CSE168: Rendering Algorithms
Programming Assignment 4
Due 11:59pm, Tuesday, June 8
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This assignment involves rendering a realistic image of an object or scene of your own choosing. The scene or object should be challenging enough to require you to design and implement an advanced rendering algorithm; for example based on the techniques from the last 3 weeks in class, such as:

- Monte Carlo ray tracing
- Path tracing
- Soft shadows
- Radiosity
- Photon mapping

Project proposal
Send a project proposal consisting of an image, a short text motivating why this is an interesting object/scene to render, and possibly a few pointers to papers describing the techniques that you plan to implement. Proposal deadline is Tuesday, June 1 - as email to cse168-turnin@graphics.ucsd.edu.

Rendering competition
On June 8 from 2pm-5pm there will be a rendering competition where each student will present their project and the images will be evaluated by an independent group of judges purely based on what images and techniques they like. Each student should create one image for the competition (if you have more images you will need to select just one for judging).

What to turn in
Create a tar.gz or .zip archive of your entire assignment (sources files and makefiles/project files) and submit it to cse168-turnin@graphics.ucsd.edu before the deadline. For this assignment you should make a 2-3 page summary description of the project, as a webpage, in addition to the original proposal. Your archive should include your webpage as a subdirectory, and the webpage should be self-contained, i.e. include all images/thumbnails in addition to your html file. Use previous years’ rendering competition webpages as inspiration. Links are available on the course website.
Grading

This assignment will account for 30% of the final grade or more in case your project is truly outstanding. The evaluation includes novelty, technical skill, and the quality of the rendered images produced as part of the assignment. Note that several thousand lines of code by itself does not make a good project.

Though judging at the competition is independent of grading for the assignment, attendance is required. Each student will need to present their project/images in front of the class/judges. The oral presentation counts towards the overall grade.

If more people work on the same project please identify what part of the code that each person implemented. This will be used for the purpose of individual grading.