

CS 4830 Midterm Exam Review Guide

1. Understand the relationship between OpenGL ES and WebGL.
2. Know acronyms such as GPU and HTML.
3. Know what HTML tag is used by WebGL to draw graphics.
4. Know how pixels are arranged spatially in a grid.
5. Understand orthogonality in Cartesian coordinate systems.
6. Know where the word pixel comes from.
7. Know the three components of color.
8. Know the difference between additive and subtractive color models.
9. Know what the dot and cross product return.
10. Know the special types of square matrices.
11. Be able to multiply two matrices.
12. Know the three basic transformations we covered (translation, rotation and scale)
13. Understand the basic pinhole camera model.
14. Know the details we covered about the graphics pipeline.
15. Know what vertex attributes are.
16. Know what a view frustum is and its shape.
17. Know what the canonical view volume is.
18. Know how light is approximated in computer graphics and the different terms we studied.
19. Know the difference between polled and event-driven interaction.
20. Know how a simple collision detection algorithm works.