

Developing Programs on Your PC

Fall 2017

COMPSCI 459 - Fundamentals of Computer Graphics

Taken from Dr. Suzuki's lecture notes

This information is provided as a benefit to those who might be interested in developing OpenGL programs on their own Windows PC. There are two things you will need to get going.

1. Microsoft VS2008 or VS2010. VS2008 is available to UWM students under a license from Microsoft. Ask the TA for a CD.
2. OpenGL and GLUT libraries, available from the TA by email. Install them as follows. For VS2008:

- Create directory `C:\ProgramFiles\MicrosoftVisualStudio9.0\VC\include\GL` and save `GL.h`, `GLAUX.h`, `GLU.h` and `GLUT.h` there.
- Save `GLAUX.LIB`, `GLU32.LIB`, `GLUT.LIB`, `GLUT32.LIB` and `OPENG32.LIB` in `C:\ProgramFiles\MicrosoftVisualStudio9.0\VC\lib`.
- Save `glaux.dll`, `glut.dll` and `glut32.dll` in `C:\WINDOWS\system32` (or `C:\WINDOWS\sysWOW64`). (Two other .dll files you need, `glu32.dll` and `opengl32.dll`, should already be in `C:\WINDOWS\system32`.)

For VS2010:

- Create directory `C:\ProgramFiles[(x86)]\MicrosoftVisualStudio10.0\VC\include\GL` and save `GL.h`, `GLAUX.h`, `GLU.h` and `GLUT.h` there.
- Save `GLAUX.LIB`, `GLU32.LIB`, `GLUT.LIB`, `GLUT32.LIB` and `OPENG32.LIB` in: `C:\ProgramFiles[(x86)]\MicrosoftVisualStudio10.0\VC\lib`
- Save `glaux.dll`, `glut.dll` and `glut32.dll` in `C:\WINDOWS\system32` (or `C:\WINDOWS\sysWOW64`). (Two other .dll files you need, `glu32.dll` and `opengl32.dll`, should already be in `C:\WINDOWS\system32`.)

If your PC uses Unix or Linux, you should download and install MESA (equivalent to OpenGL) from <http://www.mesa3d.org/>, and Freeglut from <http://freeglut.sourceforge.net/>. To compile and run C or C++ programs, you should indicate paths to .h and .lib files by: `gcc main.c o <executable> -I<opengl-include-path> -L<opengl-lib-path> -lgl lglu lglut`