杨洁

✉ yangjie01@ict.ac.cn +86 18811573001
Homepage: http://people.geometrylearning.com/~jieyang/
北京市海淀区科学院南路 6 号，100190

教育/工作背景

中国科学院计算技术研究所 | 计算机科学 中国，北京
助理研究员、博士后 *Oct. 2022 – 至今.*
研究方向：计算机图形学、几何学习与三维视觉；博士后合作导师：高林研究员

中国科学院大学 | 计算机科学 中国，北京
工学博士 *Sep. 2018 – Sep. 2022*
指导老师：高林研究员、夏时洪研究员

英国卡迪夫大学 | 计算机科学与信息学院 英国，威尔士
短期访问学生 *Nov. 2017 – Dec. 2017*
指导老师：来煜坤教授

中国科学院大学 | 计算机科学 中国，北京
工学硕士 *Sep. 2016 – Jun. 2018*
指导老师：高林研究员、夏时洪研究员

四川大学 | 数学系 中国，成都
数学与应用数学学士 *Sep. 2012 – Jun. 2016*
GPA: 3.6/4.0，专业排名：3/42

论文列表

[1] Yun-Peng Xiao, **Jie Yang**, Chuan Li, Lin Gao, Yong-Liang Yang. *MeshSeqGen: Zero-shot Mesh Animation based on a Large Video Generation Model.*
IEEE Transactions on Visualization and Computer Graphics (IEEE TVCG), early access, 2026.

[2] Jing-Wen Yang, **Jie Yang**, Yi-Hua Huang, Yong-Liang Yang, Yan-Pei Cao, Lin Gao. *MesoSplats: Texture Synthesis with Gaussian Splatting.*
IEEE Transactions on Visualization and Computer Graphics (IEEE TVCG), accepted, 2026.

[3] **Jie Yang**, Bo-Tao Zhang, Feng-Lin Liu, Hongbo Fu, Yu-Kun Lai, Lin Gao. *HumanLift: Single-Image 3D Human Reconstruction with 3D-Aware Diffusion Priors and Facial Enhancement.*
ACM SIGGRAPH Asia, 2025.

[4] Tong Wu, Yu-Jie Yuan, Ling-Xiao Zhang, **Jie Yang**, Yan-Pei Cao, Ling-Qi Yan, Lin Gao. *Recent Advances in 3D Gaussian Splatting.*
Computational Visual Media, 2024.

[5] Lin Gao, **Jie Yang**, Bo-Tao Zhang, Jia-Mu Sun, Yu-Jie Yuan, Hongbo Fu, Yu-Kun Lai. *Real-time Large-scale Deformation of Gaussian Splatting.*
ACM Transactions on Graphics (SIGGRAPH Asia), 43(6), 2024.

[6] Yu-Tao Liu, Xuan Gao, Weikai Chen, **Jie Yang**, Xiaoxu Meng, Bo Yang, Lin Gao. *DreamUDF: Generating Unsigned Distance Fields from a Single Image.*
ACM Transactions on Graphics (SIGGRAPH Asia), 43(6), 2024.

[7] Jia-Mu Sun, **Jie Yang**, Kaichun Mo, Yu-Kun Lai, Leonidas J. Guibas, Lin Gao. *HAISOR: Human-Aware Indoor Scene Optimization via Deep Reinforcement Learning.*
ACM Transactions on Graphics (Presented at SIGGRAPH), 43(2), 2024.

[8] Yu-Tao Liu, Li Wang, **Jie Yang**, Weikai Chen, Xiaoxu Meng, Bo Yang, Lin Gao. *NeUDF: Learning Neural Unsigned Distance Fields with Volume Rendering.*
IEEE Transactions on Pattern Analysis and Machine Intelligence, 2024 (extended version of CVPR 2023).

[9] Jing-Wen Yang, Jia-Mu Sun, Yongliang Yang, **Jie Yang**, Ying Shan, Yan-Pei Cao, Lin Gao. *DMiT: Deformable Mipmapped Tri-Plane Representation for Dynamic Scenes.*
European Conference on Computer Vision (ECCV), 2024.

[10] Li Wang, Yu-Tao Liu, **Jie Yang**, Weikai Chen, Xiaoxu Meng, Bo Yang, Jintao Li, Lin Gao. *HSDF: Hybrid Sign and Distance Field for Neural Representation of Surfaces with Arbitrary Topologies.*
IEEE Transactions on Visualization and Computer Graphics, 2024.

[11] Lin Gao, Jia-Mu Sun, Kaichun Mo, Yu-Kun Lai, Leonidas J. Guibas, **Jie Yang**. *SceneHGN: Hierarchical Graph Networks for 3D Indoor Scene Generation with Fine-Grained Geometry.*
IEEE Transactions on Pattern Analysis and Machine Intelligence, 2023.

[12] Chenbo Jiang, **Jie Yang**, Shwai He, Yu-Kun Lai, Lin Gao. *NeuralSlice: Neural 3D Triangle Mesh Reconstruction via Slicing 4D Tetrahedral Meshes.*
International Conference on Machine Learning (ICML), 2023.

[13] 袁宇杰，吴桐，**杨洁**，高林. 神经辐射场研究进展.
中国图象图形学学会通讯，2(1)，9–25，2023.

[14] Lan Chen, Lin Gao, **Jie Yang**, Shibiao Xu, Juntao Ye, Xiaopeng Zhang, Yu-Kun Lai. *Deep Deformation Detail Synthesis for Thin Shell Models.*
Computer Graphics Forum (Eurographics Symposium on Geometry Processing), 42(5), 2023.

[15] Lan Chen, **Jie Yang**, Hongbo Fu, Xiaoxu Meng, Weikai Chen, Bo Yang, Lin Gao. *IMPLICITPCA: Implicitly-Proxied Parametric Encoding for Collision-Aware Garment Reconstruction.*
International Conference on Computational Visual Media (CVM), 2023.

[16] **Jie Yang**[#], Kaichun Mo[#], Yu-Kun Lai, Leonidas J. Guibas, Lin Gao. *DSG-Net: Learning Disentangled Structure and Geometry for 3D Shape Generation.*
ACM Transactions on Graphics (Presented at SIGGRAPH), 2022.

[17] Li Wang, **Jie Yang**, Weikai Chen, Xiaoxu Meng, Bo Yang, Jintao Li, Lin Gao. *HSDF: Hybrid Sign and Distance Field for Modeling Surfaces with Arbitrary Topologies.*
Neural Information Processing Systems (NeurIPS), 2022.

[18] Xiao-Juan Li, **Jie Yang**, Fang-Lue Zhang. *Laplacian Mesh Transformer: Dual Attention and Topology-Aware Network for 3D Mesh Classification and Segmentation.*
European Conference on Computer Vision (ECCV), 2022.

[19] Wei Yang[*], Yi Wang[*], Lin Gao[*], Di Zhang, **Jie Yang**, Zhijie Qiu. *Sci-tech Arts on Chang'e-5 Lunar Soil.*
The Innovation, 3(5), 100300, 2022.

[20] Yi-Ling Qiao, Lin Gao, **Jie Yang**, Paul L. Rosin, Yu-Kun Lai, Xilin Chen. *Learning on 3D Meshes with Laplacian Encoding and Pooling.*
IEEE Transactions on Visualization and Computer Graphics, 28(2), 1317–1327, 2021.

[21] Qingyang Tan[#], Ling-Xiao Zhang[#], **Jie Yang**, Yu-Kun Lai, Lin Gao. *Variational Autoencoders for Localized Mesh Deformation Component Analysis.*
IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021.

[22] **Jie Yang**, Lin Gao, Qingyang Tan, Yihua Huang, Shihong Xia, Yu-Kun Lai. *Multiscale Mesh Deformation Component Analysis with Attention-based Autoencoders.*
IEEE Transactions on Visualization and Computer Graphics, 2021.

[23] Lin Gao, Yu-Kun Lai, **Jie Yang**, Ling-Xiao Zhang, Leif Kobbelt, Shihong Xia. *Sparse Data Driven Mesh Deformation.*
IEEE Transactions on Visualization and Computer Graphics, 27(3), 2085–2100, 2021.

[24] Jia-Heng Tang[#], Weikai Chen[#], **Jie Yang**, Bo Wang, Songrun Liu, Bo Yang, Lin Gao. *OctField: Hierarchical Implicit Functions for 3D Modeling.*
Neural Information Processing Systems (NeurIPS), 2021.

[25] Mingxian Lin, **Jie Yang**, He Wang, Yu-Kun Lai, Rongfei Jia, Binqiang Zhao, Lin Gao. *Single Image 3D Shape Retrieval via Cross-Modal Instance and Category Contrastive Learning.*
IEEE International Conference on Computer Vision (ICCV), 2021.

[26] Aihua Mao, Canglan Dai, Qing Liu, **Jie Yang**, Lin Gao, Ying He, Yong-Jin Liu. *STD-Net: Structure-preserving and Topology-adaptive Deformation Network for Single-View 3D Reconstruction.*
IEEE Transactions on Visualization and Computer Graphics, 2021.

[27] Yu-Jie Yuan, Yu-Kun Lai, **Jie Yang**, Hongbo Fu, Lin Gao. *Mesh Variational Autoencoders with Edge Contraction Pooling*.
Learning 3D Generative Models, CVPR Workshop, 2020.

[28] Lin Gao, **Jie Yang**, Tong Wu, Yu-Jie Yuan, Hongbo Fu, Yu-Kun Lai, Hao Zhang. *SDM-NET: Deep Generative Network for Structured Deformable Mesh.*
ACM Transactions on Graphics (SIGGRAPH Asia), 38(6), 2019.

[29] Lin Gao, **Jie Yang**, Yi-Ling Qiao, Yu-Kun Lai, Paul L. Rosin, Weiwei Xu, Shihong Xia. *Automatic Unpaired Shape Deformation Transfer.*
ACM Transactions on Graphics (SIGGRAPH Asia), 37(6), 2018.

[30] Qingyang Tan, Lin Gao, Yu-Kun Lai, **Jie Yang**, Shihong Xia. *Mesh-based Autoencoders for Localized Deformation Component Analysis.*
AAAI Conference on Artificial Intelligence (Spotlight), 2018.

[31] **Jie Yang**, Lin Gao, Yu-Kun Lai, Paul L. Rosin, Shihong Xia. *Biharmonic Deformation Transfer with Automatic Key Point Selection.*
Graphical Models, 98, 1–13, 2018.

学术服务

会议审稿: SIGGRAPH / SIGGRAPH Asia: 2023–2025；CVPR: 2022–2024；ICCV: 2021, 2023, 2025；ECCV: 2022, 2024；NeurIPS: 2021–2025；AAAI: 2021–2025；Pacific Graphics: 2020；PRCV: 2019。
期刊审稿: IEEE Transactions on Visualization and Computer Graphics；Computer Graphics Forum；Transactions on Machine Learning Research。

获奖情况

2023: 陆增镛高科技奖。
2021: CCF 时谛智能 CAD&CG 优秀学生奖（全国 6 名）。
2021: 中国科学院朱李月华奖学金。
2020: 中国科学院大学三好学生。
2019: 第四范式奖学金。
2018: 国家奖学金。
2015: 美国大学生数学建模竞赛（Honorable Mention）。

技能

编程: C/C++, Python, Matlab, LaTeX, HTML/CSS, MySQL, Node.js。
研究工具: PyTorch, TensorFlow, OpenGL, SAPIEN, Git。
设计软件: Autodesk Maya, Adobe Illustrator, Adobe Photoshop。