

Conf. 2: 3 Dimensional Image Acquisition and Display Technology and Application

Room:

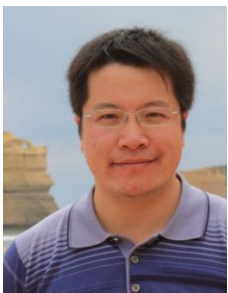
Conference Chairs:



Prof. Byoung-ho Lee
(Seoul National University,
Korea)



Prof. WANG Yongtian
(Beijing Institute of
Technology, China)



Prof. CAO Liangcai
(Tsinghua University,
China)



Prof. SITU Guohai
(Shanghai Institute of
Optics and Fine
Mechanics, CAS, China)

Program Committee:

Ayman Alfalou (ISEN-Brest, France), CHEN Linsen (Soochow University, China), CHENG Dewen (Beijing Institute of Technology, China), David J Brady (Duke University, USA), DAI Qionghai (Tsinghua University, China), LIAO Hongen (Tsinghua University, China), Partha Banerjee (University of Dayton, USA), PENG Xiang (Shenzhen University, China), SU Yikai (Shanghai Jiao Tong University, China), SANG Xinzhu (Beijing University of Posts and Telecommunication, China), Ting-Chung Poon (Virginia Tech, USA), WANG Qionghua (Sichuan University, China), WEI Sui (Anhui University, China), WEI Zhenzhong (Beihang University, China), YU Jingyi (ShanghaiTech University, China), ZHAO Jianlin (Northwestern Polytechnical University, China).

Afternoon 23 May	
Session 1	Chair: WANG Yongtian
14:00-14:25	Recent advances in phase retrieval using transport of intensity, Partha Banerjee (University of Dayton, USA) <i>Invited</i>
14:25-14:50	3D volumetric microscope systems using adaptive objective lens and depth-of-field expanding phase plate, LI Guoqiang (The Ohio State University, USA) <i>Invited</i>
14:50-15:15	Deep Learning on Light Fields, YU Jingyi (ShanghaiTech University, China) <i>Invited</i>
15:15-15:30	Computational Imaging: where optics meets deep learning, SITU Guohai (Shanghai Institute of Optics and Fine Mechanics, CAS, China)
15:30-15:45	Compression of phase-only holograms with JPEG standard and deep convolutional neural network, JIAO Shuming (Shenzhen University, China) [OTA201802-006]
15:45-16:00	coffee/tea break

Technical Program

Session 2 Chair: ByoungHo Lee	
16:00-16:35	Large-size three-dimensional light-field displays, SANG Xinzhu (Beijing University of Posts and Telecommunication, China) Keynote
16:35-17:00	Why lens_ array based 3D Display not yet Commercialized? —from the perspective of optical reconstruction, WEI Sui (Anhui University, China) Invited
17:00-17:25	Photometric 3D Reconstruction, Yasuyuki Matsushita (Osaka University, Japan) Invited
17:25-17:50	Implementation and Assessment of Table-top Holographic Display, Jinwoong Kim (ETRI, Korea) Invited
17:50-18:05	Single-channel Based Color Image Encryption Using Detour Cylindrical Diffraction and Color Space Converting, WANG Jun (Sichuan University, China) [OTA201802-036]
18:05-18:20	Overcoming Challenges in Building a Sustainable Autostereoscopic Ecosystem, Dr. Joe Chan (Marvel Digital Limited, China)
Morning 24 May	
Session 3 Chair: SITU Guohai	
08:30-09:05	Ongoing Studies for Automatic Road Anomalies Detection on 2D and 3D Pavement Images, Ayman Alfalou (ISEN-Brest, France) Keynote
09:05-09:30	Designs and evaluation of AR near eye display, CHENG Dewen (Beijing Institute of Technology, china) Invited
09:30-10:55	Electronic holography using MEMS SLM, Yasuhiro Takaki (Tokyo University of Agriculture and Technology, Japan) Invited
10:55-10:20	Real-time and Convenient 4D Reconstruction, LIU Yebin (Tsinghua University, China) Invited
10:20-10:35	coffee/tea break
Session 4 Chair: Ayman Alfalou	
10:35-11:00	Innovation of 3D Spatial Information Acquisition and Autostereoscopic Display in Biomedicion, LIAO Hongen (Tsinghua University, China) Invited
11:00-11:25	Electronic holography using MEMS SLM, Yasuhiro Takaki (Tokyo University of Agriculture and Technology, Japan) Invited
11:25-11:50	Direct phase measuring deflectometry for 3D shape measurement of discontinuous specular objects, ZHANG Zonghua (Hebei University of Technology, China) Invited
11:50-12:05	Depth Distortion Problem for Self-interference Incoherent Digital Holography and its Solution, Kiseung Bang (Seoul National University, Korea) [OTA201802-039]
Afternoon 24 May	
Session 5 Chair: SANG Xinzhu	
14:00-14:25	Dense Light Field Reconstruction from Sparse Sampling Using Residual Network, WANG Qing (Northwestern Polytechnical University, China) Invited
14:25-14:50	Hologram calculation and system realization in holographic display, YU Yingjie (Shanghai University, China) Invited
14:50-15:05	Full parallax synthetic hologram based on SRTM elevation terrain data, HOU Rui (Ocean University of China, China) [OTA201802-034]
15:05-15:20	Three-dimensional display based on volume holographic photopolymer doped with gold nanorods, CAO Liangcai (Tsinghua University, China)
15:20-15:35	Active liquid crystal micro phase modulation device based on deep sub-grating FP oscillation, HU Heteng (Anhui University,, China) [OTA201802-051]
15:35-15:45	coffee/tea break

Session 6 Chair: CAO Liangcai	
15:45-16:10	Real-time integral imaging pickup system using camera array, DENG Huan (Sichuan University, China) <i>Invited</i>
16:10-16:35	Configurable cameras with MMS architecture, Wubin Pang (Duke University, USA) <i>Invited</i>
16:35-16:50	Key factors of 3-D imaging system, XING Qi (Ningbo Vision Display Technology Co., Ltd)
16:50-17:05	Design and analysis of an analog signal readout circuit for SPAD, JIN Xiangliang (Xiangtan University, China) [OTA201802-050]
17:05-17:20	Effective speckle suppression from step processing and improvement of dual-domain de-noising approach for digital holography, LU Wei (Beihang University, China) [OTA201802-022]
17:20-17:35	RGB-D dense SLAM with keyframe-based method, FU Xingyin (Shenyang Institute of Automation, Chinese Academy of Sciences, China) [OTA201802-003]