



# 2004 Advanced OpenGL Tutorial

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## Quote

“Life moves pretty fast. If you don't stop and look around once in a while, you could miss it.”

- Ferris Bueller, “Ferris Bueller's Day Off” (1986)

# Brief History of OpenGL

- 1983 IRIS GL ships with SGI IRIS 1000 terminal
- 1987 SGI and Pixar consider joint API development
- 1991 OpenGL ARB created
- 1992 OpenGL 1.0 completed (June 30)
- 1995 OpenGL 1.1 released (vertex array, texture objects, new texenv modes)
- 1997 Fahrenheit agreement between SGI and Microsoft
- 1998 OpenGL 1.2 released (3D textures, separate specular, imaging)
- 1999 OpenGL 1.2.1 released (multi-texture)
- 2001 OpenGL 1.3 released (compressed texture, cube maps, multi-sample, dot3)
- 2002 OpenGL 1.4 (mip-map generation, shadows, point parameters)
- 2003 OpenGL 1.5 (vertex buffer objects, occlusion query)  
ARB extensions: OpenGL Shading language,  
ARB\_vertex\_program, ARB\_fragment\_program
- 2004 OpenGL 2.0

# OpenGL Tutorial Schedule

10:00 - 10:10	Introduction – <i>Simon Green</i>
10:10 - 11:00	OpenGL Shading Language Overview – <i>Bill Licea-Kane</i>
11:00 - 11:15	<b>Break</b>
11:15 – 11:30	OpenGL Shading Language (continued)
11:30 - 11:45	NVIDIA OpenGL SL implementation + demos – <i>Simon Green</i>
11:45 - 12:30	OpenGL 2.0 proposed extensions – <i>Cass Everrit</i>
12:30 - 2:00	<b>Lunch</b>
2:00 - 2:45	New ATI extensions (“Uber” buffers) – <i>Rob Mace</i>
2:45 - 3:30	New NVIDIA extensions + demos – <i>Simon Green</i>
3:30 - 4:00	Tools and Libraries – <i>Sebastien Domine, Evan Hart</i>
4:00 - 4:15	<b>Break</b>
4:15 - 5:00	Performance Optimization – <i>Evan Hart</i>
5:00 - 5:45	General Purpose Computation for Games in OpenGL – <i>Mark Harris</i>
5:45 - 6:00	Conclusion, Q&A