



参考文献

- [1] MILDENHALL B, SRINIVASAN P P, TANCİK M, et al. Nerf: Representing scenes as neural radiance fields for view synthesis[C]//ECCV. [S.l.: s.n.], 2020.
- [2] BARRON J T, MILDENHALL B, VERBIN D, et al. Zip-nerf: Anti-aliased grid-based neural radiance fields[J]. ICCV, 2023.
- [3] GROUP O K. Opengl - the industry's foundation for high performance graphics[EB/OL]. 1992-06-30 / 2024-01-01. <https://www.opengl.org/>.
- [4] APPLE M. Accelerate graphics and much more with metal[EB/OL]. 2014-06-01 / 2024-01-01. <https://developer.apple.com/metal/>.
- [5] AI L A L. Lumaai: Building multimodal ai to expand human imagination and capabilities[EB/OL]. 2021-09-01/ 2024-01-01. <https://lumalabs.ai/>.
- [6] MESCHEDER L, OECHSLE M, NIEMEYER M, et al. Occupancy networks: Learning 3d reconstruction in function space[C]//Conference on Computer Vision and Pattern Recognition (CVPR). [S.l.: s.n.], 2019.
- [7] PENG S, NIEMEYER M, MESCHEDER L, et al. Convolutional occupancy networks[C]//European Conference on Computer Vision (ECCV). [S.l.: s.n.], 2020.
- [8] NIEMEYER M, MESCHEDER L, OECHSLE M, et al. Differentiable volumetric rendering: Learning implicit 3d representations without 3d supervision[C]//Conference on Computer Vision and Pattern Recognition (CVPR). [S.l.: s.n.], 2020.
- [9] GAMES U E E. The most powerful real-time 3d creation tool - unreal engine[EB/OL]. 1998-01-01 / 2024-01-01. <https://www.unrealengine.com/>.
- [10] UNITY U. Unity real-time development platform[EB/OL]. 2004-08-02 / 2024-01-01. <https://unity.com/>.
- [11] BARRON J T, MILDENHALL B, TANCİK M, et al. Mip-nerf: A multiscale representation for anti-aliasing neural radiance fields[J]. ICCV, 2021.
- [12] BARRON J T, MILDENHALL B, VERBIN D, et al. Mip-nerf 360: Unbounded anti-aliased neural radiance fields[J]. CVPR, 2022.
- [13] MÜLLER N, SIDDIQUI Y, PORZI L, et al. Diffrf: Rendering-guided 3d radiance field diffusion[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 4328-4338.
- [14] İŞİK M, RÜNZ M, GEORGOPOULOS M, et al. Humanrf: High-fidelity neural radiance fields for humans in motion[J/OL]. ACM Transactions on Graphics (TOG), 2023, 42(4): 1-12. <https://doi.org/10.1145/3592415>.
- [15] WANG Z, SHEN T, GAO J, et al. Neural fields meet explicit geometric representations for inverse rendering of urban scenes[C]//The IEEE Conference on Computer Vision and Pattern Recognition (CVPR). [S.l.: s.n.], 2023.
- [16] HUANG J, GOJCIC Z, ATZMON M, et al. Neural kernel surface reconstruction[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 4369-4379.
- [17] YU A, LI R, TANCİK M, et al. PlenOctrees for real-time rendering of neural radiance fields[C]//ICCV. [S.l.: s.n.], 2021.
- [18] FRIDOVICH-KEIL S, YU A, TANCİK M, et al. Plenoxels: Radiance fields without neural networks[C]//

- Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2022: 5501-5510.
- [19] YU A, YE V, TANCIK M, et al. pixelNeRF: Neural radiance fields from one or few images[C]//CVPR. [S.l.: s.n.], 2021.
- [20] AI L. Luma ai in code plugins - ue marketplace[EB/OL]. 2023-04-04 / 2024-01-01. <https://www.unrealengine.com/marketplace/en-US/product/luma-ai/>.
- [21] WANG P, LIU Y, CHEN Z, et al. F2-nerf: Fast neural radiance field training with free camera trajectories[J]. CVPR, 2023.
- [22] WANG P, LIU L, LIU Y, et al. Neus: Learning neural implicit surfaces by volume rendering for multi-view reconstruction[J]. NeurIPS, 2021.
- [23] WANG Y, HAN Q, HABERMANN M, et al. Neus2: Fast learning of neural implicit surfaces for multi-view reconstruction[C]//Proceedings of the IEEE/CVF International Conference on Computer Vision (ICCV). [S.l.: s.n.], 2023.
- [24] NIEMEYER M, GEIGER A. Giraffe: Representing scenes as compositional generative neural feature fields[C]//Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR). [S.l.: s.n.], 2021.
- [25] REISER C, PENG S, LIAO Y, et al. Kilonerf: Speeding up neural radiance fields with thousands of tiny mlps[C]//Proceedings of the IEEE/CVF International Conference on Computer Vision. [S.l.: s.n.], 2021: 14335-14345.
- [26] SONG L, CHEN A, LI Z, et al. Nerfplayer: A streamable dynamic scene representation with decomposed neural radiance fields[J]. IEEE Transactions on Visualization and Computer Graphics, 2023, 29(5): 2732-2742.
- [27] ZHU Z, PENG S, LARSSON V, et al. Nice-slam: Neural implicit scalable encoding for slam[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR). [S.l.: s.n.], 2022.
- [28] YU Z, PENG S, NIEMEYER M, et al. Monosdf: Exploring monocular geometric cues for neural implicit surface reconstruction[J]. Advances in Neural Information Processing Systems (NeurIPS), 2022.
- [29] CHEN A, XU Z, GEIGER A, et al. Tensorf: Tensorial radiance fields[C]//European Conference on Computer Vision (ECCV). [S.l.: s.n.], 2022.
- [30] JIN H, LIU I, XU P, et al. Tensor: Tensorial inverse rendering[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 165-174.
- [31] CHEN A, XU Z, ZHAO F, et al. Mvsnerf: Fast generalizable radiance field reconstruction from multi-view stereo[C]//Proceedings of the IEEE/CVF International Conference on Computer Vision. [S.l.: s.n.], 2021: 14124-14133.
- [32] YAN Z, LI C, LEE G H. Od-nerf: Efficient training of on-the-fly dynamic neural radiance fields[Z]. [S.l.: s.n.], 2023.
- [33] XIE H, CHEN Z, HONG F, et al. Citydreamer: Compositional generative model of unbounded 3d cities[Z]. [S.l.: s.n.], 2023.
- [34] CHEN Z, WANG G, LIU Z. Scenedreamer: Unbounded 3d scene generation from 2d image collections[J/OL]. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2023, 45(12): 15562-15576. <http://dx.doi.org/10.1109/TPAMI.2023.3321857>. DOI: 10.1109/tpami.2023.3321857.
- [35] LI Z, WANG Q, COLE F, et al. Dynibar: Neural dynamic image-based rendering[Z]. [S.l.: s.n.], 2023.
- [36] LIU Y L, GAO C, MEULEMAN A, et al. Robust dynamic radiance fields[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR). [S.l.: s.n.], 2023: 13-23.
- [37] ATTAL B, HUANG J B, RICHARDT C, et al. HyperReel: High-fidelity 6-DoF video with ray-conditioned sampling[C]//Conference on Computer Vision and Pattern Recognition (CVPR). [S.l.: s.n.], 2023.
- [38] LI Y, LIN Z H, FORSYTH D, et al. Climatenerf: Extreme weather synthesis in neural radiance field[C]//Proceedings of the IEEE/CVF International Conference on Computer Vision (ICCV). [S.l.: s.n.], 2023.

- [39] LI Z, LI L, ZHU J. Read: Large-scale neural scene rendering for autonomous driving[C]//AAAI. [S.l.: s.n.], 2023.
- [40] ZHANG S, PENG S, SHENTU Y, et al. Dyn-e: Local appearance editing of dynamic neural radiance fields[J]. arXiv preprint arXiv:2307.12909, 2023.
- [41] WANG Z, LU C, WANG Y, et al. Prolificdreamer: High-fidelity and diverse text-to-3d generation with variational score distillation[J]. arXiv preprint arXiv:2305.16213, 2023.
- [42] WU Z, LIU T, LUO L, et al. Mars: An instance-aware, modular and realistic simulator for autonomous driving[J]. CICA, 2023.
- [43] SUN J, WANG X, WANG L, et al. Next3d: Generative neural texture rasterization for 3d-aware head avatars[C]//CVPR. [S.l.: s.n.], 2023.
- [44] XU Y, ZHANG H, WANG L, et al. Latentavatar: Learning latent expression code for expressive neural head avatar[C]//ACM SIGGRAPH 2023 Conference Proceedings. [S.l.: s.n.], 2023.
- [45] YUAN Y J, SUN Y T, LAI Y K, et al. Nerf-editing: geometry editing of neural radiance fields[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2022: 18353-18364.
- [46] HU W, WANG Y, MA L, et al. Tri-miprf: Tri-mip representation for efficient anti-aliasing neural radiance fields[C]//ICCV. [S.l.: s.n.], 2023.
- [47] GAO L, LIU F L, CHEN S Y, et al. Sketchfacenerf: Sketch-based facial generation and editing in neural radiance fields[J]. ACM Transactions on Graphics (Proceedings of ACM SIGGRAPH 2023), 2023, 42(4): 159:1-159:17.
- [48] HUANG B, YAN X, CHEN A, et al. Pref: Phasorial embedding fields for compact neural representations[J]. arXiv preprint arXiv:2205.13524, 2022.
- [49] XU J, WANG X, CHENG W, et al. Dream3d: Zero-shot text-to-3d synthesis using 3d shape prior and text-to-image diffusion models[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 20908-20918.
- [50] ZHANG J, LI X, WAN Z, et al. Text2nerf: Text-driven 3d scene generation with neural radiance fields[J]. arXiv preprint arXiv:2305.11588, 2023.
- [51] MENG X, CHEN W, YANG B. Neat: Learning neural implicit surfaces with arbitrary topologies from multi-view images[J]. Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition, 2023.
- [52] LONG X, LIN C, LIU L, et al. Neuraludf: Learning unsigned distance fields for multi-view reconstruction of surfaces with arbitrary topologies[J]. ARXIV, 2022.
- [53] NVIDIA C. Cuda toolkit documentation[EB/OL]. 2007-06-23 / 2024-01-01. <https://docs.nvidia.com/cuda/>.
- [54] LI R, GAO H, TANCIK M, et al. Nerface: Efficient sampling accelerates nerfs.[J]. arXiv preprint arXiv:2305.04966, 2023.
- [55] MÜLLER T. tiny-cuda-nn[CP/OL]. 2021. <https://github.com/NVlabs/tiny-cuda-nn>.
- [56] SANDERS J, KANDROT E. Cuda by example: an introduction to general-purpose gpu programming[M]. [S.l.]: Addison-Wesley Professional, 2010.
- [57] PHARR M, JAKOB W, HUMPHREYS G. Physically based rendering: From theory to implementation[M]. [S.l.]: MIT Press, 2023.
- [58] KOPPAL S J. Lambertian reflectance[M/OL]. Boston, MA: Springer US, 2014: 441-443. https://doi.org/10.1007/978-0-387-31439-6_534.
- [59] PHONG B T. Illumination for computer generated pictures[M]//Seminal graphics: pioneering efforts that shaped the field. [S.l.: s.n.], 1998: 95-101.
- [60] BLINN J F. Models of light reflection for computer synthesized pictures[C]//Proceedings of the 4th annual conference on Computer graphics and interactive techniques. [S.l.: s.n.], 1977: 192-198.
- [61] BECKMANN P, SPIZZICHINO A. The scattering of electromagnetic waves from rough surfaces[J]. Norwood, 1987.

- [62] SCHLICK C. An inexpensive brdf model for physically-based rendering[C]//Computer graphics forum: volume 13. [S.l.]: Wiley Online Library, 1994: 233-246.
- [63] BECKMANN P. Scattering by composite rough surfaces[J]. Proceedings of the IEEE, 1965, 53(8): 1012-1015.
- [64] WALTER B, MARSCHNER S R, LI H, et al. Microfacet models for refraction through rough surfaces[C]//Proceedings of the 18th Eurographics conference on Rendering Techniques. [S.l.: s.n.], 2007: 195-206.
- [65] COOK R L, TORRANCE K E. A reflectance model for computer graphics[J]. ACM Transactions on Graphics (ToG), 1982, 1(1): 7-24.
- [66] KELEMEN C, SZIRMAY-KALOS L. A microfacet based coupled specular-matte brdf model with importance sampling.[C]//Eurographics (short presentations). [S.l.: s.n.], 2001.
- [67] AKENINE-MOLLER T, HAINES E, HOFFMAN N. Real-time rendering[M]. [S.l.]: AK Peters/crc Press, 2019.
- [68] UCBERKELEY C . Ueberkeley computer graphics and imaging course[EB/OL]. 2023-01-17 / 2024-01-01. <https://cs184.eecs.berkeley.edu/sp23>.
- [69] HORNIK K, STINCHCOMBE M, WHITE H. Multilayer feedforward networks are universal approximators[J]. Neural networks, 1989, 2(5): 359-366.
- [70] ACM I . Keynotes i3d 2023[EB/OL]. 2023-05-16 / 2024-01-01. <https://i3dsymposium.org/2023/keynotes.html>.
- [71] KORHONEN J, YOU J. Peak signal-to-noise ratio revisited: Is simple beautiful?[C]//2012 Fourth International Workshop on Quality of Multimedia Experience. [S.l.]: IEEE, 2012: 37-38.
- [72] SIMONYAN K, ZISSERMAN A. Very deep convolutional networks for large-scale image recognition[J]. arXiv preprint arXiv:1409.1556, 2014.
- [73] KRIZHEVSKY A, SUTSKEVER I, HINTON G E. Imagenet classification with deep convolutional neural networks[J]. Advances in neural information processing systems, 2012, 25.
- [74] IANDOLA F N, HAN S, MOSKEWICZ M W, et al. Squeezenet: Alexnet-level accuracy with 50x fewer parameters and < 0.5 mb model size[J]. arXiv preprint arXiv:1602.07360, 2016.
- [75] BLUM H, NAGEL R N. Shape description using weighted symmetric axis features[J]. Pattern recognition, 1978, 10(3): 167-180.
- [76] BAKSHI A, INDYK P, JAYARAM R, et al. A near-linear time algorithm for the chamfer distance[J]. arXiv preprint arXiv:2307.03043, 2023.
- [77] YEN-CHEN L. Nerf-pytorch[J/OL]. GitHub repository, 2020. <https://github.com/yenchenlin/nerf-pytorch/>.
- [78] HE K, ZHANG X, REN S, et al. Deep residual learning for image recognition[C]//Proceedings of the IEEE conference on computer vision and pattern recognition. [S.l.: s.n.], 2016: 770-778.
- [79] HUANG G, LIU Z, VAN DER MAATEN L, et al. Densely connected convolutional networks[C]//Proceedings of the IEEE conference on computer vision and pattern recognition. [S.l.: s.n.], 2017: 4700-4708.
- [80] PARK J J, FLORENCE P, STRAUB J, et al. Deepsdf: Learning continuous signed distance functions for shape representation[C]//Proceedings of the IEEE/CVF conference on computer vision and pattern recognition. [S.l.: s.n.], 2019: 165-174.
- [81] KAJIYA J T, VON HERZEN B P. Ray tracing volume densities[J]. ACM SIGGRAPH computer graphics, 1984, 18(3): 165-174.
- [82] FACEBOOKRESEARCH. Llama[J/OL]. GitHub repository, 2023. <https://github.com/facebookresearch/llama>.
- [83] OPENCV. Opencv - open computer vision library[EB/OL]. 2000-06-01 / 2024-01-01. <https://opencv.org/>.
- [84] TANCIAK M, WEBER E, NG E, et al. Nerfstudio: A modular framework for neural radiance field development[C]//SIGGRAPH '23: ACM SIGGRAPH 2023 Conference Proceedings. [S.l.: s.n.], 2023.
- [85] YU Z, CHEN A, ANTIC B, et al. Sdfstudio: A unified framework for surface reconstruction[EB/OL]. 2022. <https://github.com/autonomousvision/sdfstudio>.
- [86] YARIV L, GU J, KASTEN Y, et al. Volume rendering of neural implicit surfaces[C]//Thirty-Fifth Conference on Neural Information Processing Systems. [S.l.: s.n.], 2021.

- [87] OECHSLE M, PENG S, GEIGER A. Unisurf: Unifying neural implicit surfaces and radiance fields for multi-view reconstruction[C]//International Conference on Computer Vision (ICCV). [S.l.: s.n.], 2021.
- [88] MILDENHALL B, SRINIVASAN P P, ORTIZ-CAYON R, et al. Local light field fusion: Practical view synthesis with prescriptive sampling guidelines[J]. ACM Transactions on Graphics (TOG), 2019, 38(4): 1-14.
- [89] ZHOU T, TUCKER R, FLYNN J, et al. Stereo magnification: Learning view synthesis using multiplane images[J]. arXiv preprint arXiv:1805.09817, 2018.
- [90] HEDMAN P, PHILIP J, PRICE T, et al. Deep blending for free-viewpoint image-based rendering[J]. ACM Transactions on Graphics (ToG), 2018, 37(6): 1-15.
- [91] JENSEN R, DAHL A, VOGIATZIS G, et al. Large scale multi-view stereopsis evaluation[C]//Proceedings of the IEEE conference on computer vision and pattern recognition. [S.l.: s.n.], 2014: 406-413.
- [92] DAI A, CHANG A X, SAVVA M, et al. Scannet: Richly-annotated 3d reconstructions of indoor scenes[C]//Proceedings of the IEEE conference on computer vision and pattern recognition. [S.l.: s.n.], 2017: 5828-5839.
- [93] KNAPITSCH A, PARK J, ZHOU Q Y, et al. Tanks and temples: Benchmarking large-scale scene reconstruction[J]. ACM Transactions on Graphics (ToG), 2017, 36(4): 1-13.
- [94] YU X, XU M, ZHANG Y, et al. Mvingnet: A large-scale dataset of multi-view images[C]//CVPR. [S.l.: s.n.], 2023.
- [95] GEIGER A, LENZ P, URTASUN R. Are we ready for autonomous driving? the kitti vision benchmark suite[C]//Conference on Computer Vision and Pattern Recognition (CVPR). [S.l.: s.n.], 2012.
- [96] GEIGER A, LENZ P, STILLER C, et al. Vision meets robotics: The kitti dataset[J]. International Journal of Robotics Research (IJRR), 2013.
- [97] FRITSCH J, KUEHN T, GEIGER A. A new performance measure and evaluation benchmark for road detection algorithms[C]//International Conference on Intelligent Transportation Systems (ITSC). [S.l.: s.n.], 2013.
- [98] MENZE M, GEIGER A. Object scene flow for autonomous vehicles[C]//Conference on Computer Vision and Pattern Recognition (CVPR). [S.l.: s.n.], 2015.
- [99] CHANG A X, FUNKHOUSER T, GUIBAS L, et al. Shapenet: An information-rich 3d model repository[J]. arXiv preprint arXiv:1512.03012, 2015.
- [100] DEITKE M, SCHWENK D, SALVADOR J, et al. Objaverse: A universe of annotated 3d objects[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 13142-13153.
- [101] WU T, ZHANG J, FU X, et al. Omnib3d: Large-vocabulary 3d object dataset for realistic perception, reconstruction and generation[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 803-814.
- [102] PUMAROLA A, CORONA E, PONS-MOLL G, et al. D-nerf: Neural radiance fields for dynamic scenes[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2021: 10318-10327.
- [103] LI T, SLAVCHEVA M, ZOLLHOEFER M, et al. Neural 3d video synthesis from multi-view video[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2022: 5521-5531.
- [104] STRAUB J, WHELAN T, MA L, et al. The replica dataset: A digital replica of indoor spaces[J]. arXiv preprint arXiv:1906.05797, 2019.
- [105] LIU A, TUCKER R, JAMPANI V, et al. Infinite nature: Perpetual view generation of natural scenes from a single image[C]//Proceedings of the IEEE/CVF International Conference on Computer Vision. [S.l.: s.n.], 2021: 14458-14467.
- [106] PENG S, ZHANG Y, XU Y, et al. Neural body: Implicit neural representations with structured latent codes for novel view synthesis of dynamic humans[C]//Proceedings of the IEEE/CVF Conference on Computer Vision

- and Pattern Recognition. [S.l.: s.n.], 2021: 9054-9063.
- [107] JIANG W, YI K M, SAMEI G, et al. Neuman: Neural human radiance field from a single video[C]//European Conference on Computer Vision. [S.l.]: Springer, 2022: 402-418.
 - [108] KIRSCHSTEIN T, QIAN S, GIEBENHAIN S, et al. Nersemble: Multi-view radiance field reconstruction of human heads[J/OL]. ACM Trans. Graph., 2023, 42(4). <https://doi.org/10.1145/3592455>.
 - [109] CHENG W, CHEN R, YIN W, et al. Dna-rendering: A diverse neural actor repository for high-fidelity human-centric rendering[Z]. [S.l.: s.n.], 2023.
 - [110] LIU T, ZHAO H, YU Y, et al. Car-studio: Learning car radiance fields from single-view and endless in-the-wild images[Z]. [S.l.: s.n.], 2023.
 - [111] MIRZAEI A, AUMENTADO-ARMSTRONG T, DERPANIS K G, et al. Spin-nerf: Multiview segmentation and perceptual inpainting with neural radiance fields[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 20669-20679.
 - [112] REISER C, PENG S, LIAO Y, et al. Kilonerf: Speeding up neural radiance fields with thousands of tiny mlps[C]//International Conference on Computer Vision (ICCV). [S.l.: s.n.], 2021.
 - [113] HINTON G, VINYALS O, DEAN J. Distilling the knowledge in a neural network[J]. arXiv preprint arXiv:1503.02531, 2015.
 - [114] ADELSON E H, BERGEN J R, et al. The plenoptic function and the elements of early vision[J]. Computational models of visual processing, 1991, 1(2): 3-20.
 - [115] MATHWORLD W. Spherical harmonics[EB/OL]. 1994-06-01 / 2024-01-01. <https://mathworld.wolfram.com/SphericalHarmonic.html>.
 - [116] ZHANG K, RIEGLER G, SNAVELY N, et al. Nerf++: Analyzing and improving neural radiance fields[J]. arXiv preprint arXiv:2010.07492, 2020.
 - [117] SUN C, SUN M, CHEN H. Direct voxel grid optimization: Super-fast convergence for radiance fields reconstruction[C]//CVPR. [S.l.: s.n.], 2022.
 - [118] MÜLLER T, EVANS A, SCHIED C, et al. Instant neural graphics primitives with a multiresolution hash encoding[J/OL]. ACM Trans. Graph., 2022, 41(4): 102:1-102:15. <https://doi.org/10.1145/3528223.3530127>.
 - [119] TANG J. Torch-ngp[J/OL]. GitHub repository, 2020. <https://github.com/ashawkey/torch-ngp>.
 - [120] KWEA123. ngp-pl[J/OL]. GitHub repository, 2020. https://github.com/kwea123/ngp_pl.
 - [121] CHEN A, XU Z, GEIGER A, et al. Tensorf: Tensorial radiance fields[C]//European Conference on Computer Vision. [S.l.]: Springer, 2022: 333-350.
 - [122] HEDMAN P, SRINIVASAN P P, MILDENHALL B, et al. Baking neural radiance fields for real-time view synthesis[C]//Proceedings of the IEEE/CVF International Conference on Computer Vision. [S.l.: s.n.], 2021: 5875-5884.
 - [123] CHEN Z, FUNKHOUSER T, HEDMAN P, et al. Mobilenerf: Exploiting the polygon rasterization pipeline for efficient neural field rendering on mobile architectures[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 16569-16578.
 - [124] REISER C, SZELESKI R, VERBIN D, et al. Merf: Memory-efficient radiance fields for real-time view synthesis in unbounded scenes[J]. ACM Transactions on Graphics (TOG), 2023, 42(4): 1-12.
 - [125] YARIV L, HEDMAN P, REISER C, et al. Bakedsd: Meshing neural sdfs for real-time view synthesis[J]. arXiv preprint arXiv:2302.14859, 2023.
 - [126] DEERING M, WINNER S, SCHEDIWY B, et al. The triangle processor and normal vector shader: a vlsi system for high performance graphics[J]. Acm siggraph computer graphics, 1988, 22(4): 21-30.
 - [127] DUCKWORTH D, HEDMAN P, REISER C, et al. Smerf: Streamable memory efficient radiance fields for real-time large-scene exploration[J]. arXiv preprint arXiv:2312.07541, 2023.
 - [128] XU Q, XU Z, PHILIP J, et al. Point-nerf: Point-based neural radiance fields[C]//Proceedings of the IEEE/CVF

- Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2022: 5438-5448.
- [129] HUANG P H, MATZEN K, KOPF J, et al. Deepmvs: Learning multi-view stereopsis[C]//Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2018: 2821-2830.
- [130] LI S, LI C, ZHU W, et al. Instant-3d: Instant neural radiance field training towards on-device ar/vr 3d reconstruction[C]//Proceedings of the 50th Annual International Symposium on Computer Architecture. [S.l.: s.n.], 2023: 1-13.
- [131] WIKIPEDIA. Nvidia Jetson — Wikipedia, the free encyclopedia[EB/OL]. 2024. <http://en.wikipedia.org/w/index.php?title=Nvidia%20Jetson&oldid=1200061119>.
- [132] HU W, WANG Y, MA L, et al. Tri-miprf: Tri-mip representation for efficient anti-aliasing neural radiance fields[C]//Proceedings of the IEEE/CVF International Conference on Computer Vision. [S.l.: s.n.], 2023: 19774-19783.
- [133] LI Z, MÜLLER T, EVANS A, et al. Neuralangelo: High-fidelity neural surface reconstruction[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 8456-8465.
- [134] YECHONGJIE. Instant-Angelo[CP/OL]. 2023. <https://github.com/hugoycj/Instant-angelo>.
- [135] WARBURG F, WEBER E, TANCIK M, et al. Nerfbusters: Removing ghostly artifacts from casually captured nerfs[J]. arXiv preprint arXiv:2304.10532, 2023.
- [136] GOLI L, READING C, SELLÁN S, et al. Bayes' Rays: Uncertainty quantification in neural radiance fields[J]. arXiv, 2023.
- [137] PARK K, SINHA U, HEDMAN P, et al. Hypernerf: A higher-dimensional representation for topologically varying neural radiance fields[J]. ACM Trans. Graph., 2021, 40(6).
- [138] VERBIN D, HEDMAN P, MILDENHALL B, et al. Ref-NeRF: Structured view-dependent appearance for neural radiance fields[J]. CVPR, 2022.
- [139] WANG Z, LI L, SHEN Z, et al. 4k-nerf: High fidelity neural radiance fields at ultra high resolutions[J]. arXiv preprint arXiv:2212.04701, 2022.
- [140] PUMAROLA A, CORONA E, PONS-MOLL G, et al. D-NeRF: Neural Radiance Fields for Dynamic Scenes[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2020.
- [141] PARK K, SINHA U, BARRON J T, et al. Nerfies: Deformable neural radiance fields[J]. ICCV, 2021.
- [142] FRIDOVICH-KEIL S, MEANTI G, WARBURG F R, et al. K-planes: Explicit radiance fields in space, time, and appearance[C]//CVPR. [S.l.: s.n.], 2023.
- [143] CAO A, JOHNSON J. Hexplane: A fast representation for dynamic scenes[J]. CVPR, 2023.
- [144] 矩阵分析与应用 [M/OL]. 清华大学出版社, 2004. <https://books.google.com/books?id=5T4LDttrZ64C>.
- [145] FANG J, YI T, WANG X, et al. Fast dynamic radiance fields with time-aware neural voxels[C]//SIGGRAPH Asia 2022 Conference Papers. [S.l.: s.n.], 2022.
- [146] WU T, ZHONG F, TAGLIASACCHI A, et al. D2nerf: Self-supervised decoupling of dynamic and static objects from a monocular video. arxiv preprint [2022-07-07][Z]. [S.l.: s.n.], 2022.
- [147] TRETSCHK E, GOLYANIK V, ZOLLHÖFER M, et al. Scenerflow: Time-consistent reconstruction of general dynamic scenes[C]//International Conference on 3D Vision (3DV). [S.l.: s.n.], 2024.
- [148] NIEMEYER M, BARRON J T, MILDENHALL B, et al. Regnerf: Regularizing neural radiance fields for view synthesis from sparse inputs[C]//Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR). [S.l.: s.n.], 2022.
- [149] JAIN A, TANCIK M, ABBEEL P. Putting nerf on a diet: Semantically consistent few-shot view synthesis[C]//Proceedings of the IEEE/CVF International Conference on Computer Vision. [S.l.: s.n.], 2021: 5885-5894.
- [150] WYNN J, TURMUKHAMBETOV D. Diffusionerf: Regularizing neural radiance fields with denoising diffusion models[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 4180-4189.

- [151] LIU R, WU R, VAN HOORICK B, et al. Zero-1-to-3: Zero-shot one image to 3d object[C]//Proceedings of the IEEE/CVF International Conference on Computer Vision. [S.l.: s.n.], 2023: 9298-9309.
- [152] YANG J, PAVONE M, WANG Y. Freenerf: Improving few-shot neural rendering with free frequency regularization[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 8254-8263.
- [153] WU R, MILDENHALL B, HENZLER P, et al. Reconfusion: 3d reconstruction with diffusion priors[J]. arXiv, 2023.
- [154] DENG K, LIU A, ZHU J Y, et al. Depth-supervised NeRF: Fewer views and faster training for free[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR). [S.l.: s.n.], 2022.
- [155] WEI Y, LIU S, RAO Y, et al. Nerfingmvs: Guided optimization of neural radiance fields for indoor multi-view stereo[C]//ICCV. [S.l.: s.n.], 2021.
- [156] GUANGCONG, CHEN Z, LOY C C, et al. Sparsenerf: Distilling depth ranking for few-shot novel view synthesis[J]. IEEE/CVF International Conference on Computer Vision (ICCV), 2023.
- [157] WANG Z, WU S, XIE W, et al. NeRF—: Neural radiance fields without known camera parameters[J]. arXiv preprint arXiv:2102.07064, 2021.
- [158] BIAN W, WANG Z, LI K, et al. Nope-nerf: Optimising neural radiance field with no pose prior[C]//[S.l.: s.n.], 2023.
- [159] MILDENHALL B, HEDMAN P, MARTIN-BRUALLA R, et al. NeRF in the dark: High dynamic range view synthesis from noisy raw images[J]. CVPR, 2022.
- [160] CUI Z, GU L, SUN X, et al. Aleth-nerf: Illumination adaptive nerf with concealing field assumption[J]. arXiv preprint arXiv:2312.09093, 2023.
- [161] MA L, LI X, LIAO J, et al. Deblur-nerf: Neural radiance fields from blurry images[J]. arXiv preprint arXiv:2111.14292, 2021.
- [162] LORENSEN W E, CLINE H E. Marching cubes: A high resolution 3d surface construction algorithm[M]//Seminal graphics: pioneering efforts that shaped the field. [S.l.: s.n.], 1998: 347-353.
- [163] WIKIPEDIA. Marching cubes — Wikipedia, the free encyclopedia[EB/OL]. 2024. <http://en.wikipedia.org/w/index.php?title=Marching%20cubes&oldid=1185254386>.
- [164] TANG J, ZHOU H, CHEN X, et al. Delicate textured mesh recovery from nerf via adaptive surface refinement[J]. arXiv preprint arXiv:2303.02091, 2023.
- [165] ZHANG X, SRINIVASAN P P, DENG B, et al. Nerfactor: Neural factorization of shape and reflectance under an unknown illumination[J]. ACM Transactions on Graphics (ToG), 2021, 40(6): 1-18.
- [166] WANG C, JIANG R, CHAI M, et al. Nerf-art: Text-driven neural radiance fields stylization[J]. IEEE Transactions on Visualization and Computer Graphics, 2023.
- [167] HAQUE A, TANCIK M, EFROS A A, et al. Instruct-nerf2nerf: Editing 3d scenes with instructions[J]. arXiv preprint arXiv:2303.12789, 2023.
- [168] KERR J, KIM C M, GOLDBERG K, et al. Lerf: Language embedded radiance fields[C]//Proceedings of the IEEE/CVF International Conference on Computer Vision. [S.l.: s.n.], 2023: 19729-19739.
- [169] BAO C, ZHANG Y, YANG B, et al. Sine: Semantic-driven image-based nerf editing with prior-guided editing field[C]//The IEEE/CVF Computer Vision and Pattern Recognition Conference (CVPR). [S.l.: s.n.], 2023.
- [170] KUANG Z, LUAN F, BI S, et al. Palettenerf: Palette-based appearance editing of neural radiance fields[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 20691-20700.
- [171] GONG B, WANG Y, HAN X, et al. Recolornerf: Layer decomposed radiance fields for efficient color editing of 3d scenes[J]. arXiv preprint arXiv:2301.07958, 2023.

- [172] MIRZAEI A, AUMENTADO-ARMSTRONG T, DERPANIS K G, et al. SPIn-NeRF: Multiview segmentation and perceptual inpainting with neural radiance fields[C]//CVPR. [S.l.: s.n.], 2023.
- [173] SIDDIQUI Y, PORZI L, BULÒ S R, et al. Panoptic lifting for 3d scene understanding with neural fields[C]// Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR). [S.l.: s.n.], 2023: 9043-9052.
- [174] CHENG B, MISRA I, SCHWING A G, et al. Masked-attention mask transformer for universal image segmentation[C]//Proceedings of the IEEE/CVF conference on computer vision and pattern recognition. [S.l.: s.n.], 2022: 1290-1299.
- [175] PENG Y, YAN Y, LIU S, et al. Cagenerf: Cage-based neural radiance field for generalized 3d deformation and animation[J]. Advances in Neural Information Processing Systems, 2022, 35: 31402-31415.
- [176] FENG Y, SHANG Y, LI X, et al. Pie-nerf: Physics-based interactive elastodynamics with nerf[Z]. [S.l.: s.n.], 2023.
- [177] WANG L, HU Q, HE Q, et al. Neural residual radiance fields for streamably free-viewpoint videos[C]// Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR). [S.l.: s.n.], 2023: 76-87.
- [178] LONG X, LIN C, LIU L, et al. Neuraludf: Learning unsigned distance fields for multi-view reconstruction of surfaces with arbitrary topologies[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 20834-20843.
- [179] YANG W, CHEN G, CHEN C, et al. S³-nerf: Neural reflectance field from shading and shadow under a single viewpoint[C]//Conference on Neural Information Processing Systems (NeurIPS). [S.l.: s.n.], 2022.
- [180] ALZAYER H, ZHANG K, FENG B, et al. Seeing the world through your eyes[J]. arXiv preprint arXiv:2306.09348, 2023.
- [181] ZENG J, BAO C, CHEN R, et al. Mirror-nerf: Learning neural radiance fields for mirrors with whitted-style ray tracing[C]//Proceedings of the 31st ACM International Conference on Multimedia. [S.l.: s.n.], 2023: 4606-4615.
- [182] POOLE B, JAIN A, BARRON J T, et al. Dreamfusion: Text-to-3d using 2d diffusion[J]. arXiv, 2022.
- [183] LIN C H, GAO J, TANG L, et al. Magic3d: High-resolution text-to-3d content creation[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 300-309.
- [184] CHEN R, CHEN Y, JIAO N, et al. Fantasia3d: Disentangling geometry and appearance for high-quality text-to-3d content creation[J]. arXiv preprint arXiv:2303.13873, 2023.
- [185] WANG H, DU X, LI J, et al. Score jacobian chaining: Lifting pretrained 2d diffusion models for 3d generation[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 12619-12629.
- [186] GUO Y, CHEN K, LIANG S, et al. Ad-nerf: Audio driven neural radiance fields for talking head synthesis[C]// IEEE/CVF International Conference on Computer Vision (ICCV). [S.l.: s.n.], 2021.
- [187] TANG J, WANG K, ZHOU H, et al. Real-time neural radiance talking portrait synthesis via audio-spatial decomposition[J]. arXiv preprint arXiv:2211.12368, 2022.
- [188] PENG S, DONG J, WANG Q, et al. Animatable neural radiance fields for modeling dynamic human bodies[C]// Proceedings of the IEEE/CVF International Conference on Computer Vision. [S.l.: s.n.], 2021: 14314-14323.
- [189] TANIĆ M, CASSER V, YAN X, et al. Block-nerf: Scalable large scene neural view synthesis[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2022: 8248-8258.
- [190] CHENG B, COLLINS M D, ZHU Y, et al. Panoptic-deeplab: A simple, strong, and fast baseline for bottom-up panoptic segmentation[C]//Proceedings of the IEEE/CVF conference on computer vision and pattern recognition. [S.l.: s.n.], 2020: 12475-12485.
- [191] TURKI H, RAMANAN D, SATYANARAYANAN M. Mega-nerf: Scalable construction of large-scale nerfs for virtual fly-throughs[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition

- tion. [S.l.: s.n.], 2022: 12922-12931.
- [192] YANG Z, CHEN Y, WANG J, et al. Unisim: A neural closed-loop sensor simulator[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 1389-1399.
 - [193] YANG J, IVANOVIC B, LITANY O, et al. Emernerf: Emergent spatial-temporal scene decomposition via self-supervision[J]. arXiv preprint arXiv:2311.02077, 2023.
 - [194] ZHU Z, PENG S, LARSSON V, et al. Nicer-slam: Neural implicit scene encoding for rgb slam[J]. arXiv preprint arXiv:2302.03594, 2023.
 - [195] ROSINOL A, LEONARD J J, CARLONE L. Nerf-slam: Real-time dense monocular slam with neural radiance fields[C]//2023 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS). [S.l.: IEEE, 2023: 3437-3444.
 - [196] YU J, LOW J E, NAGAMI K, et al. Nerfbridge: Bringing real-time, online neural radiance field training to robotics[J]. arXiv preprint arXiv:2305.09761, 2023.
 - [197] CAO J, WANG H, CHEMERYS P, et al. Real-time neural light field on mobile devices[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2023: 8328-8337.
 - [198] XIANGLI Y, XU L, PAN X, et al. Bungeenerf: Progressive neural radiance field for extreme multi-scale scene rendering[C]//European conference on computer vision. [S.l.: Springer, 2022: 106-122.
 - [199] DERKSEN D, IZZO D. Shadow neural radiance fields for multi-view satellite photogrammetry[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2021: 1152-1161.
 - [200] MARÍ R, FACCILOLO G, EHRET T. Sat-nerf: Learning multi-view satellite photogrammetry with transient objects and shadow modeling using rpc cameras[C]//Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition. [S.l.: s.n.], 2022: 1311-1321.
 - [201] ZHANG L, RUPNIK E. Sparsesat-nerf: Dense depth supervised neural radiance fields for sparse satellite images[J]. arXiv preprint arXiv:2309.00277, 2023.
 - [202] ZHANG T, LI Y. Fast satellite tensorial radiance field for multi-date satellite imagery of large size[J]. arXiv preprint arXiv:2309.11767, 2023.
 - [203] CORONA-FIGUEROA A, FRAWLEY J, BOND-TAYLOR S, et al. Mednerf: Medical neural radiance fields for reconstructing 3d-aware ct-projections from a single x-ray[Z]. [S.l.: s.n.], 2022.
 - [204] ZHOU Z, ZHAO H, FANG J, et al. Tiavox: Time-aware attenuation voxels for sparse-view 4d dsa reconstruction[J]. arXiv preprint arXiv:2309.02318, 2023.
 - [205] HU K, WEI Y, PAN Y, et al. High-fidelity 3d reconstruction of plants using neural radiance field[J]. arXiv preprint arXiv:2311.04154, 2023.
 - [206] ZHAO F, JIANG Y, YAO K, et al. Human performance modeling and rendering via neural animated mesh[J]. ACM Transactions on Graphics (TOG), 2022, 41(6): 1-17.
 - [207] CHENG Y C, LIN C H, WANG C, et al. Virtual pets: Animatable animal generation in 3d scenes[J]. arXiv preprint arXiv:2312.14154, 2023.
 - [208] LI K, SCHMIDT S, ROLFF T, et al. Magic nerf lens: Interactive fusion of neural radiance fields for virtual facility inspection[J]. arXiv preprint arXiv:2307.09860, 2023.
 - [209] AOKI H, YAMANAKA T. Improving nerf with height data for utilization of gis data[C]//2023 IEEE International Conference on Image Processing (ICIP). [S.l.: IEEE, 2023: 935-939.
 - [210] MITTAL A. Neural radiance fields: Past, present, and future[J]. arXiv preprint arXiv:2304.10050, 2023.
 - [211] KERBL B, KOPANAS G, LEIMKÜHLER T, et al. 3d gaussian splatting for real-time radiance field rendering[J]. ACM Transactions on Graphics, 2023, 42(4).
 - [212] YU Z, CHEN A, HUANG B, et al. Mip-splatting: Alias-free 3d gaussian splatting[J]. arXiv:2311.16493, 2023.
 - [213] YAN Z, LOW W F, CHEN Y, et al. Multi-scale 3d gaussian splatting for anti-aliased rendering[J]. arXiv preprint arXiv:2311.17089, 2023.

- [214] LU T, YU M, XU L, et al. Scaffold-gs: Structured 3d gaussians for view-adaptive rendering[J]. arXiv preprint arXiv:2312.00109, 2023.
- [215] LUITEN J, KOPANAS G, LEIBE B, et al. Dynamic 3d gaussians: Tracking by persistent dynamic view synthesis[J]. arXiv preprint arXiv:2308.09713, 2023.
- [216] HUANG Y H, SUN Y T, YANG Z, et al. Sc-gs: Sparse-controlled gaussian splatting for editable dynamic scenes[J]. arXiv preprint arXiv:2312.14937, 2023.
- [217] FU Y, LIU S, KULKARNI A, et al. Colmap-free 3d gaussian splatting[J]. arXiv preprint arXiv:2312.07504, 2023.
- [218] ZHU Z, FAN Z, JIANG Y, et al. Fsgs: Real-time few-shot view synthesis using gaussian splatting[Z]. [S.l.: s.n.], 2023.
- [219] YAN Y, LIN H, ZHOU C, et al. Street gaussians for modeling dynamic urban scenes[J]. arXiv preprint arXiv:2401.01339, 2024.
- [220] KOCABAS M, CHANG J H R, GABRIEL J, et al. Hugs: Human gaussian splats[J]. arXiv preprint arXiv:2311.17910, 2023.
- [221] QIAN S, KIRSCHSTEIN T, SCHONEVELD L, et al. Gaussianavatars: Photorealistic head avatars with rigged 3d gaussians[J]. arXiv preprint arXiv:2312.02069, 2023.
- [222] HU S, LIU Z. Gauhuman: Articulated gaussian splatting for real-time 3d human rendering[J]. arXiv preprint, 2023.
- [223] QIAN Z, WANG S, MIHAJLOVIC M, et al. 3dgs-avatar: Animatable avatars via deformable 3d gaussian splatting[J]. 2024.
- [224] LI M, TAO J, YANG Z, et al. Human101: Training 100+fps human gaussians in 100s from 1 view[Z]. [S.l.: s.n.], 2023.
- [225] TANG J, REN J, ZHOU H, et al. Dreamgaussian: Generative gaussian splatting for efficient 3d content creation[J]. arXiv preprint arXiv:2309.16653, 2023.
- [226] REN J, PAN L, TANG J, et al. Dreamgaussian4d: Generative 4d gaussian splatting[J]. arXiv preprint arXiv:2312.17142, 2023.
- [227] LING H, KIM S W, TORRALBA A, et al. Align your gaussians: Text-to-4d with dynamic 3d gaussians and composed diffusion models[J]. 2023.
- [228] 4dgen: Grounded 4d content generation with spatial-temporal consistency[J]. arXiv preprint: 2312.17225, 2023.
- [229] YE M, DANELLJAN M, YU F, et al. Gaussian grouping: Segment and edit anything in 3d scenes[J]. arXiv preprint arXiv:2312.00732, 2023.
- [230] CHEN Y, CHEN Z, ZHANG C, et al. Gaussianeditor: Swift and controllable 3d editing with gaussian splatting[Z]. [S.l.: s.n.], 2023.
- [231] GUÉDON A, LEPETIT V. Sugar: Surface-aligned gaussian splatting for efficient 3d mesh reconstruction and high-quality mesh rendering[J]. arXiv preprint arXiv:2311.12775, 2023.
- [232] JIANG Y, SHEN Z, WANG P, et al. Hifi4g: High-fidelity human performance rendering via compact gaussian splatting[J]. arXiv preprint arXiv:2312.03461, 2023.
- [233] HUANG B, YU Z, CHEN A, et al. 2d gaussian splatting for geometrically accurate radiance fields[J]. SIG-GRAPH, 2024.
- [234] WOLF Y, BRACHA A, KIMMEL R. Surface reconstruction from gaussian splatting via novel stereo views[Z]. [S.l.: s.n.], 2024.
- [235] LIN J, LI Z, TANG X, et al. Vastgaussian: Vast 3d gaussians for large scene reconstruction[C]//CVPR. [S.l.: s.n.], 2024.
- [236] SHUAI Q, GUO H, XU Z, et al. Real-time view synthesis for large scenes with millions of square meters[C]// [S.l.: s.n.], 2024.

参 考 文 献

- [237] REN K, JIANG L, LU T, et al. Octree-gs: Towards consistent real-time rendering with lod-structured 3d gaussians[Z]. [S.l.: s.n.], 2024.
- [238] YE C, NIE Y, CHANG J, et al. Gaustudio: A modular framework for 3d gaussian splatting and beyond[J]. arXiv preprint arXiv:2403.19632, 2024.
- [239] WU T, YUAN Y J, ZHANG L X, et al. Recent advances in 3d gaussian splatting[Z]. [S.l.: s.n.], 2024.