DIRECT AND PROGRESSIVE RECONSTRUCTION OF DUAL PHOTOGRAPHY IMAGES SUPPLEMENTARY MATERIAL

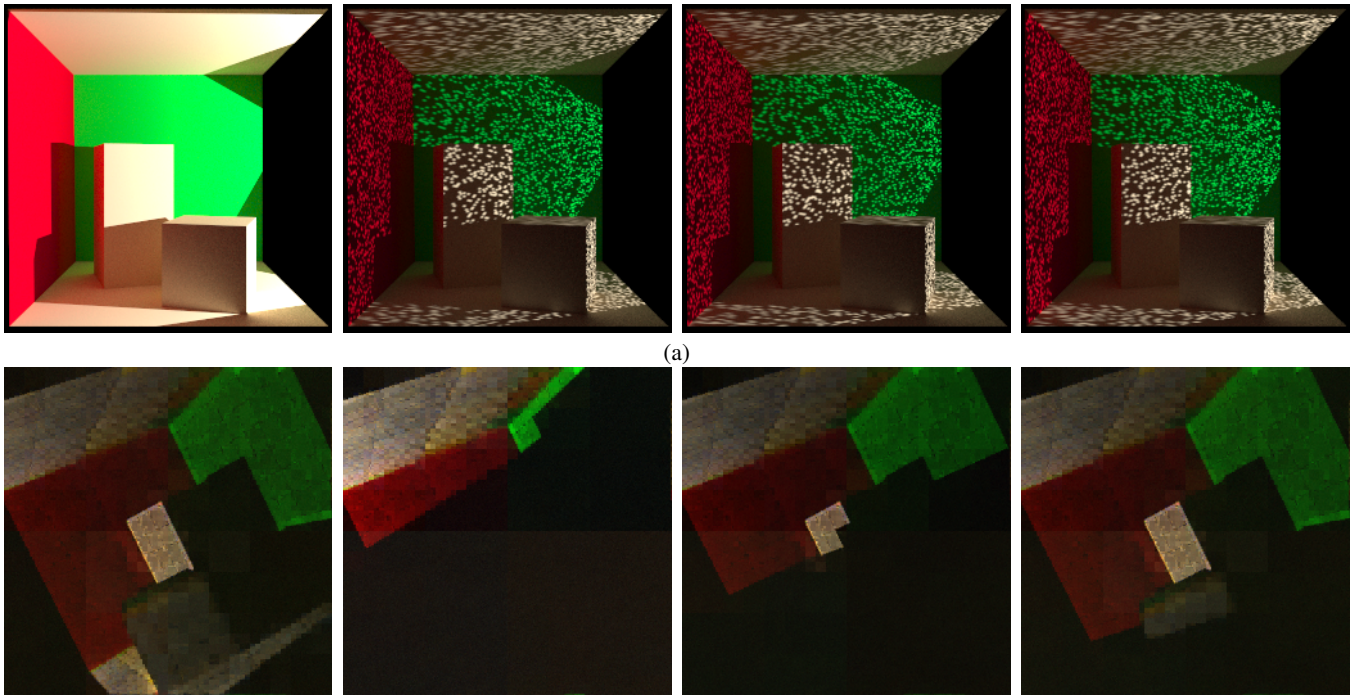
Binh-Son Hua[1] *Imari Sato*[2] *Kok-Lim Low*[1]

[1]National University of Singapore [2]National Institute of Informatics, Tokyo, Japan

1. MORE RESULTS

In this supplementary document, we present another progressive dual image reconstruction example from a synthetic light transport of a Cornell box scene. The light transport is generated in LuxRender using path tracing with approximately 1024 samples per pixel. It is easy to see that the dual image reconstructed is correct and consistent with the original camera view.

In this example, we set the patch size to 16 to increase sharpness of the dual image. As the image size is 256×256, there are in total 256 basis images. It takes roughly two hours for the progressive reconstruction to complete. While this example needs longer time to reconstruct the dual image than the example presented in our paper, this is still much quicker than reconstructing the whole light transport, which may need to reconstruct up to 64K reflectance functions.



(a)

(b)

Fig. 1. Dual photography. (a) Camera view and generated images for capturing light transport. The projector is on the right of the box. (b) Dual image and the progressive reconstruction (floodlit lighting) from 4000 samples using our method with 256 basis dual images. Haar wavelet is used for the reconstruction. Image size is 256×256.