Note

December 26, 2018

- Scene datas are in **.obj** format, corresponding materials are described by **.mtl** files.
- The world coordinate system is **right hand**, +x axis is right direction, +y axis is upper direction, +z axis is front direction.
- The material albedo(Kd) and specular(Ks) parameters and lightsource emission(Le) are represented by **rgb spectrum**, which is a 3-float non-negtive vector.
- Lambertian and Blinn-Phong BRDF is necessary. Besides, you can implement some specular and transparent material like mirror, glass and water.

1 Scene01:Room

Refenence Resolution:512*512
Perspective Camera:position=[0.0, 0.0, 0.4],lookat: [0.0, 0.0, 0.0],up: [0.0 1.0 0.0],fovy:50.0°
Light: The Scene contains 1 SphereLight:
Light0:center=[0.0,1.589,-1.274],radius=0.2,Le=[50,50,40]

2 Scene02:Cup

Refenence Resolution:512*512
Perspective Camera:position=[0.0, 0.64, 0.52],lookat: [0.0, 0.40, 0.3],up: [0.0 1.0 0.0],fovy:60.0°
Light: The Scene contains 1 PolygonLight:
Light0:shape="quad",center=[-2.758771896,1.5246,0],normal=[1,0,0],size=1*1,Le=[40,40,40]

3 Scene03:Veach MIS

Refenence Resolution:1152*864
Perspective Camera:position=[0.0, 2.0, 15.0],lookat: [0.0, 1.69521, 14.0476],up: [0.0,0.952421,-0.304787],fovy:28.0° **Light:**The Scene contains 5 SphereLights:
Light0:position=[-10,10,4],radius=0.5,Le=[800,800,800]
Light1:position=[3.75,0,0],radius=0.033,Le=[901.803,901.803,901.803]
Light2:position=[1.25,0,0],radius=0.1,Le=[100,100,100]
Light3:position=[-1.25,0,0],radius=0.3,Le=[11.1111,11.1111,11.1111]
Light4:position=[-3.75,0,0],radius=0.9,Le=[1.23457,1.23457,1.23457]

Figure 1: room

Figure 2: cup

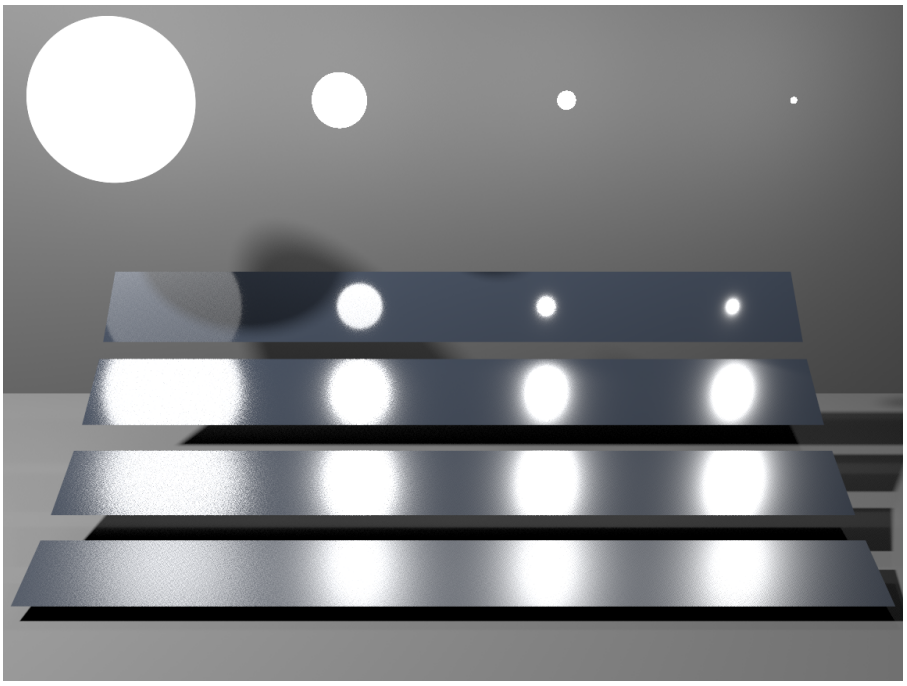

Figure 3: Veach MIS