PA1 – Playing with Embree



Embree Usage

2

- High performance ray tracing kernel
 - Intel's ray tracing kernel optimized for Intel processors
- Various kind of simulations
 - Lighting, sound, particles, collision detection, etc.)

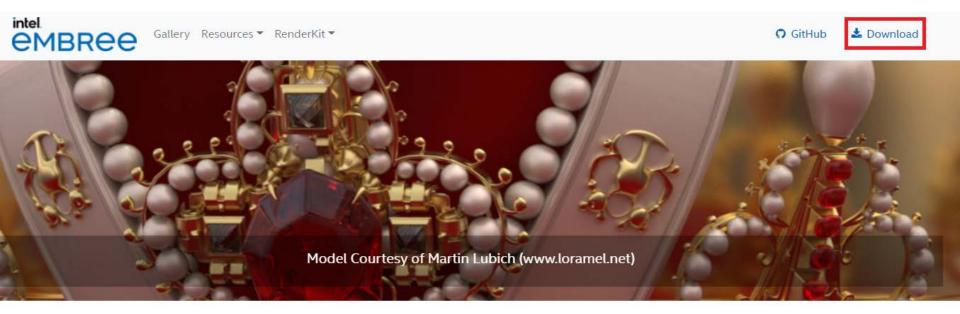


Embree: A Kernel Framework for Efficient CPU Ray Tracing (SIGGRAPH 2014) KAIST

Installation

Installing Embree Binary

• Access https://www.embree.org/





Installation

 Added support for Intel[®] Data Center GPU Max Series. 		
Added ARM64 Linux support.		
Added EMBREE_BACKFACE_CULLING_SPHERES cmake opti	on. The new cmake option defaults to OFF.	
Sembree-4.1.0-beta.sycl.x64.windows.zip	66.8 MB	May
<pre></pre>	66.8 MB 117 MB	
		May
@embree-4.1.0-beta.sycl.x86_64.linux.tar.gz	117 MB	May May
<pre> @embree-4.1.0-beta.sycl.x86_64.linux.tar.gz @embree-4.1.0.x64.windows.zip </pre>	117 MB 52.7 MB	May May May May May
Sembree-4.1.0-beta.sycl.x86_64.linux.tar.gz Sembree-4.1.0.x64.windows.zip Sembree-4.1.0.x86_64.linux.tar.gz	117 MB 52.7 MB 78.2 MB	May May May



Binary

for

Win/

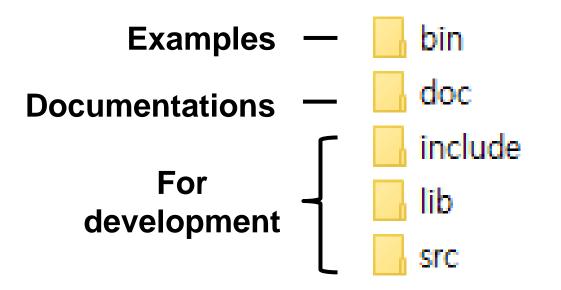
Linux/

Mac

Source

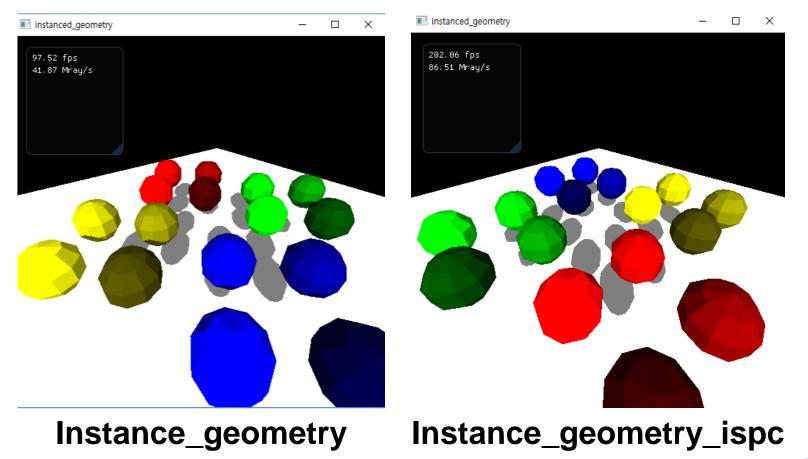
Example : Windows – 64-bit

Contents of embree-4.1.0.x64.windows.zip



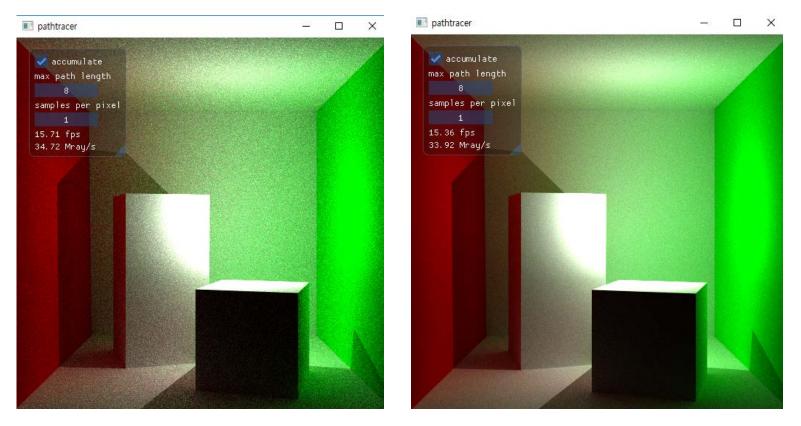


Play with some examples





Play with some examples



path_tracer; how the scene changes when time passes?

Play with some examples



hair_geometry; how the scene changes when time passes?

- See how it changes when time passes
- Interact with the scene
 - Drag mouse ...
- Submit screenshots of following projects:
 - pathtracer
 - quaternion_motion_blur
 - voronoi

