

Hollemeersch Charles-Frederik J.

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Software Engineer

Software engineer specialized in real time graphics, experienced in both development of practical applications and research of new and innovative technologies. Excellent knowledge of mathematics and physics, besides formal computer sciences. Attracted to the aesthetic and artistic side of computer graphics as well as theoretical concepts. Avid team worker capable of taking responsibility and working autonomous. Interested in learning new skills, theories and ideas and applying them in a practical context.

Technical Skills

Programming Languages	C, C++, ADA, Java
API's	OpenGL, DirectX9, .NET & windows forms, VxWorks (5.x and 653 PSC)
Concepts	Mathematics and Physics, Computer Graphics, Physical Simulation, Safety critical software.
Applications	Visual Studio, VTune, Concurrent Versions System, Subversion, Clearcase, Wind River Workbench (Eclipse based), Adobe Photoshop.

Academic & Professional Experience

BARCO NV., Kortrijk, België

Feb. 2007 - Nov. 2007

Development engineer software

- * Developer for DU-178B Level-A certified software. I.e. software whose anomalous behavior, would cause or contribute to a failure of system function resulting in a catastrophic failure condition for the aircraft.
- * Development of the core components of a graphics monitoring system in C.
- * Development and integration of a remote procedure call system in the VxWorks ARINC 653 safety critical kernel in ADA.
- * Deploying the MOSArt system on newly developed hardware.

SPLASH DAMAGE LTD., London, United Kingdom

Aug 2004 - Aug 2006

Graphics Programmer

- * Working on "Enemy Territory Quake Wars" (released in 2007)
- * Responsible for extending the Doom3 engine for outdoor use.
- * Developed Megatexture technology in cooperation with id Software
- * Extended existing shader infrastructure to make the engine fully pixel shader 2.0 aware.
- * Responsible for most shaders and special effects present in the game, development

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of particle effects and optimization.

- * Communicating new technologies to artists and integrating their feedback into the application.

GHENT UNIVERSITY, Ghent, Belgium

Feb 2004 - Jul 2004

Project

Development of a real time graphics demo for the "Imagine Cup" organized by Microsoft.

- * Responsible for: concept, technical direction and programming.
- * Developed extensible demo engine from scratch in a limited timeframe.
- * Finished 3rd in the worldwide finals in Brazil.

SPLASH DAMAGE LTD., London, United Kingdom

Aug 2003 - Sept 2003

Internship

- * Development of a proof of concept showing feasibility of outdoor environments using the Doom3 engine.

TENEBRAE, Online - <http://www.tenebrae2.com/>

Dec 2001 - Present

Project Founder and Lead Programmer

- * Lead programmer of the Tenebrae Quake source modification.
- * Integrates modern graphical techniques like per pixel lighting and stencil shadows into the open sourced Quake 1 engine.

Education

Master in Computer Sciences

Jul 2004

- * University of Ghent Belgium
- * Concentration: Software Development
- * Finished first with "Greatest Distinction"

Languages

- * Excellent knowledge of English and Dutch. Proficient in French and German, Beginner level Russian.