

HW4 Text Report

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1. How many images are there in your dataset? And how many matched images are there in the log.txt file?

A. 301 images are captured, with 259 matched images.

2. If someone wants to create their own NeRF model today, during the data collection stage (recording or taking photos), how would you advise them to make the subsequent model more comprehensive?

A.

1. Ensure that your photo collection covers the subject from multiple angles and distances. (In polycam, we can view regions that are not observed currently)

2. Maintain consistent lighting conditions across all photos.

3. Avoid reflections (of computer screens or glasses).

3. During the data collection stage, may I ask how many attempts you made in total and how much time you spent?

A. 4 Attempt; Approximately 12 hours.

4. Please provide a link to the nerfstudio folder on your cloud drive and grant viewer permissions for the link.

https://drive.google.com/drive/folders/1K468DfNcn9k8Zb-7YwU-xFOnz4y3Ukmb?usp=drive_link

5. If you are using the COLMAP method, please describe how to execute it in practice, including relevant commands and code. (optional)

**A. Install COLMAP, find 'colmap2nerf.py' in repo of 'Instant-ngp', set environment variables, and run the command to get 'transforms.json' which is required in NeRF.
[python colmap2nerf.py --colmap_matcher exhaustive --run_colmap --aabb_scale 16 --images images]**