Assignment-2 Submission

Indian Institute of Technology Delhi

Mesh Processing

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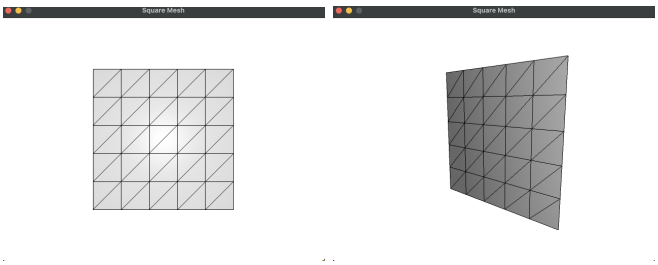
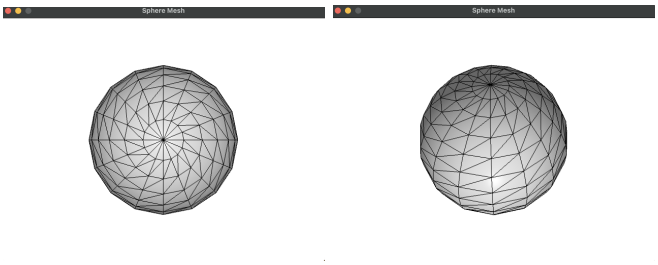
1 Square Mesh



(a) (b)

Figure 1: Square Mesh: 5 rows and 5 columns

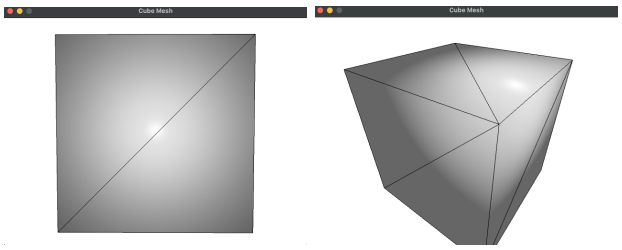
2 Sphere Mesh



(a) (b)

Figure 2: Sphere Mesh: 16 longitudes and 16 latitudes

3 Cube Mesh



(a) (b)

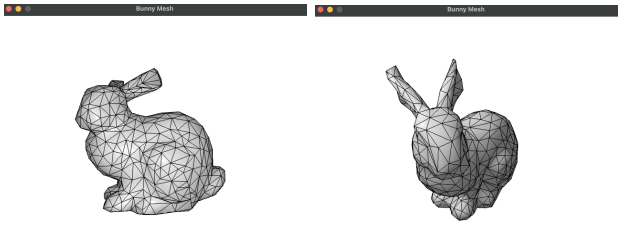
Figure 3: Cube loaded from `cube.obj`

4 Teapot Mesh

(a) (b)

Figure 4: Teapot loaded from `teapot.obj`

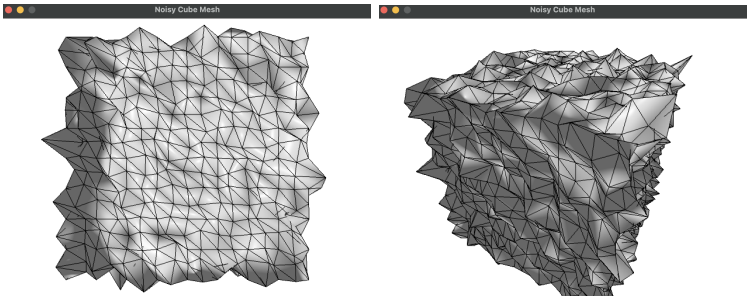
5 Bunny Mesh



(a) (b)

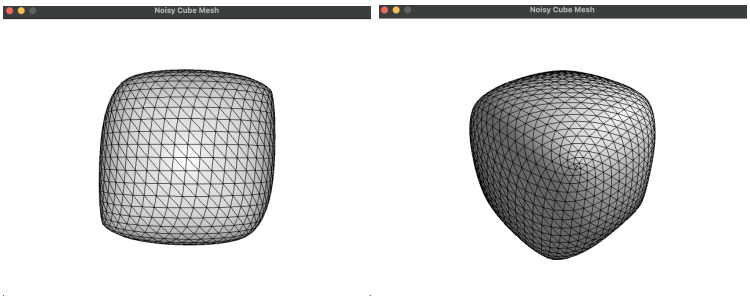
Figure 5: Bunny loaded from `bunny-1k.obj`

6 Noisy Cube Mesh



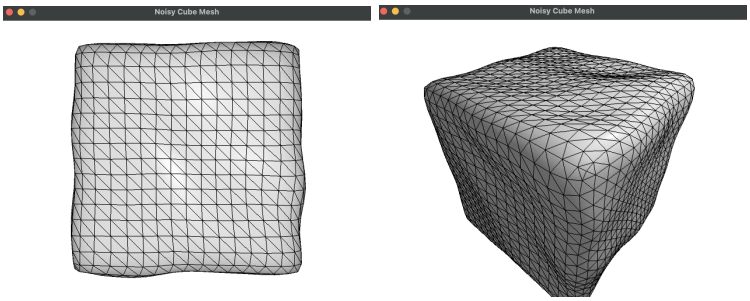
(a) (b)

Figure 6: Cube loaded from `noisycube.obj` (noisy)



(a) (b)

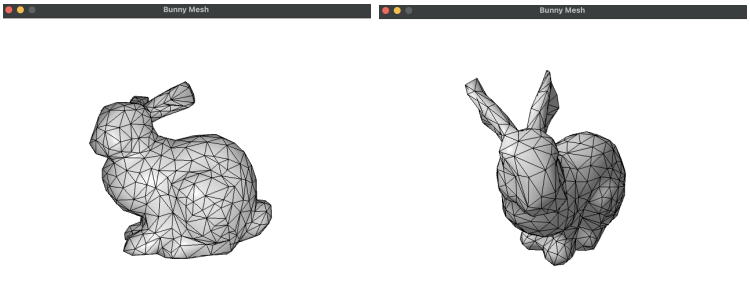
Figure 7: Naive smoothing (100 iterations, $\lambda = 0.33$)



(a) (b)

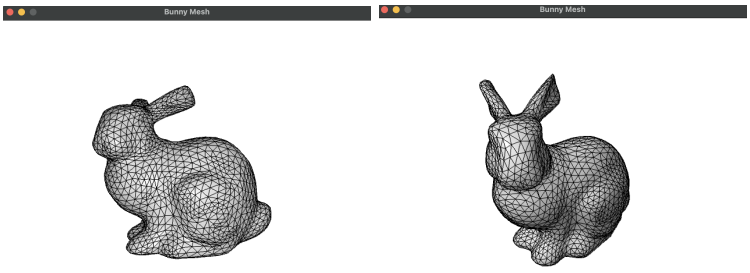
Figure 8: Taubin smoothing (100 iterations, $\lambda = 0.33$, $\mu = -0.34$)

7 Loop Subdivision (Bunny Mesh)



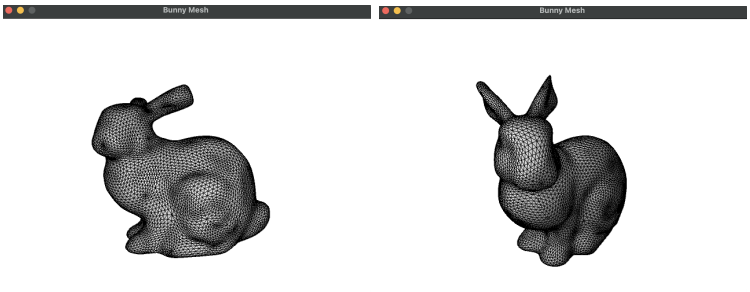
(a) (b)

Figure 9: Original bunny loaded from `bunny-1k.obj`



(a) (b)

Figure 10: Subdividing once (Loop)



(a) (b)

Figure 11: Subdividing again (Loop)