SVS: Adversarial refinement for sparse novel view synthesis - Supplementary results

BMVC 2022 Submission #886

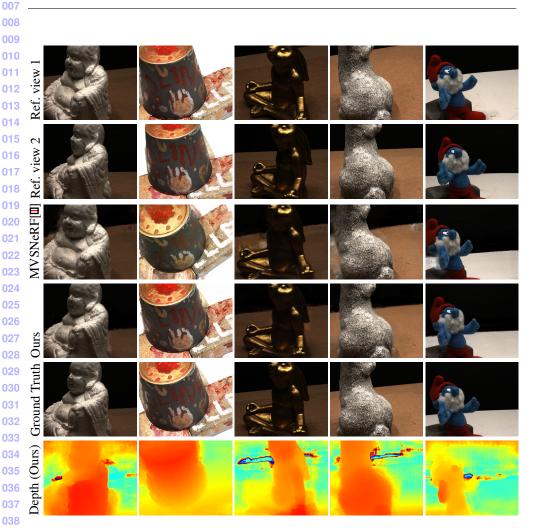


Figure 1: Example predictions from the DTU dataset. Each column shows a different scene predicted under the Sparse View Synthesis evaluation protocol. Note that state of the art [III] predictions exhibit fuzziness or "smearing" around object boundaries where occlusions occur. In contrast our approach provides sharper edges as it realistically fills unobserved regions.

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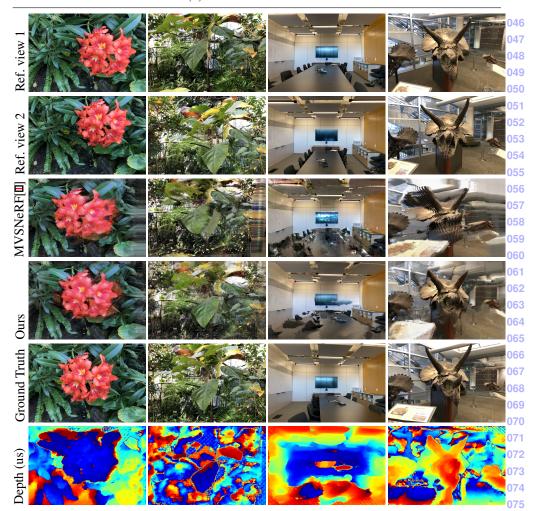


Figure 2: Example predictions from the LLFF dataset. Again we can observe "smearing" artifacts in the state-of-the-art predictions, especially along the image borders. Additionally, we can observe "halo" or "duplicated boundary" artifacts in some of the state-of-the-art scenes such as the rightmost two columns. These perceptually jarring artifacts are easily detected by our adversarial discriminator, and so they do not occur in the predicitons for our 080 approach.

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References

[1] Anpei Chen, Zexiang Xu, Fuqiang Zhao, Xiaoshuai Zhang, Fanbo Xiang, Jingyi Yu, and Hao Su. MVSNeRF: Fast Generalizable Radiance Field Reconstruction from Multi-View Stereo. In Proceedings of the IEEE/CVF International Conference on Computer Vision, 087 pages 14124–14133, August 2021. 1, 2