

## PREFACE

Mr. Yusuf Pisan discussed the design and implementation of a 3D game engine during the Australian spring semester 2004. We looked at state-of-the-art engines, like FLY3D and many more open source tools, and discussed various techniques for realistic and – that is even more important – *real-time* worlds. Attendance in all the lectures and labs was mandatory. The labs and assignments provided interesting insights into the advanced use of OpenGL, DirectX and a number of 3<sup>rd</sup> party tools.

My solutions are available online as PDF files which can be read by using the free Adobe Acrobat Reader. Nowadays, this tool is found on most systems – both Windows and Linux. If do not have the Acrobat Reader installed on your computer then you can either download it from [www.adobe.com](http://www.adobe.com) or just buy a good computer magazine – most of them come with a CD that contains it. Unfortunately, I cannot afford an expensive tool to generate these PDFs and have to use the free Ghostscript suite. The only drawback is the missing ability to embed hyperlinks: even though they are tempting blue and properly underlined there is no possibility to actually click them, they are passive.

I would am quite glad to receive annotations, corrections and hints: feel free to write your comments to [games@stephan-brumme.com](mailto:games@stephan-brumme.com) !

*To make it finally clear: I do not take on any responsibility concerning the correctness of my solutions. They may contain errors, wrong assumptions and/or buggy code.*

Sincerely yours,  
Stephan Brumme

*The trick is to keep breathing.*