Final Project Report

Hardware Ray Tracing

1. Report Document, due: 1:00 PM, April 30, 2014

Write a final report document describing your project. This document should include a summary of your original plan and goals, as well as a detailed report and analysis on the outcome of your efforts. There are no length requirements for this document. Be concise without omitting any important details or data.

Since individual projects vary so widely, the type of content in a good analysis and report will also vary. In general, be sure to include:

- Performance data (both delay and energy performance) - If your project modifies some aspect of the hardware, analyze the affects this has on performance. Analyze how typical software benchmarks (such as a path tracer) interact with the TRaX hardware including your modifications. If your project is a software technique, analyze the performance on TRaX, similar to the analyses performed in assignments. Identify bottlenecks and provide intuition as to why your software interacts with TRaX in the way that it does. Present your data in the way you find most appropriate (e.g. charts/plots/tables). Data should be accompanied by a clear explanation.

- Images - If applicable, include any relevant renderings or graphics generated using your techniques. Provide a description of each.

- Difficulties - Describe any problems you encountered that you did not initially anticipate. How did you overcome these problems? If you were unable to overcome a problem, how does this affect the outcome of your project?

- Conclusions - Discuss the utility of your project. What are the potential applications? Do your results match your expectations? Finally, discuss any future work or directions that could improve the utility of your project.

2. Presentation, due: between 1:00pm-3:00pm (NOTE: Not regular class time!), April 30, 2014 - regular class room.

Prepare a 10 minute presentation to describe your project to the class. Consider this a condensed, presentable version of your final document. Please keep your actual presentation limited to 10 minutes. Be prepared to answer any questions the teach staff or other students may have. If you plan to use the projector for your presentation, prepare either pdf slides or online materials to avoid powerpoint format conflicts, or bring your own laptop if you trust it.

What to turn in:

1. By 1:00 PM, Wednesday April 30, send e-mail to teach-cs6958@list.eng.utah.edu with your final project report document.

2. By Wednesday April 30 at 1:00 PM, be prepared to present your project to the class.