedwa Lamaarti (University of Ottawa); Faisal Arafsha (University of Ottawa);
	Basim Hafidh (University of Ottawa); Abdulmotaleb El Saddik (University of
	Ottawa)
13:50 ~ 14:10	Video-based Prediction for Header-height Control of a Combine Harvester
	He Liu (Purdue University); Amy Reibman (Purdue University); Aaron Ault (Purdue
	University); James Krogmeier (Purdue University)
14:10 ~ 14:30	Asynchronous localization of ground objects using a 2-UAV system
	Ju Wang (Virginia State University); Sagar Pandit (Virginia State University); Ahmed
	F. Abdelzaher (Virginia State University); Melissa Watts (Virginia State University)
14:30 ~ 14:50	3D Reconstruction of Tubular Structure Using Radially Deployed Projections
	Mahmut Unan (University of Alabama at Birmingham); Junmo An (University of
	Houston); Ioannis Seimenis (Democritus University of Thrace (DUTH)); Dipan Shah
	(Houston Methodist DeBakey Heart & Vascular Center); Nikolaos Tsekos
	(University of Houston)
14:50 ~ 15:10	Game Theoretical Multi-User Computation Offloading for Mobile-Edge Cloud
	Computing
	An Qin (Nanjing University of Posts and Telecommunications); Chengcheng Cai
	(Nanjing Tech University); Qin Wang (New York Institute of Technology - Nanjing
	Site); Yiyang Ni (Jiangsu Second Normal University); Hongbo Zhu (Nanjing
	University of Posts and Telecommunications)
15:10 ~ 15:30	Efficient and QoS-aware Drone Coordination for Simultaneous Environment
	Coverage
	Petra Mazdin (Universität Klagenfurt); Bernhard Rinner (Klagenfurt University)

March 29	Session: Innovation Forum 6 - Video for VR/AR
	Room: Champagne I
	Moderator: Haricharan Lakshman (Facebook)
16:00 ~ 18:00	Speakers:

Adam Gaige (JauntXR)
Sam Tsai (Facebook)
Shlomo Dubnov (UCSD)
Phil Chou (Google)

March 29	Session: Data Management 1
	Room: Champagne II
	Session Chair: Pradeep K. Atrey (University at Albany, SUNY)
16:00 ~ 16:20	
10:00 10:20	Multimedia Data Offloading in Resource-limited Multi-hop Vehicular Networks
	Flischeth & Bentley (Air Force Becearch Leberstery), Jecoph Synropent (Air Force
	Elizabeth S Bentley (Air Force Research Laboratory); Joseph Suprenant (Air Force
10.00 × 10.10	Research Laboratory); Stephen Reichhart (Air Force Research Laboratory)
16:20 ~ 16:40	Distributed Layer-Partitioned Training for Privacy-Preserved Deep Learning
	Chun-Hsien Yu (HTC Research); Chun-Nan Chou (HTC Research); Emily Chang (HTC
	Research)
16:40 ~ 17:00	SecureCSearch: Secure Searching in PDF over Untrusted Cloud Servers
	Meet Shah (GlobalFoundaries); Manoranjan Mohanty (University of Auckland, New
	Zealand); Pradeep K. Atrey (University at Albany, SUNY)
17:00 ~ 17:20	Threat Intelligence Sharing Community: A countermeasure against Advanced
	Persistent Threat
	Sonali Chandel (New York Institute of Technology); Mengdi Yan (New York Institute
	of Technology); Shaojun Chen (New York Institute of Technology); Huan Jiang (New
	York Institute of Technology); Tian-yi Ni (New York Institute of Technology)
17:20 ~ 17:40	FIS: Facial Information Segmentation for Video Redaction
	Bo Chen (University of Illinois at Urbana-Champaign); Klara Nahrstedt (University
	of Illinois at Urbana-Champaign)
17:40 ~ 18:00	Fine-granularity Ownership Identification of Multimedia Content Components: a
	Mechanism for Smart Media Streaming
	Luntian Mou (Beijing University of Technology); Hao Liu (Beijing University of
	Technology); Hao Ji (Beijing University of Technology); Tiejun Huang (Peking
	University); Wen Gao (Peking University)

March 29	Session: Demo and Poster paper
16:00 ~ 18:00	Room: Champagne Foyer
	Demo Session Chair: Ramazan Aygun (The University of Alabama in Huntsville)
	Poster Session Chair: Hyoil Han (Illinois State University)
Demo paper	Visual Decoding of Hidden Watermark in Trained Deep Neural Network
	Shigeyuki Sakazawa (Osaka Institute of Technology);Emi Myodo (KDDI R&D
	Research); Kazuyuki Tasaka (KDDI Research, Inc.); Hiromasa Yanagihara (KDDI
	Research, Inc.)

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Demo paper	Fingerprint generation and presentation attack detection using deep neural networks
	Hakil Kim (Inha University); Xuenan Cui (Inha University); Man-Gyu Kim (Inha University); Binh T. H. Nguyen (Inha University)
Demo paper	Semantic Interaction with Human Motion using Query-Based Recombinant Video Synthesis
	Vignesh Gokul (University of California San Diego); Ganesh Prasanna Balakrishnan (Worcester Polytechnic Institute); Tammuz Dubnov (Zuzor); Shlomo Dubnov (UC San Diego)
Demo paper	3D Convolutional Neural Network Fusion Model for Lung Nodule Detection
	Yejin Chen (Huiyinghuiying Inc.); wenxiu shi (Huiyihuiying Inc.); Peng Zhang (Huiying Medical Technology Co. Ltd); Wanshu Zhang (Huiying Medical Technology Co. Ltd); Zhihui Cao (Huiying Medical Technology Co. Ltd); Songzeng Fan (Australian National University)
Poster paper	Performance Comparison of Chunk/Peer Scheduling Algorithms of Peer-to-Peer Streaming Systems
	Nasru Minallah, (University of Engineering and Technology Peshawar); Syed Saddam Hussain Shah, (University of Engineering and Technology Peshawar); Naina Said, (University of Engineering and Technology Peshawar Pakistan); Waleed khan, (University of Engineering and Technology Peshawra Pakistan); Aysha Nayab, (University of Engineering and Technology Peshawar Pakistan)
Poster paper	Implementation of Augmented Reality Globe in Teaching-Learning Environment Hovhannes Mayilyan (YoungZone Culture Shanghai Co.Ltd)
Poster paper	Automatic Tour Video Summarization Focusing on Scene Change for Advance Touristic Experience
	Yuki Kanaya (Nara Institute of Science and Technology); Shogo Kawanaka (Nara Institute of Science and Technology); Hirohiko Suwa (Nara Institute of Science and Technology); Yutaka Arakawa (Nara Institute of Science and Technology); Keiichi Yasumoto (Nara Institute of Science and Technology, Japan)

March 29	Session: TCMC Information Session Room: Champagne III
16:00 ~ 18:00	TCMC Information Session

March 29	Session: Banquet
	Room: Champagne I
19:00 ~ 21:00	Banquet

## March 30

March 30	Registration Room: Champagne Foyer
8:00 ~ 18:00	Registration

March 30	Session: Feature Talk
	Room: Champagne I
	Session Chair: Min Chen (University of Washington Bothell)
8:30 ~ 9:30	Keynote Speaker: Patrick Griffis (Dolby Laboratories)
	Title: HDR – From Dream to Mainstream

March 30	Session: Multimedia and Vision 4
	Room: Champagne I
	Session Chair: Neeraj Gadgil (Dolby Laboratories)
10:00 ~ 10:20	Large-Scale Object Detection of Images from Network Cameras in Variable
	Ambient Lighting Conditions
	Caleb Tung (Purdue University); Matthew R. Kelleher (Purdue University); Ryan J.
	Schlueter (Purdue University); Binhan Xu (Purdue University); Yung-Hsiang Lu
	(Purdue University); George K. Thiruvathukal (Loyola University Chicago/Argonne
	National Laboratory); Yen-Kuang Chen (Intel Corporation); Yang Lu (Facebook
	Corporation)
10:20 ~ 10:40	Real-Time Scale-Invariant License Plate Detection Using Cascade Classifiers
	Elnaz Yousefi (Shahid Beheshti University); Amir Hossein Nazem Deligani (Sharif
	University of Technology); Jafar Jafari Amirbandi (Islamic Azad University, Science
	and Research Branch, Tehran); Mohsen Karimzadeh Kiskani (University of
	California, Santa Cruz )
10:40 ~ 11:00	Single View 3D Face Reconstruction with Landmark Updating
10.40 11.00	Single view 3D race Reconstruction with Landmark Opdating
	Dang Liu (Nanjing University), Vao Vu (Nanjing University), Vu Zhou (Nanjing
	Peng Liu (Nanjing University); Yao Yu (Nanjing University); Yu Zhou (Nanjing
11.00 0 11.20	University); Sidan Du (Nanjing University)
11:00 ~ 11:20	Reverse Tone Mapping of High Dynamic Range Video using Gaussian Process
	Regression
	Harshad Kadu (Dolby Labs); Neeraj Gadgil (Dolby Laboratories); Guan-Ming Su
	(Dolby Labs )
11:20 ~ 11:40	Efficient Video Data Structure for Fabric Wicking Phenomena Studies
	Chau-Wai Wong (North Carolina State University)

March 30	Session: Machine Learning/Deep Learning/Data Mining 3
	Room: Champagne II

	Session Chair: Yao Wang (New York University)
10:00 ~ 10:20	Image Captioning with Clause-Focused Metrics in a Multi-Modal Setting for Marketing
	Philipp Harzig (University of Augsburg); Dan Zecha (University of Augsburg); Rainer Lienhart (Universitat Augsburg, Germany); Carolin Kaiser (GfK Verein); René Schallner (GfK Verein)
10:20 ~ 10:40	A Variational Autoencoder Based Generative Model of Urban Human Mobility
	Dou Huang (The University of Tokyo); Xuan Song (The University of Tokyo); Zipei Fan (The University of Tokyo); Renhe Jiang (The University of Tokyo); Ryosuke Shibasaki (The University of Tokyo); Yu Zhang (Hong Kong University of Science and Technology); Haizhong Wang (Oregon State University); Yugo Kato (NAVITIME JAPAN Co)
10:40 ~ 11:00	Layered Image Compression using Scalable Auto-encoder
	Chuanmin Jia (Peking University); Zhaoyi Liu (Beijing Institute of Technology); Yao Wang (New York University); Siwei Ma (Peking University, China); Wen Gao (Peking University)
11:00 ~ 11:20	High Dimensional Latent Space Variational AutoEncoders for Fake News Detection
	Saad Sadiq (University of Miami); Nicolas Wagner (University of Miami); Mei-Ling Shyu (University of Miami); Daniel Feaster (University of Miami- Miller school of medicine)
11:20 ~ 11:40	Feature-level and Model-level Audiovisual Fusion for Emotion Recognition in the Wild
	Jie Cai (University of South Carolina); Zibo Meng (Innopeak Technology Inc.); Ahmed-Shehab Khan (University of South Carolina); Zhiyuan Li (University of South Carolina); James O'Reilly (University of South Carolina); Shizhong Han (12 sigma technologies); Ping Liu (UTS); Min Chen (University of Washington Bothell); Yan Tong (University of South Carolina)

March 30	Session: Systems and Infrastructures 1
	Room: Champagne III
	Session Chair: Yang Lei (HP)
10:00 ~ 10:20	A Novel Remote Eye Gaze Tracking System Using Line Illumination Sources
	James O'Reilly (University of South Carolina); Ahmed-Shehab Khan (University of South Carolina); Zhiyuan Li (University of South Carolina); Jie Cai (University of South Carolina); Min Chen (University of Washington Bothell); Yan Tong (University of South Carolina); Xiangyu Hu (University of South Carolina)
10:20 ~ 10:40	Analysis of Palette Mode on Versatile Video Coding
	Yu-Chen Sun (Alibaba Group (U.S.) Inc.); Jian Lou (Alibaba Group (U.S.) Inc.); Yung- Hsuan Chao (Qualcomm Technologies Inc.); Hongtao Wang (Qualcomm

	Technologies Inc.); Vadim,Seregin (Qualcomm Technologies Inc.); Marta Karczewicz (Qualcomm Technologies Inc.)
10:40 ~ 11:00	An Extensible, Flexible, Modular Framework for Classifying Videos on YouTube Using Web and Social Media
	Mohamad Hammam Alsafrjalani (University of Miami)
11:00 ~ 11:20	A Big Data Platform for Surface Enhanced Raman Spectroscopy Data with An
Industrial	Application on Image-based Sensor Quality Control
Program paper	
	Yiming Zuo (HP Inc.); Rares Vernica (HP); Yang Lei (HP); Steven Barcelo (HP); Anita Rogacs (HP)
11:20 ~ 11:40	Automated Cloud Infrastructure, Continuous Integration and Continuous Delivery
Industrial	using Docker with Robust Container Security
Program paper	
	Somya Garg (Ernst & Young); Satvik Garg (Jaypee University of Information
	Technology)

March 30	Session: AIArt Workshop 1 - Visual Art Creation via AI
	Room: Champagne I
	Session Chair: Luntian Mou (Beijing University of Technology)
13:30 ~ 14:00	Keynote 1: Mei Han, Ping An Technology, US Research Lab at Silicon Valley
	Title: Al and Art
14:00 ~ 14:20	Garment Detectives: Discovering Clothes and Its Genre in Consumer Photos
	Shintami Hidayati (SINICA); Kai-Lung Hua (NTUST); Yu Tsao (Academia Sinica);
	Hong-Han Shuai (National Chiao Tung University); Jiaying Liu (Peking University);
	Wen-Huang Cheng (EE, NCTU)
14:20 ~ 14:40	Design and Implementation of Virtual-real Interactive System for Mixed Reality
	Xinxin Shi (Communication University of China); Xin Xiang (Communication
	University of China); Long Ye (Communication University of China)
14:40 ~ 15:00	When Green Screen Meets Panoramic Videos: An Interesting Video Combination Framework
	Chenxi Feng (Communication University of China); Tianyi Feng (Communication
	University of China); Long Ye (Communication University of China)
15:00 ~ 15:20	A Generative Adversarial Network for AI-Aided Chair Design
	Zhibo Liu (Peking University); Feng Gao (The Future Lab, Tsinghua University) ; Yizhou Wang (Peking University)

March 30	Session: AIArt Workshop 2 - Audio and Other Art Creation via AI
	Room: Champagne I
	Session Chair: Luntian Mou (Beijing University of Technology)
16:00 ~ 16:30	Keynote 2: Jesse Engel

	Title: Magenta
16:30 ~ 16:50	Monophonic Singing Voice Separation Based on Deep Learning
	Zhao Zhang (Communication University of China)
16:50 ~ 17:10	From Knowledge Map to Mind Map: Artificial Imagination
	Ruixue Liu (JD AI Platform & Research); Baoyang Chen (Faculty of School of
	Experimental Arts; Central Academy of Fine Arts); Xiaoyu Guo (JD AI Platform &
	Research); Yan Dai (JD AI Platform & Research); Meng Chen (JD AI Platform &
	Research ); Zhijie Qiu (Faculty of School of Experimental Arts; Central Academy of
	Fine Arts); Xiaodong He (JD AI Research)
17:10 ~ 17:30	Composer4Everyone: Automatic Music Generation with Audio Motif
	Aozhi Liu (Ping An Technology (Shenzhen)); Jianzong Wang (Ping An Technology
	(Shenzhen)); Junqing Peng (Ping An Technology (Shenzhen)); Yiwen Wang (Ping An
	Technology (Shenzhen)); Yaqi Mei (Ping An Technology (Shenzhen)); Xiaojing Liang
	(Ping An Technology (Shenzhen)); Zimin Xia (Ping An Technology (Shenzhen)); Jing
	Xiao (Ping An Technology (Shenzhen))
17:30 ~ 17:50	Solving Jigsaw Puzzles via Hausdorff-based Border Compatibility
	Huang-Chia Shih (Yuan Ze University); Jian-Liang Lu (Yuan Ze University); Chang-
	Hsian Ma (Yuan Ze University)

March 30	Session: FakeMM workshop 1
	Room: Champagne II
	Session Chair: Pradeep Atrey (University at Albany, SUNY)
13:30 ~ 14:30	Keynote 1: Hany Farid, University of California, Berkeley, USA
	Title: Detecting Deep Fakes
14:30 ~ 14:50	Do GANs Leave Artificial Fingerprints?
	Francesco Marra (University Federico II of Naples, Italy); Diego Gragnaniello
	(University Federico II of Naples, Italy) ; Luisa Verdoliva (University Federico II of
	Naples, Italy); Giovanni Poggi (University Federico II of Naples, Italy)
14:50 ~ 15:10	Securing Voice-driven Interfaces against Fake (Cloned) Audio Attacks.
	Hafiz Malik (University of Michigan, Dearborn, USA)
15:10 ~ 15:30	Face Morphing Detection with Three-Channel Convolutional Neural Network based
	on Multi-Features.
	Yi Lu (Shanghai Jiao Tong University, China); Xinghao Jiang (Shanghai Jiao Tong
	University, China); Tanfeng Sun (Shanghai Jiao Tong University, China); Peisong He (Sichuan University)

March 30	Session: FakeMM workshop 2
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	Room: Champagne II
	Session Chair: Pradeep Atrey (University at Albany, SUNY)
16:00 ~ 16:20	Towards Vulnerability Analysis of Voice-Driven Interfaces and Countermeasures
	for Replay Attacks.
	Khalid Malik (Oakland University, USA); Hafiz Malik (University of Michigan,
	Dearborn, USA); Roland Baumann (Oakland University, USA)
16:20 ~ 16:40	Towards Impact Scoring of Fake News.
	Shivam Parikh (University at Albany, State University of New York, USA); Vikram
	Patil (University at Albany, State University of New York, USA); Ravi Makawana
	(University at Albany, State University of New York, USA); Pradeep K. Atrey
	(University at Albany, State University of New York, USA)

March 30	Session: MMPrag Workshop 1
	Room: Champagne III
	Session Chair: William Grosky (University of Michigan-Dearborn)
13:15 ~ 14:30	Keynote 1: Adam Pease, Infosys Foothills Research, USA
	Title: Conceptual Pragmatics: A Library of Logical Definitions
14:30 ~ 15:00	Robust Algorithm for Multimodal Deception Detection
	S. Venkatesh (Norwegian University of Science and Technology (NTNU), Norway);
	R. Ramachandra (NTNU, Norway); and P. Bours (NTNU, Norway)
15:00~ 15:30	Multimodal Indicators of Humor in Videos
	Z. Yang (Columbia University, USA); L. Ai (Columbia University, USA); and J.
	Hirschberg (Columbia University, USA)

March 30	Session: MMPrag Workshop 2 Room: Champagne III Session Chair: Richard Chbeir (Université de Pau et des Pays de l'Adour)
15:45 ~ 17:00	Keynote 2: Amit Sheth, KNO.E.SIS Laboratory, Wright State University, USA
	Title: On Exploiting Multimodal Information for Machine Intelligence and Natural Interactions – With Examples from Health Chatbots
17:00 ~ 17:30	Metaconcepts: Isolating Context in Word Embeddings
	P. Sutor (University of Maryland, USA); Y. Aloimonos (University of Maryland), USA; D. Summers-Stay (US Army Research Labs Adelphi, USA); and C. Fermuller, University of Maryland, USA)
17:30 ~ 18:00	Keyword Extraction Performance Analysis
	A. Kumbhar (University of Michigan-Dearborn (UMD), USA), M. Savargaonkar (UMD, USA), A. Nalwaya (UMD, USA), C. Bian (UMD, USA), and M. Abouelenien (UMD, USA)

March 30	Session: Keynote 3
	Room: Champagne II
	Session Chair: Chengcui Zhang (University of Alabama)
17:00 ~ 18:00	Keynote Speaker: Ruzena Bajcsy (University of California, Berkeley)
	Title: Multimodal real time assessment of the driver state using, Visual, Acoustic and body motion observations