

CS 455 Project

Present

1 Overview

During the last weeks of the semester, the tables will be turned. You and a partner will research a topic and record a video-based lesson on a topic related to interactive 3-D graphics. The rest of the class will watch your video before we meet in lab. During lab, we will complete an exercise that you are your partner design.

2 Requirements

You and your partner are to design a lesson on a topic related to interactive 3-D graphics. Choose from the following list of topics:

- Transform feedback - storing the results of the vertex shader for other uses
- Tessellation shaders - subdividing coarse geometry into finer geometry
- Instanced rendering - expanding simple prototype geometry into armies of geometry
- Deferred shading - shading only the fragments that are visible
- Direct3D - OpenGL's main competitor (will require LTS setup)
- WebGL - Javascript bindings for OpenGL (will require non-Internet Explorer browsers)
- Some team-suggested, instructor-approved topic

Topics are selected on a first-come, first-served basis. You must meet the following requirements to satisfactorily complete the presentation:

1. Pick your own partner. Only the last group to form may contain three members.
2. Pick the date of your presentation: either Tuesday or Thursday in one of the last several weeks of the semester.
3. Register your partner and presentation date with your instructor before March 1.
4. Prepare a 15-30 minute video lesson on your topic. Slides, drawings, demos, and code development are all acceptable teaching tools. Capturing screencasts can be done with Camtasia on Windows and Mac (a 30-day trial can be downloaded for free) or Kazam on Linux. (If you know of other tools, I welcome input.) Submit this video to YouTube. If recording yourself makes you feel self-conscious, watch some poorly-rated YouTube video tutorials to raise your spirits.

5. Prepare some in-lab exercises on an unpublished blog post.
6. Submit your video and your post to your instructor several days before your teaching day. (On Friday for a Tuesday lesson, on Tuesday for a Thursday lesson.)