

Jingyi Yu

Vice President and Vice Provost

Inaugural Chair Professor, School of Information Science and Technology, 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

2025 – present	Vice President ShanghaiTech University
2020 – present	Vice Provost ShanghaiTech University
2015 – 2025	Professor and 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

- Inaugural Chair Professor of the ShanghaiTech University 2025
- OSA Fellow, 2022
- IEEE Fellow, 2021
- ACM Distinguished Members, 2021
- Director, the MoE Key Lab of Intelligent Perception and Human-Machine Collaboration, 2023
- General Chair, IEEE International Conference on Computer Vision (ICCV), 2025

- Program Co-Chair, IEEE International Conference on Computer Vision (ICCV), 2027
- 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, the 2nd Workshop on Light Field for Computer Vision (LF4CV '17) in conjunction with CVPR 2017.
- Program Co-Chair, the 4th Workshop on Computational Cameras and Displays (CCD '15) in conjunction with CVPR 2015.
- Program Co-Chair, the 1st Workshop on Light Field for Computer Vision (LF4CV '14) in conjunction with ECCV 2014.
- Program Co-Chair, the 11th Workshop on Omnidirectional Vision, Camera Networks and Non-classical Cameras (OMNIVIS '11) in conjunction with ICCV 2011.
- General Co-Chair, IEEE Workshop on Projector-Camera Systems (PROCAMS '09) in conjunction with CVPR 2009
- Area Chair, IEEE Conference on Computer Vision and Patter Recognition (CVPR 2016, 2017, 2019, 2022, 2023)
- Area Chair, IEEE International Conference on Computer Vision (ICCV 2011, 2015, 2017, 2019, 2023)
- Area Chair, European Conference on Computer Vision (ECCV 2006, 2010, 2012)
- Area Chair, Neural Information Processing Symposium (NeurIPS 2015, 2017, 2018)
- **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 - present)
- **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)
- Program Committee, ACM Interactive 3D Graphics (I3D, 2009 - 2014)
- Program Committee, Pacific Graphics (PG 2009 - 2019)
- Computer Animation and Social Agents (CASA 2008, 2009)
- Shape Modeling International (SMI 2008, 2009, 2010)
- Guest Editor, CVIU Special Issue on Light Field for Computer vision (LF4CV)
- Best Paper Award (ACM SIGGRAPH 2025)
- Best-in-Show Award, Emerging Technologies (ACM SIGGRAPH 2025)
- Best Paper Award Nominees (ACM/IEEE DAC 2025)
- Two Technical Papers Honorable Mention Award (ACM SIGGRAPH 2024)
- Best Paper Award Nominees (ACM/IEEE DAC 2024)

- Best student paper finalist (to my Ph.D. student Nianyi Li), 2017 International Joint Conference on Artificial Intelligence (IJCAI '17).
- Best student paper award (to my Ph.D. student Yang Yang), 2016 SPIE Conference on Mobile Imaging
- Best student paper award (to my Ph.D. student Qiaosong Wang), 2014 SPIE Conference on Mobile Imaging
- 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
- Faculty adviser to student-founded startup companies: DGene (on virtual and augmented reality, investor: Alibaba and GSR), Deemos (on digital human creation, investor: Sequoia), Stereye (on digital city, investor: GSR), NeuDim (on neural rendering engine, investor: Sequoia).
- 2013 College of Engineering Outstanding Junior Faculty Award
- 2010 Air Force Young Investigator Award (AFOSR YIP)
- 2009 NSF Career Award
- 2009 University of Delaware Research Foundation Grant Recipient
- 2007 Exemplary Use of Technology in Teaching Award, University of Delaware
- 2006 College of Arts and Sciences Transformation Grant Recipient
- 2000 Caltech Graduation with Honor, California Institute of Technology
- 2000 Caltech Moore Fellowship, California Institute of Technology
- 1999 Zeigler Memorial Award, California Institute of Technology
- 1999 Merit Scholarship, California Institute of Technology

Research Grants

2005 – 2018 as a faculty member at the University of Delaware: Total amount awarded as lead PI: \$~4M, 2015-2021 at ShanghaiTech University: Total amount of research funding: 7M in CNY

- Research and Development of Virtual Reality Interaction and Analysis System for Three-Dimensional Structure of Biological Macromolecules, Jingyi Yu (PI), Ministry of Science and Technology, National Key Research and Development Program sub-project (2025YFA1309603), ¥4690,000, 2025.12 – 2030.11.
- Cross-domain Agent Collaboration and Evolution in Virtual-Real Symbiotic Environments, Jingyi Yu (PI), The Science and Technology Commission of Shanghai Municipality (YDZX20253100001001), ¥3000,000, 2025.09 – 2028.08.
- Coupling Emerging AI Techniques with Computational Imaging for Visual Intelligence: Theories, Algorithms and Applications, Jingyi Yu (PI), National Natural Science Foundation of China (W2431046), ¥1600,000, 2025.1- 2026.12.
- Research on AI Theory, Hardware-Software Co-design, and Systems, Jingyi Yu (PI), The Science and Technology Commission of Shanghai Municipality (21010502400), ¥560,000, 2021.07 – 2024.06.
- Dynamic 3D Reconstruction of Fluid Flows Driven via Deep Learning and Light Fields, Jingyi Yu (PI), National Natural Science Foundation of China (61976138), ¥620,000, 2020.1–2023.12.

- Key Technologies on 3D Mixed Reality of Teaching and Learning Scenes for Resources Sharing, Shiyang Li, Jingyi Yu (PI), National Natural Science Foundation of China (61977047), ¥500,000, 2020.1–2023.12.
- Multi-scale Light Filed Imaging and Analysis on Urban Scenes, in the National Key Research and Development Program (Multi-scale Sensing Technologies Integration for Smart Cities, No. 2018YFB2100500), Jingyi Yu, ¥1,730,000, 2019.7–2022.6
- Intelligent Hand Interactions in MR Teaching and Learning Scenes, Jingyi Yu (PI), Major Program of Shanghai Municipal Education Commission (2019-01-07-00-01-E00003), ¥3,000,000, 2019.1–2023.12.
- Light Filed VR Platforms: Reconstructing Micro-Macro World, Jingyi Yu (PI), Science and Technology Commission Shanghai Municipal (17XD1402900), ¥400,000, 2017.5–2020.4.
- Light Field Deep Learning for 3D Scene Perception, Jingyi Yu (PI), Science and Technology Commission Shanghai Municipal (17JC1403800), ¥800,000, 2017.9–2019.8.
- National Science Foundation, “Multiscale plenoptic imaging and direct computation of turbulent channel flows laden with finite-size solid particles”, Co-PI; PI: L. Wang; NSF CBET; June 1, 2017 – May 31, 2020, \$300,000 (my portion \$150,000).
- Defense Advanced Research Program Agency, “Image Forensics on Motion and Defocus Blurs”, PI; with Scott McCloskey (PI at Honeywell); DARPA MEDIFOR; June 1, 2016 – May 31, 2018, \$250,000.
- National Science Foundation, “Building A Light Field Imaging System to Transparent Flow Reconstruction”, PI; with L. Wang (Co-PI); NSF CRI; June 1, 2015 – May 31, 2017, \$180,000 (my portion \$160,000).
- National Science Foundation, “Stochastic Sampling for Rendering, Imaging, and Modeling”, PI at UD; with Rui Wang (PI at University of Massachusetts); September 1, 2014 – August 31, 2017, \$499,996 (my portion \$179,664).
- Army Research Office, “Face Localization and Recognition Under Low Lighting via Multi-Modal Sensing”, Sole PI; Aug 1, 2014 – July 31, 2018, \$343,858.
- National Science Foundation, “Head-Activated Interface Using Off-the-shelf Mobile Platforms”, Co-PI. PI: Kenneth Barner; September 1, 2013 – August 31, 2016, \$496,020 (my portion \$179,497).
- Army Research Lab, “Evaluations and Comparisons of Visible-Light Face Detection Algorithms for Infrared Facial Imagery”, Sole PI; September 1, 2012 – May 31, 2013, \$49,999.
- National Science Foundation, “Contour-Assisted Visual Inference: Systems, Algorithms, and Applications”, PI at UD; with Haibin Ling (PI at Temple University); NSF IIS; September 1, 2012 – August 31, 2015, \$469,359 (my portion \$208,746).
- Delaware IDeA Network of Biomedical Research Excellence (INBRE), National Institute of Health, “ISurg: A Next-generation Immersive Surgical Simulation System”, Sole PI; March 1, 2012 – February 28, 2013, \$214,247.
- National Science Foundation, “Differential Ray Geometry for Surface Modeling and Reconstruction”, Sole PI; NSF IIS; September 1, 2010 – August 31, 2013, \$370,940.
- Air Force Office of Scientific Research (AFOSR) Young Investigator Award (YIP), “Building a Hybrid Camera Array for Tracking and Reconstruction under Low Light”, Sole PI; May 1, 2010 – April 30, 2013, \$367,231.

- National Science Foundation CAREER Award, “Beyond Perspective Cameras: Multi-perspective Imaging, Reconstruction, Rendering, and Projection”, Sole PI, NSF IIS; April 1, 2009 – March 31, 2014, \$400,000.
- University of Delaware Research Foundation, “Building a Portable Acquisition System for Capturing Rich Appearance Data”, Sole PI; June 1, 2009 – May 31, 2011, \$35,000.
- National Science Foundation, “3D Fluid Surface Reconstruction Using A Multi-Camera System”, PI; with P. Guyenne (Co-PI); NSF MCS; September 1, 2006 – August 31, 2010, \$499,430 (my portion \$328,683).
- University of Delaware College of Arts and Sciences Dean’s Transformation Grant, “Building An Immersive, Interactive Display for Smith Hall”, Co-PI; with C. Rasmussen (PI) and L. Winn (Co-PI); June 12, 2006 – June 30, 2008, \$25,000.

Publications

Over 200 publications (over 90 at CVPR/ICCV/ECCV/SIGGRAPH/TPAMI). For conference publications, Acceptance Rate (AR) refers to the percentage of submissions that get accepted and appear as full papers in the proceedings. For premiere computer vision conferences CVPR/ICCV/ECCV, most of the accepted full papers are presented by poster and only those are rated at the very top (usually < 4% of all submissions) are selected for oral presentation for which I mark as “Oral” along with their corresponding AR with respect to the total number of submissions.

Books/Book Chapters

- B.1. McCorduck, P. *Machines who think: A personal inquiry into the history and prospects of artificial intelligence* (Jingyi Yu & Lifeng. Yang, Trans.). Beijing: Gezhi Press, 2023
- B.2. Jingyi Yu, *Light Fields: Theory, Algorithms and Applications*, in progress, Springer, 2023.
- B.3. Jingyi Yu, *Reconstructing Invisible Objects*, in progress, in Lectures on Computer Vision, Morgan and Claypool, 2023.
- B.4. Jingyi Yu and Lifeng Yang, *Ethics in Information Science and Technology*, China Machine Press, 2023
- B.5. Jingyi Yu, *Multi-sensor Fusion for Motion Deblurring*, in Motion Deblurring: Theory, Algorithms and Systems, Rajagopalan A. N. and Rama Chellappa, Cambridge University Press, 2014.

Selected Journal Publications (ACM ToG, IEEE TPAMI/TIP, Springer IJCV)

- 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 Transactions on Graphics (TOG) 44 (4): 1-19, 2025. (Presented at 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 Transactions on Graphics (TOG) 44 (4): 1-21, 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, *V³: 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, Shiyong Li, Jingyi Yu, *Holi-1-to-3: Transient-enhanced holistic image-to-3d generation*. IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 47(9): 7206 – 7217, 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. Jingping Wang, Tingrui Zhang, Qixuan Zhang, Chuxiao Zeng, Jingyi Yu, Chao Xu, Lan Xu, Fei Gao, *Implicit swept volume sdf: Enabling continuous collision-free trajectory generation for arbitrary shapes*. ACM Transactions on Graphics (TOG) 43 (4):1-14, 2024.
- J.11. 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.12. 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.13. Jingyi Wang, Beibei Pan, Zi Wang, Jiakai Zhang, Zhiqi Zhou, Lu Yao, Yanan Wu, Wuwei Ren, Jianyu Wang, Haiming Ji, Jingyi Yu, Baile Che, *Single-pixel p-graded-n junction spectrometers*. Nature Communications 15 (1), 1773, 2024.
- J.14. Guan-Ting Liu, Yi-Wei Shen, Rui-Qian Li, Jingyi Yu, Xuming He, Cheng Wang, *Optical ReLU-like activation function based on a semiconductor laser with optical injection*. Optics Letters 49 (4), 818-821, 2024.
- J.15. Yiming Ren, Chengfeng Zhao, Yinnan He, Peishan Cong, Han Liang, Jingyi Yu, Lan Xu, Yuexin Ma, *Lidar-aid inertial poser: Large-scale human motion capture by sparse inertial and lidar sensors*. IEEE Transactions on Visualization and Computer Graphics (TVCG) 29 (5), 2337-2347, 2023.
- J.16. Jia-Yan Tang, Bao-De Lin, Yi-Wei Shen, Rui-Qian Li, Jingyi Yu, Xuming He, Cheng Wang, *Asynchronous photonic time-delay reservoir computing*. Optics Express, 31 (2), 2456-2466, 2023.
- J.17. 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, to appear.
- J.18. 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, to appear.
- J.19. 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.20. Yuqi Ding, Zhong Li, Zhang Chen, Yu Ji, Jingyi Yu, Jinwei Ye, *Full-Volume 3D Fluid Flow Reconstruction with Light Field PIV*, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2023.

- J.21. 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.22. 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.23. 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.24. 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.25. 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.26. 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.27. 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.28. 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.29. 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.30. 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.31. Siyuan Shen, Zi Wang, Ping Liu, Zhengqing Pan, Ruiqian Li, Tian Gao, Shiyong 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.32. 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.33. 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.34. 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.35. 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.36. 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.37. 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.38. 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.39. 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.40. 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.41. Qi Zhang, Chunping Zhang, Jinbo Ling, Qing Wang, Jingyi Yu, *A Generic Multi-Projection-Center Model and Calibration Method for Light Field Cameras*, in IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 41(11): 2539 - 2552, 2019
- J.42. Xin Chen, Yuwei Li, Xi Luo, Tianjia Shao, Jingyi Yu, Kun Zhou, Youyi Zheng, *AutoSweep: Recovering 3D Editable Objects from a Single Photograph*, IEEE Transactions on Visualization and Computer Graphics (TVCG), 14(8): 1-10, 2018 .
- J.43. Zhaolin Xiao, Qing Wang, and Jingyi Yu, *Aliasing Detection and Reduction Scheme on Angularly Undersampled Light Fields*, in IEEE Transaction on Image Processing (TIP), 2017.
- J.44. 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.45. 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.46. Yu-Wing Tai, Xiaogang Chen, Sunyeong Kim, Seon Joo Kim, Feng Li, Jie Yang, Jingyi Yu, Yasuyuki 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.47. 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.
- J.48. Yuanjie Zheng, Sing-Bing Kang, Chandra Kambhampettu, Jingyi Yu and Steve Lin, *Single-Image Vignetting Correction*, in IEEE Transaction on Pattern Analysis and Machine Intelligence (TPAMI), 31(12): 2243-2256, 2009.
- J.49. Yongjin Kim, Jingyi Yu, Xuan Yu and Seungyong Lee, *Line-art Illustration of Dynamic and Specular Surfaces*, in ACM Transaction on Graphics (Proceedings of ACM SIGGRAPH Asia), 2008.
- J.50. Ramesh Raskar, Kar-han Tan, Rogerio Feris, Jingyi Yu and Mathew Turk, *Non-photorealistic Camera: Depth Edge Detection and Stylized Rendering Using Multi-Flash Imaging*, in ACM Transaction on Graphics (Proceedings of ACM SIGGRAPH), 2004, Volume 3, Issue 3: 679-688.

Selected Conference Publications (Top conferences in Computer Vision/Computer Graphics/Bioinformatics, Ranked by Microsoft Academic)

- C.1. Pengyu Long, Zijun Zhao, Min Ouyang, Qingcheng Zhao, Wei Yang, Lan Xu, Jingyi Yu, *Generating 3D Hair Strands from Images with Diverse Styles and Viewpoints*. Proceedings of the 33rd ACM International Conference on Multimedia (ACM MM), 2025.
- C.2. Hongyang Lin, Kuixiang Shao, Peijun Xu, Zhuoyang Bu, Yuyang Jiao, Ziyuan Tang, Chenxi Xiao, Jingyi Yu, *HandCraft: Tactile-Informed Hand-Object Dynamics Capture and Realistic Rendering*. Proceedings of the 33rd ACM International Conference on Multimedia (ACM MM), 2025.
- C.3. Yu Hong, Yize Wu, Zehao Shen, Chengcheng Guo, Yuheng Jiang, Yingliang Zhang, Qiang Hu, Jingyi Yu, Lan Xu, *BEAM: Bridging Physically-based Rendering and Gaussian Modeling for Relightable*

- Volumetric Video. Proceedings of the 33rd ACM International Conference on Multimedia (ACM MM), 2025.
- C.4. Youjia Wang, Ruixiang Cao, Teng Xu, Yifei Liu, Dong Zhang, Yiwen Wu, Jingyi Yu, DreamPrinting: Volumetric Printing Primitives for High-Fidelity 3D Printing. ACM SIGGRAPH 2025 Emerging Technologies 2025. (Best-in-Show Award, Emerging Technologies).
 - C.5. 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.6. 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.7. 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.8. 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.9. Yiming Zhong, Qi Jiang, Jingyi Yu, Yuexin Ma, Dexgrasp anything: Towards universal robotic dexterous grasping with physics awareness. Proceedings of the Computer Vision and Pattern Recognition Conference (CVPR), 2025
 - C.10. Shijie Wu, Yihang Zhu, Yunao Huang, Kaizhen Zhu, Jiayuan Gu, Jingyi Yu, Ye Shi, Jingya Wang, Afforddp: Generalizable diffusion policy with transferable affordance. Proceedings of the Computer Vision and Pattern Recognition Conference (CVPR), 2025
 - C.11. Bikang Pan, Qun Li, Xiaoying Tang, Wei Huang, Zhen Fang, Feng Liu, Jingya Wang, Jingyi Yu, Ye Shi, NLPrompt: Noise-Label Prompt Learning for Vision-Language Models. Proceedings of the Computer Vision and Pattern Recognition Conference (CVPR), 2025
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Patents

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