

CS5500 Computer Graphics Final Project

Proposal due: 14:00 June 7, 2007

Demo and report due: 13:00 July 2, 2007 (June 25 for graduating students)

In this project, you may work on your own or work with a classmate as a two-person team. You may choose one from the following topics:

(1) Implementation of Ambient Occlusion:

Read and implement the ambient occlusion field paper in I3D 2005

(<http://www.tml.tkk.fi/~janne/aofields/>) or the article in NVIDIA GPU Gems 2



(http://download.nvidia.com/developer/GPU_Gems_2/GPU_Gems2_ch14.pdf).

- (2) Implementation of shadow map:** Download the Sponza Atrium 3D model from <http://hdri.cgtechniques.com/~sponza/files/>. Write an OpenGL program to display it. Add shadow and lighting to make it look visually appealing.



- (3) GPU Programming:** Use Cg or GLSL to generate interesting effects such as ripples on water surfaces, or bump mapping (or relief mapping) effects.

