

Due: Thursday December 2nd at 6:00am

A9 & A10—Hardware rendering, the programmable pipeline

In a nutshell

Implement environment mapping and environment mapped reflections with GPU programs.

Details

1. Write vertex/pixel shader programs for:
 - Environment mapping
 - Environment mapped reflections
 - Use Cg / OpenGL
2. Example
 - Define a camera path, save to file; have GUI button that animates camera along path.
 - Make a 10s 30fps video of your scene rendered along the camera path.
3. Extra credit, all through GPU programs:
 - Shadow mapping (5%)
 - Billboard reflections + environment mapped reflections (5%)
 - Depth image impostor reflections + environment mapped reflections (7%)
 - A rendering effect of your choice (x%)

Turn in

- Code including GPU programs.
- Camera path file.
- Movie file.
- A README.txt description of your GUI.