CIS 565 Milestone 3 - Normals and Deformation

Daniel Krupka and Gabriel Naghi

Recap

- Able to generate smooth structure
- Able to utilize GPU properties for optimization
- Can more be done?

Normal Interpolation

- Normals are just more data
- One set of surface coefficients per coordinate
- Can also do UVs

Deformation

- Full coefficient calculation is the 'reverse' problem
- Can also go from coefficients to real space
- Do updates in coefficient space if we know what each "basis patch" does

Demo

Final Goals

- Reprofile, assess full impact of deformation
- Summarize trends viz. Mesh size, sampling density, etc.