

Rendering

CS 775: Advanced Computer Graphics - Assignment 2

Due Date: 17/3/2015

1 Description

In this assignment you will render a transformer using Pixar's PRMan.

2 To do

1. Learn how to use PRMan. Read the docs. Try out examples. Learn how to write scenes in the RIB format.
2. Convert one frame of your animation from A1 into a rib file. This must contain at least one transformer in some pose. In order to do this, you can write out the absolute coordinates for various vertices that make up your transformer in a RIB file format. Or if you want to write down the RIB file manually, you can do that too.
3. Now add scene elements to the scene that produce indirect illumination (color bleeding) in the scene.
4. Add scene elements that create caustics.
5. Add area lights and soft shadows.
6. Add a texture (image or procedural) to at least two objects (two parts of your transformer is also fine) in your scene.
7. Add at least one transparent and one metallic surface.
8. Render the scene with PRMan.

3 Method of Submission

1. A Tar-Gzipped archive of the RIB file(s), shaders and textures has to be submitted. It should run on the system in lab.

2. A html report page on the assignment that should contain some details about what you implemented and images of the results that you generated.
3. A README file with a declaration that the assignment has been done by you and not plagiarized from anywhere, and a statement specifying if you are using any *late days* or not.
4. Submission will be through the submission portal, which will be enabled later.

4 Marking

The assignment will be marked as follows:

- RIB scene with transformer - 20 marks
- Indirect illumination - 10 marks
- Caustics - 10 marks
- Area lights and Soft Shadows - 10 marks
- Textured Objects - 10 marks
- Transparent and Metallic surfaces - 10 marks
- HTML report with images of rendered results - 10 marks
- Total : 80