12:20:23 When you are in a game and you see your avatar walk up to a mirror and the reflection moves when your character moves, does that effect use ray tracing?

Could be. But oftentimes that is a cheat where they reverse the X coordinate of the avatar and draw it a second time at the plane of the mirror. Raytracing might be overkill for that.

12:38:26 If Apple iMacs don't have modern OpenGL support, what do Macs make use of for graphics instead of OpenGL? Can Macs be used with modern Vulkan development?

Vulkan can be made to run on Macs. Apple would prefer you use Metal, which then locks you into Apple-only.

12:55:51 Would it be doable to approach your Vulkan class as a self study?

Probably. The notes are in a very deliberate order. They start in the middle with what you already know (vertex-drawing) and then work out into what you don’t know.

13:08:51 I remember playing with POV-Ray back in, um, high school, and how it took hours to render a 1024x768 image of shapes made of glass, so all this real-time raytracing seems like magic to me :P

Yes, the prospect of doing RT with hardware support is pretty exciting if you have ever tried doing it without hardware support.

13:18:46 People can keep their smartphone on their belt.

I agree. Cellphone only. No slide rules either. As much as I love this stuff, even I would not carry a rendering engine on my belt…

13:20:19 I may be a nerd, but even I'm not nerdy enough to use a belt clip. That's what cargo shorts are for.

😊

13:34:51 Did Pixar invent shaders?

I give Pixar credit for shaders. Others might have had plug-ins, but it was Pixar that really formalized the whole shader setup with built-in variables, uniform variables, etc. It says a lot that about the quality of Pixar’s vision with shaders that GLSL copied a lot of Pixar’s ideas even 15+ years later.
13:42:19 Did plugins include changing the geometry of the surface?
That's what RenderMan would call a "displacement shader"/

14:23:13 From Bailey, Mike to Everyone [how to get something to move from the side towards the origin]:
    float newx = gl_Vertex.x + 5.*(1.-Timer);