Fast Fourier Intrinsic Network
– Supplementary Material –

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This supplementary material provides 1) the training&testing splits for MPI-Sintel and MIT Intrinsic; 2) more examples for visualization and comparison.

1. Training&Testing Splits

We use the same training&testing split files with [8] and [1] for MIP-Sintel and MIT Intrinsic, respectively. We think it would be good to publish these files such that any following-up works can use them and make a fair comparison with us or any previous relevant works. We report the scene-split for MPI-Sintel and object-split for MIT Intrinsic dataset below.

**MPI-Sintel:**

\(\text{training: alley}_1, \text{bamboo}_1, \text{bandage}_1, \text{cave}_2, \text{market}_2, \text{market}_6, \text{shaman}_2, \text{sleeping}_1, \text{temple}_2\)

\(\text{testing: alley}_2, \text{bamboo}_2, \text{bandage}_2, \text{cave}_4, \text{market}_5, \text{mountain}_1, \text{shaman}_3, \text{sleeping}_2, \text{temple}_3\)

**MIT Intrinsic:**

\(\text{training: apple, box, cup}_1, \text{dinosaur, frog}_1, \text{panther, paper}_1, \text{phone, squirrel, teabag}_2\)

\(\text{testing: cup}_2, \text{deer, frog}_2, \text{paper}_2, \text{pear, potato, raccoon, sun, teabag}_1, \text{turtle}\)

2. More Examples for Visualization

- Fig. 1 and Fig. 4: visual results on MPI-Sintel dataset with scene split and image split, respectively. We compare our method with [6, 8, 4, 5, 1]. We particularly point the readers to the flatten patches and fine textures (see red arrows) in the images to show the superiority of our method.
- Fig. 3: more visual results on MIT Intrinsic dataset. In Fig. 3 we compare our FFI-Net with different versions in [2]; ours are clearly visually better than [2].
- Fig. 2: visual results on IIW benchmark. We compare our FFI-Net with other representative approaches [3, 9, 7].

References

Figure 2: Qualitative comparisons of (A)lbedo and (S)hading on IIW.

Figure 3: Sample (A)lbedo and (S)hading on MIT Intrinsic. Comparison with different versions in [2]. Results of [2] are downloaded from their project webpage.


Figure 4: More Examples of (A)lbedo and (S)hading predictions on MPI-Sintel (image split).