Joel Rausch
Christopher Jeffers
Eric Jensen
Group Number: May 12-11
Adviser: Simanta Mitra
Client: Siemens PLM Software

Weekly Report for 2/13/2013

Accomplishments

This past week we had a meeting with our client, Siemens PLM. One of the big things that came out of the meeting was confirmation that the point cloud libraries being supplied to us will contain normal vectors. Having these will simplify the pre-processing stage of our application considerably.

In the meeting we also talked about getting sample point cloud of different sizes (10,000,000 - 1,000,000,000 points) and point clouds with features such as sharp edges. These will present various degrees of difficulty for rendering, and will help provide a more complete picture of the capabilities of our algorithm.

Siemens suggested that we incorporate an occlusion filter similar to what the CryEngine 3 uses. This is a "would be nice" feature, which may be added as time allows.

We also talked about a collection of spatially segregated point clouds which could be loaded dynamically based on the camera position. This would require only a subset of the point clouds to be loaded at any one time. Again, this is a "would be nice" feature which may be added as time allows.

Plan for coming weeks:
- Maintain the Design Document with developing architecture decisions. These should be mostly low-level decisions.
- Continue development of software components.

Pending issues:
- We are waiting for Siemens to deliver a sample point cloud.

Individual contributions:

All - Approximately 8 hours each