

Live Lecture Chat Window

January 17, 2024

10:21:52 So it looks like the blend retains the lighting of the original object?

Actually works the other way. You do the blend to get the blended color and then apply the lighting to that blended color.

10:25:53 So if we go beyond 2.0 [in the morph slider], the cow is just basically being sucked into the sphere?

I think that is a good way to look at it, although it is not being “sucked” exactly. It is a weighted average of the two shapes. I’m still trying to wrap my head around exactly what that shows.

10:29:06 That is terrifying ... [the cow being blended with the sphere outside the blending range of 0. To 1.]

I agree. But in an interesting way.

11:11:58 Minecraft uses perlin plots to do its procedural terrain generation

Makes sense. That’s roughly what our Noise Terrain demo is doing.

11:23:59 It's the xyz of each fragment not the object?

Correct. The object has vertices whose coordinates get interpolated by the rasterizer and given to the fragment shaders.

11:25:32 So its totally okay to use our Project # 1 from the start? [To do Project #2.]

Yes! I don’t want you to waste your valuable time re-inventing the part that matches P1.

**12:22:15 Aren't there ways to convert any objects into a set of equations aka a spline?
[https://en.wikipedia.org/wiki/Spline_\(mathematics\)](https://en.wikipedia.org/wiki/Spline_(mathematics)) That way, we can take any object, turn it into a spline, then morph it with any other object?**

The professionals still want to match up parts of the images so that eyes morph to eyes, noses morphs to noses, mouths morphs to mouths, etc.

12:29:11 So we can morph objects but it is more common to morph images

Yes. Check out the videos linked from the last slide of our Morph notes! They morph images. I think you will like them!

13:04:34 If we're not using glman, can we generate our own 2D/3D noise textures using something like simplex or Perlin noise at startup?

Definitely! When you do, show me sometime what you are getting with it. I've always wondered if glman should be using simplex or wavelet noise instead. (glman uses Perlin noise now.)

13:13:13 At some point, could you show where the .glib file is added via the sample.cpp file?

Easy – it's not. You either use { .cpp, .vert, .frag } or you use { .cpp, .vert, .frag }.

13:21:02 Sorry been a while since I took a class like this. where can i find the glman?

I'd like to believe that you've *never* taken a class as cool as this one! 😊 You get glman.exe from the Downloadable Executables section of the Class Resources Page. You will at least need the first two .dll files right after that.

13:22:04 Is it possible to use glman on Mac? I can't seem to access glman.exe

Sorry, glman uses a lot of Windows-isms, and so hasn't yet been ported to the Mac.

13:22:50 Does that mean its necessary to use C++ and the GLSL API on Mac?

Yes. But don't let that discourage you. Hundreds of Mac users have succeeded wildly in this class.