

REFERENCES

- [1] Mur-Artal, Raul & Tardos, Juan. (2016). ORB-SLAM2: an Open-Source SLAM System for Monocular, Stereo and RGB-D Cameras. *IEEE Transactions on Robotics*. PP. 10.1109/TRO.2017.2705103.
- [2] D. J. Rezende, S. Eslami, S. Mohamed, P. Battaglia, M. Jaderberg, and N. Heess. Unsupervised learning of 3d structure from images. *arXiv preprint arXiv:1607.00662*, 2016
- [3] Hahner, Martin & Varesis, Orestis & Bountouris, Panagiotis. (2017). *Simulating Structure-from-Motion*.
- [4] Schönberger, Johannes & Frahm, Jan-Michael. (2016). *Structure-from-Motion Revisited*. 10.1109/CVPR.2016.445.
- [5] H. Su, S. Maji, E. Kalogerakis, and E. Learned-Miller. Multi-view convolutional neural networks for 3d shape recognition. In *ICCV*, 2015
- [6] Y. Yang, C. Feng, Y. Shen, and D. Tian. Foldingnet: Interpretable unsupervised learning on 3d point clouds. *arXiv preprint arXiv:1712.07262*, 2017
- [7] Ducke, Benjamin. (2018). *Multi-View Stereo*. 1-4. 10.1002/9781119188230.saseas0398.
- [8] Rock, J., Gupta, T., Thorsen, J., Gwak, J., Shin, D., Hoiem, D.: Completing 3d object shape from one depth image. In: *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition*. (2015) 2484–2493
- [9] R. Girdhar, D. F. Fouhey, M. Rodriguez, and A. Gupta. Learning a predictable and generative vector representation for objects. In *ECCV*, 2016.
- [10] Choy, Chris & Xu, Danfei & Gwak, JunYoung & Chen, Kevin & Savarese, Silvio. (2016). 3D-R2N2: A Unified Approach for Single and Multi-view 3D Object Reconstruction. 9912. 628-644. 10.1007/978-3-319-46484-8_38.
- [11] Yan, Xinchun & Yang, Jimei & Yumer, Ersin & Guo, Yijie & Lee, Honglak. (2016). *Perspective Transformer Nets: Learning Single-View 3D Object Reconstruction without 3D Supervision*.
- [12] J. Gwak, C. B. Choy, M. Chandraker, A. Garg, and S. Savarese. Weakly supervised 3d reconstruction with adversarial constraint. In *3DV*, 2017
- [13] Park, Jeong & Florence, Peter & Straub, Julian & Newcombe, Richard & Lovegrove, Steven. (2019). *DeepSDF: Learning Continuous Signed Distance Functions for Shape Representation*.

- [14] G. Riegler, A. O. Ulusoy, and A. Geiger. Octnet: Learning deep 3d representations at high resolutions. In CVPR, pages 6620–6629. IEEE, 2017
- [15] Fan, Haoqiang & Su, Hao & Guibas, Leonidas. (2017). A Point Set Generation Network for 3D Object Reconstruction from a Single Image. 2463-2471. 10.1109/CVPR.2017.264.
- [16] C. R. Qi, L. Yi, H. Su, and L. J. Guibas. Pointnet++: Deep hierarchical feature learning on point sets in a metric space. In NIPS, pages 5099–5108, 2017
- [17] Sun, Xingyuan & Wu, Jiajun & Zhang, Xiuming & Zhang, Zhoutong & Zhang, Chengkai & Xue, Tianfan & Tenenbaum, Joshua & Freeman, William. (2018). Pix3D: Dataset and Methods for Single-Image 3D Shape Modeling. 2974-2983. 10.1109/CVPR.2018.00314.
- [18] Sitzmann, V., Thies, J., Heide, F., Nießner, M., Wetzstein, G., Zollhöfer, M.: Deepvoxels: Learning persistent 3D feature embeddings. In: CVPR (2019)
- [19] Niemeyer, Michael & Mescheder, Lars & Oechsle, Michael & Geiger, Andreas. (2019). Differentiable Volumetric Rendering: Learning Implicit 3D Representations without 3D Supervision.
- [20] Knapitsch, J. Park, Q.-Y. Zhou, and V. Koltun. Tanks and temples: Benchmarking large-scale scene reconstruction. ACM TOG, 36(4):78, 2017
- [21] Liu, Shichen & Chen, Weikai & Li, Tianye & Li, Hao. (2019). Soft Rasterizer: A Differentiable Renderer for Image-Based 3D Reasoning. 7707-7716. 10.1109/ICCV.2019.00780.
- [22] Yiyi Liao, Simon Donne, and Andreas Geiger. Deep marching cubes: Learning explicit surface representations. In Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2018
- [23] Yiyi Liao, Simon Donne, and Andreas Geiger. Deep marching cubes: Learning explicit surface representations. In Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2018
- [24] David Stutz and Andreas Geiger. Learning 3d shape completion from laser scan data with weak supervision. In Proc. IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), 2018.
- [25] Zubić, Nikola & Lio, Pietro. (2021). an Effective Loss Function for Generating 3D Models from Single 2D Image without Rendering.
- [26] Thu Nguyen-Phuoc, Chuan Li, Stephen Balaban, and Yongliang Yang. Rendernet: A deep convolutional network for differentiable rendering from 3d shapes. arXiv preprint arXiv:1806.06575, 2018

- [27] Angjoo Kanazawa, Shubham Tulsiani, Alexei A Efros, and Jitendra Malik. Learning category-specific mesh reconstruction from image collections. arXiv preprint arXiv:1803.07549, 2018
- [28] Xu, Q., Wang, W., Ceylan, D., Mech, R., Neumann, U.: Disn: Deep implicit surface network for high-quality single-view 3d reconstruction (2019)
- [29] Tulsiani, S., Efros, A.A., Malik, J.: Multi-view consistency as supervisory signal for learning shape and pose prediction (2018)
- [30] A Kar, S. Tulsiani, J. Carreira, and J. Malik. Categoryspecific object reconstruction from a single image. In CVPR, 2015