

## HW 5 Advanced GLSL

### PART 1-

Things implemented-:

- Bump mapped terrain
- Rim lighting to simulate atmosphere
- Nighttime lights on the dark side of the globe
- Specular mapping
- Moving clouds

The open ended feature.

- Procedural water rendering and animation using noise

I did what i could understand from it. I would have loved to have a visual reference for how it should look. For now i created a simple noise generator and varied its output with time and used it on the water area. Not exactly effect i wanted.

Part 2- Implemented the gather occlusion function and Implemented the regular sample based approach.

In Part 3, I loaded the stanford dragon mesh model for example in place of the Sponza scene. Then i implemented any two of the following four vertex shaders:

- Vertex Pulsing
- Skinning

I was trying to implement skinning but i kind of got stuck in what exactly is required and i was trying to keep points as bones and then i would attach weight to each vertex corresponding to a bone. But again i didn't finish that part. I guess a little more information on what is expected would have been helpful.

I also rendered my one of the 3D interior scenes I had done long back, with AO. Check my blog for that.

BLOG Address- <http://raytracerpathtracer.wordpress.com/advanced-glsl/>