Real-time Shading with Filtered Importance Sampling (sap_0073)

Supplemental Materials

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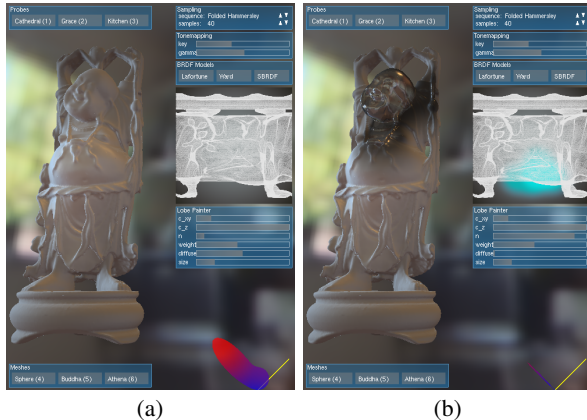
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(a)   (b)

Figure 1: *Buddha lit by the Grace Cathedral (a) and Kitchen (b) light probe with a spatially varying Lafortune BRDF, where the head is glossy and the remainder of the body is more diffuse.*

(a)   (b)

Figure 2: *Our interface for designing spatially varying BRDF used to test the filtered importance sampling. (a) and (b) demonstrate the before and after of a BRDF painting operation, where the user defines the BRDF using the parameters of the Lafortune model.*

(a)   (b)

Figure 3: *Our rendering algorithm with the Ward BRDF model for three spheres (a) and the Athena model (b) where the anisotropic parameters, α_x and α_y, are respectively 0.048 and 0.013 for the top sphere and Athena model. The isotropic parameter, α_{xy}, is 0.007 for the glossy middle sphere, and 0.168 for the more diffuse bottom sphere. Each object also has a diffuse albedo of 0.1.*
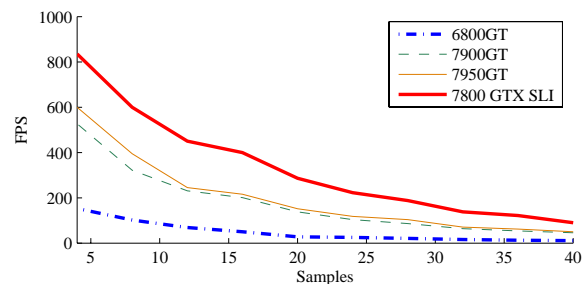
Figure 4: *Plot of the performance with respect to the number of frame per second for a given number of samples when rendering a sphere at a resolution of 512x512. The max of 40 samples is used due to hardware limitations.*

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