

Binary Radiance Fields

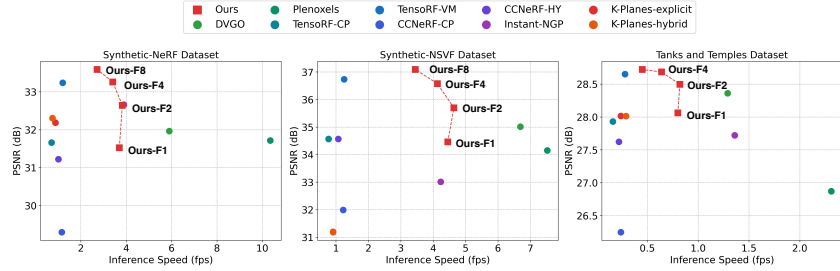


Figure 1: Illustration of the inference speed (fps) and reconstruction quality (PSNR) of each method on the Synthetic-NeRF dataset, Synthetic-NSVF dataset, and Tanks and Temples dataset.

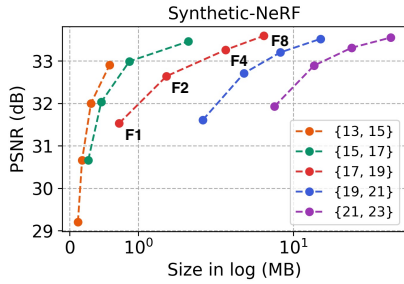


Figure 2: Ablation study on the hash table size. Results are averaged over all scenes of the Synthetic-NeRF dataset.

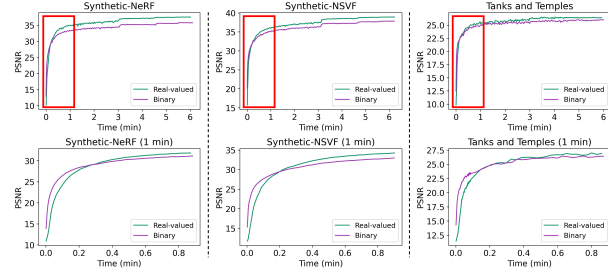


Figure 3: Evaluation of the reconstruction quality for the whole training time (up) and 1 min (bottom). “Real-valued” denotes a real-valued grid and “binary” denotes a binary grid.

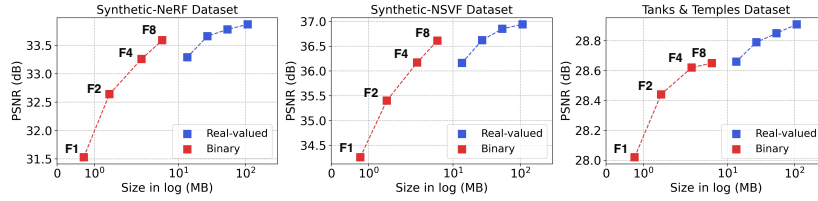


Figure 4: Ablation study on the binary feature encoding. Results are averaged over all scenes of the Synthetic-NeRF dataset, Synthetic-NSVF dataset, and Tanks and Temples dataset.

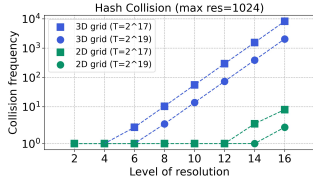


Figure 5: Evaluation of hash collision frequencies based on different grid designs, 2D grid and 3D grid. T denotes the size of the hash table. We set the maximum resolution to 1024.

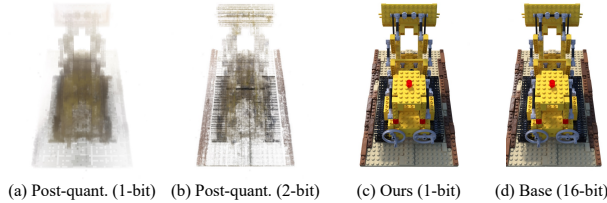


Figure 6: Comparison of reconstruction quality according to the number of bits. “Post-quant.” denotes post-quantization.