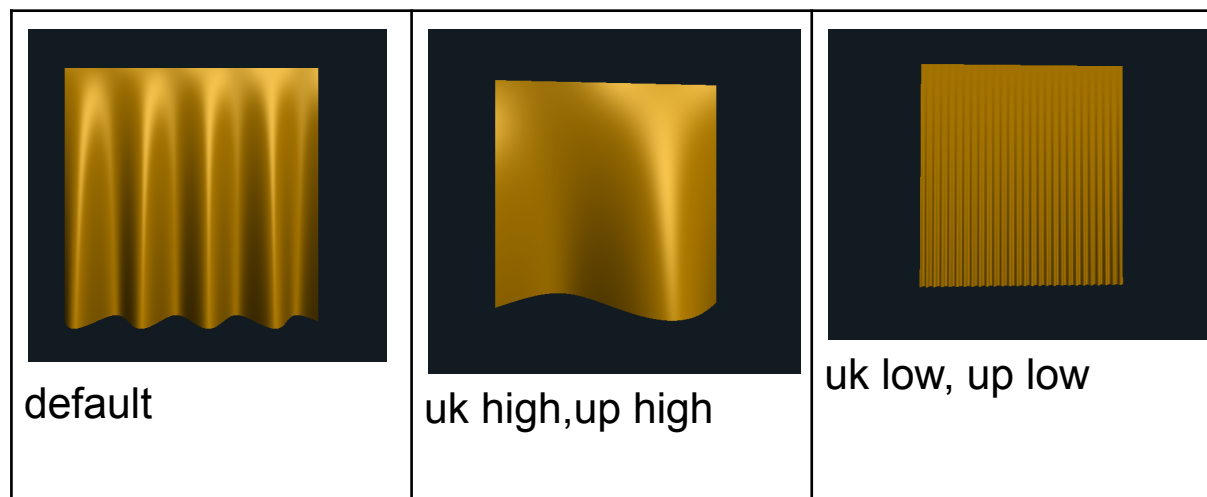


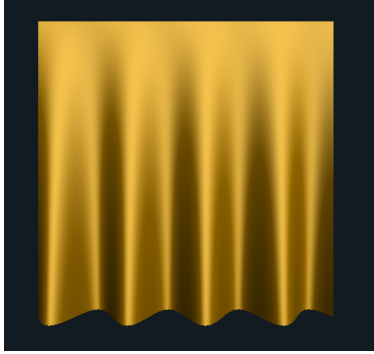
Jung-Che Chang  
Project 3: Displacement Mapping, Bump Mapping,  
and Lighting

[changju@oregonstate.edu](mailto:changju@oregonstate.edu)

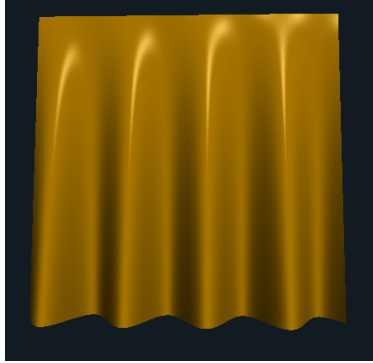
[https://media.oregonstate.edu/media/t/1\\_p9i41y4w](https://media.oregonstate.edu/media/t/1_p9i41y4w)

This project uses per-fragment lighting to create lighting that follows the curtain's Shape and fold. When the vertices of the original plane are distorted to create the undulating curtain, and then further modified to add a crinkle texture, the lighting is improved by adjusting the surface normals at each location to match the newly distorted surface.

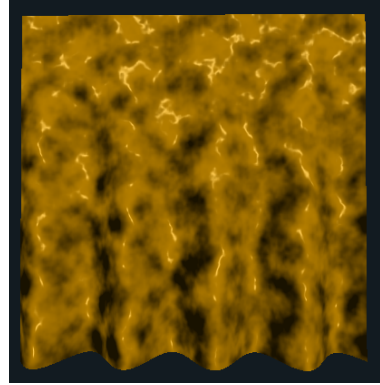




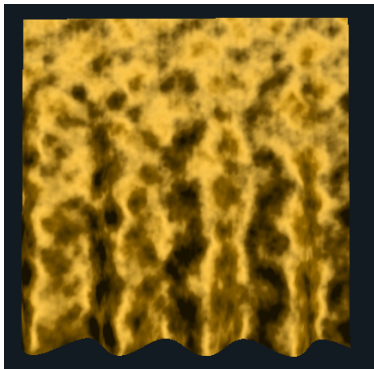
shiness low



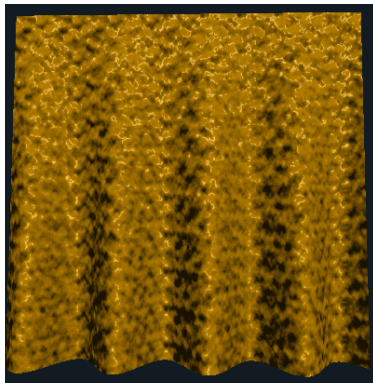
shiness high



bump-mapped with  
shiness



bump-mapped  
without shiness



uNoiseFreq high