Computer Graphics with Modern OpenGL and C++

# Section 1: Introduction

## Introduction to GLEW, GLFW, and SDL

What is GLEW?

* OpenGL Extension Wrangler
* Interface for OpenGL versions above 1.1
* Load OpenGL extensions
* Some extensions are platform specific, GLEW can check if they exist on that platform
* Alternatives: GL3W, glLoadGen, glad, glsdk, glbinding, libepoxy, Glee

Using GLEW

* #include <GL/glew.h>
* After initialization OpenGL context:

glewExperimental = GL\_TRUE;

* glewInit();
* Should return GLEW\_OK. If it fails, it returns the error.
* Can read error with glewGetErrorString(result);
* Check extensions exist:

If (!GLEW\_EXT\_framebuffer\_object){}

* wglew.h for Windows-only functions

GLFW

* OpenGL FrameWork (…probably)
* Handles window creation and control
* Pick up and process input from the keyboard, mouse, joystick, and gamepad
* Even allows multiple monitor support