

## Jingyi Yu

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Inaugural Chair Professor

Dean, School of Information Science and Technology

Vice Provost, ShanghaiTech University, China

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## Education

Ph.D., Electrical Engineering and Computer Science, August, 2005

*General Linear Cameras: Theory and Applications*

Advisor: Prof. Leonard McMillan

Massachusetts Institute of Technology, Cambridge, MA 02139

M.S., Electrical Engineering and Computer Science, February, 2003

Massachusetts Institute of Technology, Cambridge, MA 02139

B.S., Applied Mathematics/Computer Science, June, 2000, *with Honor*

California Institute of Technology, Pasadena, CA 91125

## Positions Held

2020 – present	Vice Provost and Dean ShanghaiTech University
2018 – 2020	Professor and Executive Dean School of Information Science and Technology Director, Virtual Reality and Visual Computing Center ShanghaiTech University
2005 – 2018	Assistant Professor ('05 – '10), Associate Professor ('10 – '15), Full Professor ('15 – '18) Department of Computer and Information Sciences Department of Electrical and Computer Engineering Department of Biomedical Engineering, University of Delaware
2011 – 2012	Visiting Professor Computer Science Department, Columbia University

## Research Achievement Highlights

- OSA Fellow, 2023
- IEEE Fellow, 2021
- ACM Distinguished Members, 2021
- National Outstanding Teaching Award (First Prize), *Interdisciplinary Curricula on Computational Photography, Computer Vision and Computer Graphics at ShanghaiTech*, Shanghai Division, Ministry of Education, China, 2022
- Best Paper Award (ACM SIGGRAPH 2025)

- Best Emerging Technology Award (ACM SIGGRAPH 2025)
- Best Paper Honorable Mention (ACM/IEEE DAC 2025)
- Two Technical Papers Honorable Mention (ACM SIGGRAPH 2024)
- Best Paper Honorable Mention (ACM/IEEE DAC 2024)
- Under his leadership, the School of Information Science faculty and students won best paper awards or honorable mentions at CVPR 2024, MICCAI 2024, VIS 2024, AMMAS 2024, CHI 2025, ICRA 2025, etc.
- Best Student Paper Runner-up, with PhD student Nianyi Li (IJCAI 2017).
- College of Engineering Outstanding Junior Faculty Award, University of Delaware, 2013
- Air Force Young Investigator Award (AFOSR YIP), 2010
- NSF Career Award, 2009
- Graduation with Honor, California Institute of Technology, 2000
- Zeigler Memorial Award, California Institute of Technology, 1999

## Academic Service Highlights

- Program Co-Chair, IEEE International Conference on Computer Vision (ICCV), 2027
- General Co-Chair, IEEE International Conference on Computer Vision (ICCV), 2025
- Program Co-Chair, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021
- Program Co-Chair, IEEE Winter Conference on Applications of Computer Vision (WACV), 2021
- Program Co-Chair, International Conference on Pattern Recognition (ICPR), 2020
- Program Co-Chair, the 15th ACM SIGGRAPH Conference on Virtual-Reality Continuum and Its Applications in Industry (VRCAI), 2016
- Program Co-Chair, IEEE Conference on Computational Photography (ICCP), 2016
- Program Co-Chair of many workshops: LF4CV 2017, CCD 2015, LF4CV 2014, OMNIVIS 2011, PROGRAM 2009.
- (Senior) Area Chair, IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2016, 2017, 2019, 2022, 2023, 2024)
- Program Committee, ACM SIGGRAPH (2024, 2025)
- (Senior) Area Chair, IEEE International Conference on Computer Vision (2011, 2015, 2017, 2019, 2023)
- (Senior) Area Chair, European Conference on Computer Vision (2006, 2010, 2012, 2024)
- (Senior) Area Chair, Neural Information Processing Symposium (2015, 2017, 2018, 2024)
- **Associate Editor-in-Chief**, Springer Visual Intelligence (2022 – present)
- **Associate Editor**, IEEE Transactions on Pattern Analysis and Machine Intelligence (2013 - 2020)
- **Associate Editor**, IEEE Transaction on Image Processing (2018 - 2024)
- **Associate Editor**, Elsevier Computer Vision and Image Understanding (2017 - present)
- **Associate Editor**, Journal of Machine Vision and Applications (MVA) (2012 – 2017)
- **Associate Editor**, The Visual Computer (2012 – 2017)

## Research Grants

2005 – 2018 at the University of Delaware: Total amount awarded as lead PI: ~4M USD

2018 – Present at ShanghaiTech University: Total amount awarded as lead PI: ~7M USD (or ~50M CNY)

## Selected Journal Publications

As the corresponding or co-corresponding author in leading journals in the field, including SIGGRAPH/TVCG/TPAMI/ IJCV/TIP/NC

- J.1. Kaixin Yao, Longwen Zhang, Xinhao Yan, Yan Zeng, Qixuan Zhang, Wei Yang, Lan Xu, Jiayuan Gu, Jingyi Yu, *CAST: Component-aligned 3D Scene Reconstruction from an RGB Image*. ACM ToG, 2005. (SIGGRAPH 2025. Best Paper Award).
- J.2. Longwen Zhang, Qixuan Zhang, Haoran Jiang, Yinuo Bai, Wei Yang, Lan Xu, Jingyi Yu. *BANG: Dividing 3D Assets via Generative Exploded Dynamics*. ACM ToG, 2005. (SIGGRAPH 2025).
- J.3. Weihang Liu, Xue Xian Zheng, Yuke Li, Tareq Y Al-Naffouri, Jingyi Yu, Xin Lou, *CoARF++: Content-Aware Radiance Field Aligning Model Complexity with Scene Intricacy*. IEEE Transactions on Visualization and Computer Graphics (TVCG) 2025.
- J.4. Dafei Qin, Hongyang Lin, Qixuan Zhang, Kaichun Qiao, Longwen Zhang, Jun Saito, Zijun Zhao, Jingyi Yu, Lan Xu, Taku Komura, *Instant Gaussian Splatting Generation for High-Quality and Real-Time Facial Asset Rendering*. IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) 2025.
- J.5. Penghao Wang, Zhirui Zhang, Liao Wang, Kaixin Yao, Siyuan Xie, Jingyi Yu, Minye Wu, Lan Xu, *V<sup>3</sup>: Viewing Volumetric Videos on Mobiles via Streamable 2D Dynamic Gaussians*. ACM Transactions on Graphics (TOG) 43 (6): 1-13, 2024.
- J.6. Yuheng Jiang, Zhehao Shen, Yu Hong, Chengcheng Guo, Yize Wu, Yingliang Zhang, Jingyi Yu, Lan Xu, *Robust Dual Gaussian Splatting for Immersive Human-centric Volumetric Videos*. ACM Transactions on Graphics (TOG) 43 (6):1-15, 2024.
- J.7. Jiadi Cui, Junming Cao, Fuqiang Zhao, Zhipeng He, Yifan Chen, Yuhui Zhong, Lan Xu, Yujiao Shi, Yingliang Zhang, Jingyi Yu, *LetsGo: Large-scale Garage Modeling and Rendering via Lidar-Assisted Gaussian Primitives*. ACM Transactions on Graphics (TOG) 43 (6): 1-18. 2024.
- J.8. Siyuan Shen, Suan Xia, Xingyue Peng, Ziyu Wang, Yingsheng Zhu, Shiyang Li, Jingyi Yu, *Holi-1-to-3: Transient-enhanced Holistic Image-to-3D Generation*. IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) 2024.
- J.9. Han Liang, Wenqian Zhang, Wenxuan Li, Jingyi Yu, Lan Xu, *Intergen: Diffusion-based Multi-human Motion Generation under Complex Interactions*. International Journal of Computer Vision (IJCV) 132 (9): 3463-3483, 2024.
- J.10. Kai He, Kaixin Yao, Qixuan Zhang, Jingyi Yu, Lingjie Liu, Lan Xu, *DressCode: Autoregressively Sewing and Generating Garments from Text Guidance*. ACM Transactions on Graphics (TOG), 43(4): 1-23, 2024. (Presented at SIGGRAPH 2024. Best Paper Honorable Mention Award).
- J.11. Longwen Zhang, Ziyu Wang, Qixuan Zhang, Qiwei Qiu, Anqi Pang, Haoran Jiang, Wei Yang, Lan Xu, Jingyi Yu, *CLAY: A Controllable Large-scale Generative Model for Creating High-quality 3D Assets*. ACM Transactions on Graphics (TOG), 43(4): 1-20, 2024 (Presented at SIGGRAPH 2024. Best Paper Honorable Mention Award).
- J.12. Jingyi Wang, Beibei Pan, Zi Wang, Jiakai Zhang, Zhiqi Zhou, Lu Yao, Yanan Wu, Wuwei Ren, Jianyu Wang, Haiming Ji, Jingyi Yu, Baile Chen, *Single-pixel p-graded-n Junction Spectrometers*. Nature Communications 15 (1), 1773, 2024.

- J.13. Longwen Zhang, Zijun Zhao, Xinzhou Cong, Qixuan Zhang, Shuqi Gu, Yuchong Gao, Rui Zheng, Wei Yang, Lan Xu, Jingyi Yu, *HACK: Learning a Parametric Head and Neck Model for High-fidelity Animation*, ACM Transactions on Graphics (TOG), 2023.
- J.14. Longwen Zhang, Qiwei Qiu, Hongyang Lin, Qixuan Zhang, Cheng Shi, Wei Yang, Ye Shi, Sibe Yang, Lan Xu, Jingyi Yu, *DreamFace: Progressive Generation of Animatable 3D Faces Under Text Guidance*. ACM Transactions on Graphics (TOG), 2023.
- J.15. Youjia Wang, Kai He, Taotao Zhou, Kaixin Yao, Nianyi Li, Lan Xu, Jingyi Yu, *Free-view Face Relighting Using a Hybrid Parametric Neural Model on a SMALL-OLAT Dataset*, International Journal of Computer Vision (IJCV), 131(4): 1002-1021, 2023.
- J.16. Zesong Qiu, Yuwei Li, Dongming He, Qixuan Zhang, Longwen Zhang, Yinghao Zhang, Jingya Wang, Lan Xu, Xudong Wang, Yuyao Zhang, Jingyi Yu, *SCULPTOR: Skeleton-consistent face creation using a learned parametric generator*, ACM Transactions on Graphics (TOG), 41(6): 1-17, 2022.
- J.17. Longwen Zhang, Chuxiao Zeng, Qixuan Zhang, Hongyang Lin, Ruixiang Cao, Wei Yang, Lan Xu, Jingyi Yu, *Video-driven Neural Physically-based Facial Asset for Production*, ACM Transactions on Graphics (TOG), 41(6): 1-16, 2022.
- J.18. Fuqiang Zhao, Yuheng Jiang, Kaixin Yao, Jiakai Zhang, Liao Wang, Haizhao Dai, Yuhui Zhong, Yingliang Zhang, Minye Wu, Lan Xu, Jingyi Yu, *Human Performance Modeling and Rendering via Neural Animated Mesh*, ACM Transactions on Graphics (TOG), 41(6): 1-17, 2022.
- J.19. Chaolin Rao, Huangjie Yu, Haochuan Wan, Jindong Zhou, Yueyang Zheng, Minye Wu, Yu Ma, Anpei Chen, Binzhe Yuan, Pingqiang Zhou, Xin Lou, Jingyi Yu, *ICARUS: A Specialized Architecture for Neural Radiance Fields Rendering*, ACM Transactions on Graphics (TOG), 41(6): 1-14, 2022.
- J.20. Yuwei Li, Longwen Zhang, Zesong Qiu, Yingwenqi Jiang, Nianyi Li, Yuexin Ma, Yuyao Zhang, Lan Xu, Jingyi Yu, *NIMBLE: a Non-rigid Hand Model with Bones and Muscles*, ACM Transactions on Graphics (TOG), 41(4): 1-16, 2022.
- J.21. Yingqian Wang, Longguang Wang, Gaochang Wu, Jungang Yang, Wei An, Jingyi Yu, Yulan Guo, *Disentangling Light Fields for Super-Resolution and Disparity Estimation*, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 45(1): 425-443, 2022
- J.22. Anpei Chen, Ruiyang Liu, Ling Xie, Zhang Chen, Hao Su, Jingyi Yu, Sofgan: A Portrait Image Generator with Dynamic Styling, ACM Transactions on Graphics (TOG), 41(1): 1-26, 2022
- J.23. Xin Chen, Anqi Pang, Wei Yang, Peihao Wang, Lan Xu, Jingyi Yu, *Tightcap: 3D Human Shape Capture with Clothing Tightness Field*, ACM Transactions on Graphics (TOG), 41(1): 1-17, 2021
- J.24. Xin Chen, Anqi Pang, Wei Yang, Yuexin Ma, Lan Xu, Jingyi Yu, *Sportscap: Monocular 3d Human Motion Capture and Fine-grained Understanding in Challenging Sports Videos*, International Journal of Computer Vision (IJCV), 129: 2846-2864, 2021
- J.25. Jiakai Zhang, Xinhang Liu, Xinyi Ye, Fuqiang Zhao, Yanshun Zhang, Minye Wu, Yingliang Zhang, Lan Xu, Jingyi Yu, *Editable Free-viewpoint Video Using a Layered Neural Representation*, ACM Transactions on Graphics (TOG), 40(4): 1-18, 2021
- J.26. Siyuan Shen, Zi Wang, Ping Liu, Zhengqing Pan, Ruiqian Li, Tian Gao, Shiyang Li, Jingyi Yu, *Non-line-of-Sight Imaging via Neural Transient Fields*, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 43(7): 2257 - 2268, 2021
- J.27. Wei Yang, Yingliang Zhang, Jinwei Ye, Yu Ji, Zhong Li, Mingyuan Zhou, Jingyi Yu, *Structure from Motion on XSlit Cameras*, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 43(5): 1691-1704, 2021
- J.28. Minye Wu, Haibin Ling, Ning Bi, Shenghua Gao, Qiang Hu, Hao Sheng, Jingyi Yu, *Visual Tracking With Multiview Trajectory Prediction*, IEEE Transactions on Image Processing (TIP), 28: 8355-8367, 2020

- J.29. Xiaoxu Li, Dongliang Chang, Zhanyu Ma, Zheng-Hua Tan, Jing-Hao Xue, Jie Cao, Jingyi Yu, Jun Guo, *Oslnet: Deep Small-sample Classification with an Orthogonal Softmax Layer*, IEEE Transactions on Image Processing (TIP), 29: 6482-6495, 2020
- J.30. Mingyuan Zhou, Yuqi Ding, Yu Ji, Shiqiong Susan Young, Jingyi Yu, Jinwei Ye, *Shape and Reflectance Reconstruction Using Concentric Multi-Spectral Light Field*, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 42 (7): 1594-1605, 2020
- J.31. Cen Wang, Minye Wu, Ziyu Wang, Liao Wang, Hao Sheng, Jingyi Yu, *Neural Opacity Point Cloud*, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 42 (7): 1570-1581, 2020
- J.32. Yongri Piao, Xiao Li, Miao Zhang, Jingyi Yu, Huchuan Lu, *Saliency Detection via Depth-Induced Cellular Automata on Light Field*, IEEE Transactions on Image Processing (TIP), 29: 1879 – 1889, 2019
- J.33. Jinwei Ye, Yu Ji, Mingyuan Zhou, Sing Bing Kang and Jingyi Yu, *Content Aware Image Pre-Compensation*, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 41(7): 1545-1558, 2019
- J.34. Kang Zhu, Yujia Xue, Qiang Fu, Sing Bing Kang, Xilin Chen and Jingyi Yu, *Hyperspectral Light Field Stereo Matching*, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 41(5): 1131-1143, 2019
- J.35. Yanyu Xu, Shenghua Gao, Junru Wu, Nianyi Li, Jingyi Yu, *Personalized Saliency and Its Prediction*, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 41(12): 2975 - 2989, 2019
- J.36. Nianyi Li, Jinwei Ye, Yu Ji, Haibin Ling, and Jingyi Yu, *Saliency Detection on Light Field*, in IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2017.
- J.37. Feng Li, Christopher Thorpe, Zijia Li, Dave Saunders and Jingyi Yu, *A Co-Prime Blur Scheme for Data Security in Video Surveillance*, in IEEE Transaction on Pattern Analysis and Machine Intelligence (TPAMI), 35(12), 3066-3072, 2013.
- J.38. Yu-Wing Tai, Xiaogang Chen, Sunyeong Kim, Seon Joo Kim, Feng Li, Jie Yang, Jingyi Yu, Yasuyuku Matsushita and Michael Brown, *Image Deblurring Under Non-linear Camera Response Curves*, in IEEE Transaction on Pattern Analysis and Machine Intelligence (TPAMI), 35(10): 2498-2512, 2013.
- J.39. Scott McCloskey, Yuanyuan Ding and Jingyi Yu, *Design and Estimation of Coded Exposure Point Spread Functions*, in IEEE Transaction on Pattern Analysis and Machine Intelligence (TPAMI), 34(10): 2071-2077, 2012.

## Selected Conference Publications

As the corresponding or co-corresponding author at the leading conferences in the field, including CVPR/ICCV/ECCV/DAC/AAAI/NEURIPS/IJCAI

- C.1. Yiwen Wu, Yuyang Chen, Shuo Yin, Nan Wang, Tao Wu, Xuming He, Hao Geng, Jingyi Yu, *LVM-MO: A Large Vision Model Pioneer for Full-Chip Mask Optimization*, ACM/IEEE Design Automation Conference (DAC), 2025 (Best Paper Award Nomination)
- C.2. Youjia Wang, Yiwen Wu, Hengan Zhou, Hongyang Lin, Xingyue Peng, Jingyan Zhang, Yingsheng Zhu, YingWenQi Jiang, Yatu Zhang, Lan Xu, Jingya Wang, Jingyi Yu, *Capturing the Unseen: Vision-Free Facial Motion Capture Using Inertial Measurement Units*. Proceedings of the AAAI Conference on Artificial Intelligence (AAAI), 2025
- C.3. Yuqi Liu, Wenqian Zhang, Sihan Ren, Chengyu Huang, Jingyi Yu, Lan Xu, *SCOPE: Sign Language Contextual Processing with Embedding from LLMs*. Proceedings of the AAAI Conference on Artificial Intelligence (AAAI), 2025
- C.4. Minye Wu, Haizhao Dai, Kaixin Yao, Tinne Tuytelaars, Jingyi Yu, *BG-Triangle: Bézier gaussian triangle for 3D vectorization and rendering*. Proceedings of the Computer Vision and Pattern Recognition Conference (CVPR), 2025

- C.5. Jiakai Zhang, Qihe Chen, Yan Zeng, Wenyuan Gao, Xuming He, Zhijie Liu, Jingyi Yu, *CryoGEM: physics-informed generative cryo-electron microscopy*. Advances in Neural Information Processing Systems (NeurIPS), 2024
- C.6. Yingjun Shen, Haizhao Dai, Qihe Chen, Yan Zeng, Jiakai Zhang, Yuan Pei, Jingyi Yu, *Draco: A denoising-reconstruction autoencoder for cryo-em*. Advances in Neural Information Processing Systems (NeurIPS), 2024
- C.7. Taotao Zhou, Teng Xu, Dong Zhang, Yuyang Jiao, Peijun Xu, Yaoyu He, Lan Xu, Jingyi Yu, *Sophia-in-Audition: Virtual Production with a Robot Performer*. Proceedings of the 32nd ACM International Conference on Multimedia (ACM MM) 2024
- C.8. Qingcheng Zhao, Pengyu Long, Qixuan Zhang, Dafei Qin, Han Liang, Longwen Zhang, Yingliang Zhang, Jingyi Yu, Lan Xu. *Media2Face: Co-speech Facial Animation Generation With Multi-Modality Guidance*. Proc. of SIGGRAPH 2024
- C.9. Han Liang, Jiacheng Bao, Ruichi Zhang, Sihan Ren, Yuecheng Xu, Sibe Yang, Xin Chen, Jingyi Yu, Lan Xu, *OMG: Towards Open-vocabulary Motion Generation via Mixture of Controllers*. IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2024
- C.10. Wenqian Zhang, Molin Huang, Yuxuan Zhou, Juzhe Zhang, Jingyi Yu, Jingya Wang, Lan Xu, *BOTH2Hands: Inferring 3D Hands from Both Text Prompts and Body Dynamics*. IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2024
- C.11. Chengfeng Zhao, Juzhe Zhang, Jiashen Du, Ziwei Shan, Junye Wang, Jingyi Yu, Jingya Wang, Lan Xu, *I'M HOI: Inertia-aware Monocular Capture of 3D Human-Object Interactions*. IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2024
- C.12. Yuheng Jiang, Zhehao Shen, Penghao Wang, Zhuo Su, Yu Hong, Yingliang Zhang, Jingyi Yu, Lan Xu, *HiFi4G: High-Fidelity Human Performance Rendering via Compact Gaussian Splatting*. IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2024
- C.13. Liao Wang, Kaixin Yao, Chengcheng Guo, Zhirui Zhang, Qiang Hu, Jingyi Yu, Lan Xu, Minye Wu, *VideoRF: Rendering Dynamic Radiance Fields as 2D Feature Video Streams*. IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2024
- C.14. Yuyang Chen, Yiwen Wu, Jingya Wang, Tao Wu, Xumin He, Jingyi Yu, Hao Geng, *LLM-HD: Layout Language Model for Hotspot Detection with GDS Semantic Encoding*, ACM/IEEE Design Automation Conference (DAC), 2024 (Best Paper Award Nomination)
- C.15. Yuehan Wang, Siyuan Shen, Suan Xia, Ruiqian Li, Xingyue Peng, Yanhua Yu, Shiyang Li, Jingyi Yu, *Neural Reconstruction through Scattering Media with Forward and Backward Losses*, 2023 IEEE International Conference on Computational Photography (ICCP), 2023
- C.16. Ziyu Wang, Wei Yang, Junming Cao, Qiang Hu, Lan Xu, Junqing Yu, Jingyi Yu, *NeReF: Neural Refractive Field for Fluid Surface Reconstruction and Rendering*, 2023 IEEE International Conference on Computational Photography (ICCP), 2023
- C.17. Jiajin Tang, Ge Zheng, Jingyi Yu, Sibe Yang, *Cotdet: Affordance knowledge prompting for task driven object detection*, Proceedings of the IEEE/CVF International Conference on Computer Vision (ICCV), 2023
- C.18. Han Liang, Yannan He, Chengfeng Zhao, Mutian Li, Jingya Wang, Jingyi Yu, Lan Xu, *Hybridcap: Inertia-aid monocular capture of challenging human motions*, AAAI Conference on Artificial Intelligence, 2023
- C.19. Taotao Zhou, Kai He, Di Wu, Teng Xu, Qixuan Zhang, Kuixiang Shao, Wenzheng Chen, Lan Xu, Jingyi Yu, *Relightable Neural Human Assets from Multi-view Gradient Illuminations*, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2023
- C.20. Liao Wang, Qiang Hu, Qihan He, Ziyu Wang, Jingyi Yu, Tinne Tuytelaars, Lan Xu, Minye Wu, *Neural Residual Radiance Fields for Streamably Free-Viewpoint Videos*, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2023

- C.21. Juze Zhang, Haimin Luo, Hongdi Yang, Xinru Xu, Qianyang Wu, Ye Shi, Jingyi Yu, Lan Xu, Jingya Wang, *NeuralDome: A Neural Modeling Pipeline on Multi-View Human-Object Interactions*, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2023
- C.22. Anpei Chen, Zexiang Xu, Andreas Geiger, Jingyi Yu, Hao Su, *Tensorf: Tensorial radiance fields*, European Conference on Computer Vision (ECCV), 2022
- C.23. Juze Zhang, Jingya Wang, Ye Shi, Fei Gao, Lan Xu, Jingyi Yu, *Mutual Adaptive Reasoning for Monocular 3D Multi-Person Pose Estimation*, ACM International Conference on Multimedia (ACM MM), 2022
- C.24. Ping Liu, Yanhua Yu, Zhengqing Pan, Xingyue Peng, Ruiqian Li, Yuehan Wang, Jingyi Yu, Shiyang Li, *HiddenPose: Non-Line-of-Sight 3D Human Pose Estimation*, IEEE International Conference on Computational Photography (ICCP), 2022
- C.25. Huangjie Yu, Anpei Chen, Xin Chen, Lan Xu, Ziyu Shao, Jingyi Yu, *Anisotropic fourier features for neural image-based rendering and relighting*, AAAI Conference on Artificial Intelligence, 2022
- C.26. Fuqiang Zhao, Wei Yang, Jiakai Zhang, Pei Lin, Yingliang Zhang, Jingyi Yu, Lan Xu, *Humannerf: Efficiently generated human radiance field from sparse inputs*, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2022
- C.27. Jialian Li, Jingyi Zhang, Zhiyong Wang, Siqi Shen, Chenglu Wen, Yuexin Ma, Lan Xu, Jingyi Yu, Cheng Wang, *Lidarcap: Long-range marker-less 3d human motion capture with lidar point clouds*, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2022
- C.28. Yudi Dai, Yitai Lin, Chenglu Wen, Siqi Shen, Lan Xu, Jingyi Yu, Yuexin Ma, Cheng Wang, *Hsc4d: Human-centered 4d scene capture in large-scale indoor-outdoor space using wearable imus and lidar*, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2022
- C.29. Yuheng Jiang, Suyi Jiang, Guoxing Sun, Zhuo Su, Kaiwen Guo, Minye Wu, Jingyi Yu, Lan Xu, *Neuralhofusion: Neural volumetric rendering under human-object interactions*, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2022
- C.30. Liao Wang, Jiakai Zhang, Xinhang Liu, Fuqiang Zhao, Yanshun Zhang, Yingliang Zhang, Minye Wu, Jingyi Yu, Lan Xu, *Fourier plenotrees for dynamic radiance field rendering in real-time*, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2022
- C.31. Liao Wang, Ziyu Wang, Pei Lin, Yuheng Jiang, Xin Suo, Minye Wu, Lan Xu, Jingyi Yu, *ibutter: Neural interactive bullet time generator for human free-viewpoint rendering*, ACM International Conference on Multimedia (ACM MM), 2021
- C.32. Haimin Luo, Anpei Chen, Qixuan Zhang, Bai Pang, Minye Wu, Lan Xu, Jingyi Yu, *Convolutional neural opacity radiance fields*, IEEE International Conference on Computational Photography (ICCP), 2021
- C.33. Ziyu Wang, Liao Wang, Fuqiang Zhao, Minye Wu, Lan Xu, Jingyi Yu, *Mirrornerf: One-shot neural portrait radiance field from multi-mirror catadioptric imaging*, IEEE International Conference on Computational Photography (ICCP), 2021
- C.34. Qing Wu, Yuwei Li, Lan Xu, Ruiming Feng, Hongjiang Wei, Qing Yang, Boliang Yu, Xiaozhao Liu, Jingyi Yu, Yuyao Zhang, *IREM: High-resolution magnetic resonance image reconstruction via implicit neural representation*, Medical Image Computing and Computer Assisted Intervention (MICCAI), 2021
- C.35. Longwen Zhang, Qixuan Zhang, Minye Wu, Jingyi Yu, Lan Xu, *Neural video portrait relighting in real-time via consistency modeling*, IEEE/CVF International Conference on Computer Vision (ICCV), 2021
- C.36. Anpei Chen, Zexiang Xu, Fuqiang Zhao, Xiaoshuai Zhang, Fanbo Xiang, Jingyi Yu, Hao Su, *Mvsnerf: Fast generalizable radiance field reconstruction from multi-view stereo*, IEEE/CVF International Conference on Computer Vision (ICCV), 2021
- C.37. Quan Meng, Anpei Chen, Haimin Luo, Minye Wu, Hao Su, Lan Xu, Xuming He, Jingyi Yu, *GNeRF:*

- GAN-based neural radiance field without posed camera*, IEEE/CVF International Conference on Computer Vision (ICCV), 2021
- C.38. Jing Jin, Junhui Hou, Jie Chen, Sam Kwong, Jingyi Yu, *Light Field Super-resolution via Attention-Guided Fusion of Hybrid Lenses*, ACM International Conference on Multimedia (ACM MM), 2020
- C.39. Zhong Li, Yu Ji, Jingyi Yu, Jinwei Ye, *3D Fluid Flow Reconstruction Using Compact Light Field PIV*, European Conference on Computer Vision (ECCV), 2020
- C.40. Xin Suo, Minye Wu, Yanshun Zhang, Yingliang Zhang, Lan Xu, Qiang Hu, Jingyi Yu, *Neural3D: Light-weight Neural Portrait Scanning via Context-aware Correspondence Learning*, ACM International Conference on Multimedia (ACM MM), 2020
- C.41. Quan Meng, Jiakai Zhang, Qiang Hu, Xuming He, Jingyi Yu, *LGNN: A Context-aware Line Segment Detector*, ACM International Conference on Multimedia (ACM MM), 2020
- C.42. Zhang Chen, Anpei Chen, Guli Zhang, Chengyuan Wang, Yu Ji, Kiriakos N Kutulakos, Jingyi Yu, *A Neural Rendering Framework for Free-Viewpoint Relighting*, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2020
- C.43. Minye Wu, Yuehao Wang, Qiang Hu, Jingyi Yu, *Multi-View Neural Human Rendering*, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2020
- C.44. Zhang Chen, Yu Ji, Mingyuan Zhou, Sing Bing Kang, Jingyi Yu, *3D face reconstruction using color photometric stereo with uncalibrated near point lights*, IEEE International Conference on Computational Photography (ICCP), 2020
- C.45. Anpei Chen, Zhang Chen, Guli Zhang, Ziheng Zhang, Kenny Mitchell and Jingyi Yu, *Photo-Realistic Facial Details Synthesis from Single Image*, in Proceeding of IEEE International Conference on Computer Vision (ICCV), 2019 (Oral).
- C.46. Qi Zhang, Jinbo Ling, Qing Wang, Jingyi Yu, *Ray-space Projection Model for Light Field Camera*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019
- C.47. Jie Lu, Yu Ji, Jingyi Yu, Jinwei Ye, *Mirror Surface Reconstruction Using Polarization Field*, IEEE International Conference on Computational Photography (ICCP), May 15-17, 2019
- C.48. Xuan Cao, Zhang Chen, Anpei Chen, Xin Chen, Shiying Li and Jingyi Yu, *Sparse Photometric 3D Face Reconstruction Guided by Morphable Models*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018
- C.49. Zhong Li, Minye Wu, Wangyiteng Zhou and Jingyi Yu, *4D Human Body Correspondences from Panoramic Depth Maps*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018
- C.50. Yang Yang, Shi Jin, Ruiyang Liu, Sing Bing Kang and Jingyi Yu, *Automatic 3D Indoor Scene Modeling from Single Panorama*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018
- C.51. Yanyu Xu, Yanbing Dong, Junru Wu, Zhengzhong Sun, Zhiru Shi, Jingyi Yu, and Shenghua Gao, *Gaze Prediction in Dynamic 360° Immersive Videos*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018
- C.52. Can Chen, Scott McCloskey, Jingyi Yu, *Focus Manipulation Detection via Photometric Histogram Analysis*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018
- C.53. Shi Jin, Jinwei Ye, Yu Ji, Ruiyang Liu, and Jingyi Yu. *Learning to Dodge a Bullet*, in Proceeding of European Conference on Computer Vision (ECCV), Munich, Germany, September 8 – 14, 2018
- C.54. Ziheng Zhang, Yanyu Xu, Jingyi Yu, Shenghua Gao, *Saliency detection in 360 videos*, European Conference on Computer Vision (ECCV), , Munich, Germany, September 8–14, 2018



- C.55. Anpei Chen, Minye Wu, Yingliang Zhang, Nianyi Li, Jie Lu, Shenghua Gao and Jingyi Yu, *Deep Surface Light Fields*, in Proceeding of ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games (I3D), 2018
- C.56. Yingliang Zhang, Peihong Yu, Wei Yang, Yuanxi Ma, and Jingyi Yu, *Ray Space Features for Plenoptic Structure-from-Motion*, in Proceeding of IEEE International Conference on Computer Vision (ICCV), 2017.
- C.57. Yujia Xue, Kang Zhu, Qiang Fu, Xilin Chen, and Jingyi Yu, *Catadioptric Hyperspectral Light Field Imaging*, in Proceeding of IEEE International Conference on Computer Vision (ICCV), 2017.
- C.58. Yanyu Xu, Nianyi Li, Junru Wu, Jingyi Yu, Shenghua Gao, *Beyond Universal Saliency: Personalized Saliency Prediction with Multi-task CNN*, in Proceeding of the International Joint Conference on Artificial Intelligence (IJCAI), 2017. Best student paper finalist.
- C.59. Yingliang Zhang, Haiting Lin, Wei Yang, Peihong Yu, and Jingyi Yu, *The Light Field 3D Scanner*, in Proceeding of IEEE International Conference on Computational Photography (ICCP), 2017.
- C.60. Can Chen, Scott McCloskey, and Jingyi Yu, *Camera Response Curve Analysis on Modern Cameras*, in Proceeding of IEEE International Conference on Computational Photography (ICCP), 2017.
- C.61. Can Chen, Scott McCloskey, and Jingyi Yu, *Image Splicing Detection via Blurred Content Analysis*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017.
- C.62. Nianyi Li, Haiting Lin, Bilin Sun, Mingyuan Zhou, and Jingyi Yu, *Rotational Crossed-Slit Light Field*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2016.
- C.63. Haiting Lin, Can Chen, Sing Bing Kang, and Jingyi Yu, *Depth Recovery From Light Field Using Focal Stack Symmetry*, in Proceedings of the IEEE International Conference on Computer Vision (ICCV), 2015.
- C.64. Wei Yang, Yu Ji, Sing Bing Kang, and Jingyi Yu, *Ambient Occlusion via Compressive Visibility Estimation*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2015.
- C.65. Nianyi Li, Bilin Sun, and Jingyi Yu, *A Weighted Sparse Coding Framework for Saliency Detection*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2015.
- C.66. Jinwei Ye, Yu Ji and Jingyi Yu, *Depth-of-Field analysis and Coded Aperture Imaging on XSLT Cameras*, in Proceedings of the European Conference on Computer Vision (ECCV), 2014. Oral presentation.
- C.67. Wei Yang, Jinwei Ye, Yu Ji and Jingyi Yu, *Coplanar Common Points in Non-Centric Cameras*, in Proceedings of the European Conference on Computer Vision (ECCV), 2014.
- C.68. Tao Yang, Jing Li, Yanning Zhang and Jingyi Yu, *All-in-Focus Synthetic Aperture Imaging*, in Proceedings of the European Conference on Computer Vision (ECCV), 2014.
- C.69. Yu Ji, Jinwei Ye, Sing Bing Kang and Jingyi Yu, *Image Preconditioning: Balancing Contrast and Ringing*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2014.
- C.70. Nianyi Li, Jinwei Ye, Yu Ji, Haibin Ling and Jingyi Yu, *Saliency Detection on Light Fields*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2014.
- C.71. Zhaolin Xiao, Qing Wang, Guoqing Zhou and Jingyi Yu, *Aliasing Detection and Reduction in Plenoptic Imaging*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2014.
- C.72. Can Chen, Haiting Lin, Zhan Yu, Sing Bing Kang and Jingyi Yu, *Light Field Stereo Matching Using Bilateral Statistics of Surface Cameras*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2014.

- C.73. Erkang Cheng, Yu Pang, Ying Zhu, Jingyi Yu and Haibin Ling, *Curvilinear Structure Tracking by Low Rank Tensor Approximation with Model Propagation*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2014.
- C.74. Xuan Yu, Zhan Yu, Xiaogang Chen, and Jingyi Yu, *A Hybrid Image-CAD Based System for Modeling Realistic Hairstyles*, in Proceedings of Interactive 3D Graphics (I3D) 2014.
- C.75. Jinwei Ye, Yu Ji and Jingyi Yu, *A Rotational Stereo Model Based on XSlit Imaging*, in Proceeding of the Thirteenth International Conference on Computer Vision (ICCV), 2013. Oral presentation.
- C.76. Zhan Yu and Jingyi Yu, *Line-Assisted Light Field Triangulation and Stereo Matching*, in Proceeding of the Thirteenth International Conference on Computer Vision (ICCV), 2013.
- C.77. Peng Jiang, Haibin Ling, Jingyi Yu and Jingliang Peng, *Salient Region Detection by UFO: Uniqueness, Focusness and Objectness*, in Proceeding of the Thirteenth International Conference on Computer Vision (ICCV), 2013.
- C.78. Jinwei Ye, Yu Ji and Jingyi Yu, *Manhattan Scene Understanding Via XSlit Imaging*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2013.
- C.79. Yu Ji, Jinwei Ye and Jingyi Yu, *Volumetric Gas Flow Reconstruction Via Light Path Estimation*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2013. Oral presentation.
- C.80. Xiaogang Chen, Sing Bing Kang, Jie Yang and Jingyi Yu, *Fast Patch-based Denoising Using Geodesic Path Approximation*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2013.
- C.81. Xiaogang Chen, Feng Li, Jie Yang and Jingyi Yu, *A Theoretical Analysis of Camera Response Functions in Image Deblurring*, in Proceeding of the European Conference on Computer Vision (ECCV), 2012: 333-346.
- C.82. Jinwei Ye, Yu Ji, Feng Li and Jingyi Yu, *Dynamic 3D Fluid Surface Reconstruction Using Angular Normal Sampling and Reconstruction*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2012: 310-317.
- C.83. Zhan Yu, Jingyi Yu, Andrew Lumsdaine and Todor Georgiev, *An Analysis on Color Demosaicing in Plenoptic Cameras*, in Proceeding of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2012: 901-908.
- C.84. Xuan Yu, Jason C. Yang, Justin Hensley, Takahiro Harada and Jingyi Yu, *A Framework for Rendering Complex Scattering Effects on Hair*, in Proceedings of ACM SIGGRAPH Symposium on Interactive 3D Graphics & Games (I3D), 2012: 111-118.
- C.85. Yuanyuan Ding, Feng Li, Yu Ji and Jingyi Yu, *Dynamic 3D Fluid Surface Acquisition Using a Camera Array*, in Proceedings of the Twelfth International Conference on Computer Vision (ICCV), 2011: 2478-2485.
- C.86. Feng Li, Zijia Li, David Saunders and Jingyi Yu, *A Theory of Co-prime Blurred Pairs*, in Proceedings of the Twelfth International Conference on Computer Vision (ICCV), 2011: 217-224.
- C.87. Yi Wu, Haibin Ling, Jingyi Yu, Feng Li, Xue Mei and Erkang Cheng, *Blurred Target Tracking by Blur-driven Tracker*, in Proceedings of the Twelfth International Conference on Computer Vision (ICCV), 2011: 1100-1107.
- C.88. Yuanyuan Ding, Jing Xiao and Jingyi Yu, *A Theory of Multi-perspective Defocusing*, in Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2011: 217-224.
- C.89. Yuanyuan Ding, Jing Xiao and Jingyi Yu, *Importance Filtering for Image Retargeting*, in Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2011: 89-96.
- C.90. Yuanyuan Ding, Scott McCloskey and Jingyi Yu, *Analysis of Motion Blur with a Flutter Shutter Camera for Non-Linear Motion*, in Proceedings of the Eleventh European Conference on Computer Vision (ECCV), 2010: 15-30. Oral presentation.

- C.91. Feng Li, Liwei Xu, Philippe Guyenne and Jingyi Yu, *Recovering Fluid-type Motions Using Navier-Stokes Potential Flow*, in Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2010: 2448-2455.
- C.92. Yuanyuan Ding, Jingyi Yu and Peter Sturm, *Multi-perspective Stereo Matching and Volumetric Reconstruction*, in Proceedings of the Twelfth International Conference on Computer Vision (ICCV), 2009: 1827-1834.
- C.93. Yuanyuan Ding, Jing Xiao, Kar-Han Tan and Jingyi Yu, *Catadioptric Projectors*, in Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2009: 2528-2535.
- C.94. Yuanyuan Ding, Jingyi Yu and Peter Sturm, *Recovering Specular Surfaces Using Curved Line Images*, in Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2009: 2326-2333.
- C.95. Yuanyuan Ding and Jingyi Yu, *Recovering Shape Characteristics on Near-flat Specular Surfaces*, in Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2008: 1-8.
- C.96. Yuanjie Zheng, Jingyi Yu, Steve Lin, Sing Bing Kang and Chandra Kambhampettu, *Single-Image Vignetting Correction Using Radial Gradient Symmetry*, in Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2008: 1-8. Oral presentation.
- C.97. Feng Li, Jingyi Yu and Jinxiang Chai, *A Hybrid Camera for Motion Deblurring and DepthMap Super-Resolution*, in Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2008: 1-8.
- C.98. Yuanjie Zheng, Chandra Kambhampettu, Jingyi Yu, Thomas Bauer and Karl Steiner, *FuzzyMatte: A Computationally Efficient Scheme for Interactive Matting*, in Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2008: 1-8. Oral presentations.
- C.99. Jingdan Zhang, Leonard McMillan and Jingyi Yu, *Robust Tracking and Stereo Matching under Varying Illumination*, in Proceedings of IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR), 2006, Volume 1, Issue 17-22: 871-878.
- C.100. Jingyi Yu and Leonard McMillan, *Multiperspective Projection and Collineation*, in Proceedings of International Conference on Computer Vision (ICCV), 2005, Volume 1: 580-587.
- C.101. Jingyi Yu, Jason Yang and Leonard McMillan, *Real-Time Reflection Mapping with Parallax*, in Proceedings of the Symposium on Interactive 3D Graphics and Games (I3D), 2005: 133- 138.
- C.102. Jingyi Yu and Leonard McMillan, *Analyzing Reflections via Multiperspective Imaging*, in Proceedings of IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR), 2005: 117-124.
- C.103. Jingyi Yu and Leonard McMillan, *General Linear Cameras*, in the Eighth European Conference on Computer Vision (ECCV), 2004, Volume 2: 14-27. Oral presentation.

## Patents

- Shape and reflectance reconstruction, United States Patent 11528427 (December 13, 2022)
- Method and system for three-dimensional model reconstruction, United States Patent 10762654 (September 1, 2020)
- Method and system for hyperspectral light field imaging, United States Patent 10641658 (May 5, 2020)
- Method and apparatus for estimating depth of field information, United States Patent 10645368 (May 5, 2020)
- Method and system for snapshot multi-spectral light field imaging, United States Patent 10645281 (May 5, 2020)
- Compression method and apparatus for panoramic stereo video system, United States Patent 10643305, (May 5, 2020)

- XSlit camera, United States Patent 10546395, (Jan 28, 2020)
- Stitching method and apparatus for panoramic stereo video system, United States Patent 10489886, (Nov 26, 2019)
- 3-D light field camera and photography method, United States Patent 10397545, (Aug 27, 2019)
- Compression Method and Apparatus for Panoramic Stereo Video System, PCT 16069185
- Three Dimensional Acquisition and Rendering, PCT16004434
- Method and System for Image-based Image Rendering Using a Multi-Camera Array and Depth-Camera Array, PCT16004430
- Calibration Method and Apparatus for Panoramic Stereo Video System, PCT160063
- Stitching Method and Apparatus for Panoramic Stereo Video System, PCT160064
- Stereo Video Compression Based on Hybrid ROI Detection, PCT160065
- 3D Light Field Camera and Photography Method, United States Provisional Patent Application, 61/920,074, 61/931,051.
- Portable 3D Reconstruction System Using Microsoft Kinect Sensors/3D Space-Time Navigator to Interactively Display Data Generated on Portable 3D Acquisition System, United States Provisional Patent Application, 61/893,352.
- The XSlit Camera, United States, Provisional Patent Application, 61/886,161.
- Light Field Quilting Software, United States, Copyright, 1-1016472119.
- Reducing Texture Details in Images, United States Patent 7,102,638.
- Enhancing Low Quality Images of Naturally Illuminated Scenes, United States Patent 7,103,227.
- Stylized Imaging Using Variable Controlled Illumination, United States Patent 7,218,792.
- Detecting Silhouette Edges in Images, United States Patent 7,206,449.