

ParallaxOcclusionMapping Sample

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This sample donated by ATI Technologies (www.ati.com) presents the parallax occlusion mapping algorithm which employs per-pixel ray-tracing for dynamic lighting of surfaces in real-time on the GPU. The method uses a high precision algorithm for approximating view-dependent surface extrusion for a given height field to simulate motion parallax and perspective-correct depth. Additionally, the method allows generation of soft shadows in real-time for surface occlusions. This sample includes an automatic level-of-detail system for in-shader complexity scaling. The full algorithm is described in 'Dynamic Parallax Occlusion Mapping with Approximate Soft Shadows' paper by N. Tatarchuk, ATI Research, Inc., to appear in ACM Symposium on Interactive 3D Graphics and Games, 2006.

The GDC slides can be found at:

[ATI Developer: Techology Papers and Presentations](#)

"Practical Parallax Occlusion Mapping for Highly Detailed Surface Rendering"

N. Tatarchuk, ATI Research, Inc. ATI Technologies, GDC 2006.

Path

Source	<i>SDK root</i> \Samples\C++\Direct3D\ParallaxOcclusionMapping
Executable	<i>SDK root</i> \Samples\C++\Direct3D\Bin\x86 or x64\ParallaxOcclusionMapping.exe

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Version: 1962.00