

Implementation of Monte Carlo path tracing algorithm based on OpenGL

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As the performance of graphics cards continues to improve, Ray tracing algorithms are getting faster to compute. It has been widely used in movies and games for its more realistic experience than rasterization. Using publicly available tools, this paper implements rendering of virtual scenes based on Monte Carlo path-tracing algorithm. Make it close to the lighting effect of the real scene. This paper also studies ray-tracing acceleration algorithm and OpenGL data transmission between CPU and GPU.