

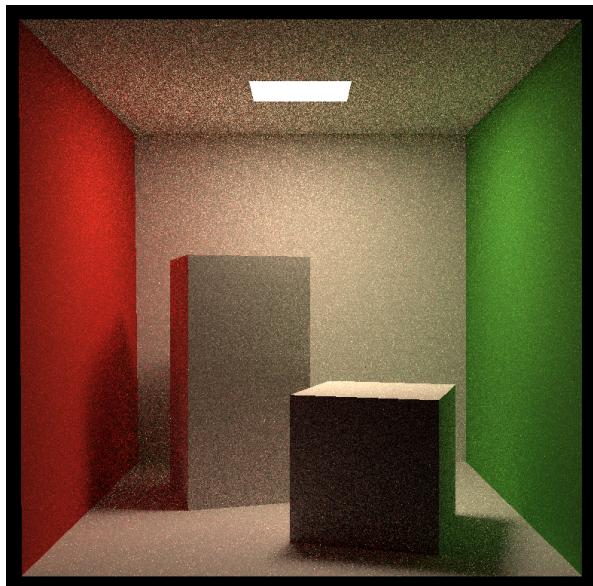
Project 1 : Path Tracing

CG course assignment. Based on CPU calculation and C++ programming, the project uses Monte Carlo method to render the image of the Cornell Box. Integrates over all the illuminance arriving to a single point on the diffuse surfaces of objects. Repeats the integration procedure for every pixel and uses BVH structure to accelerate collision testing and multithreading to reduce time consumption. Analyzes the results under different sampling frequencies.

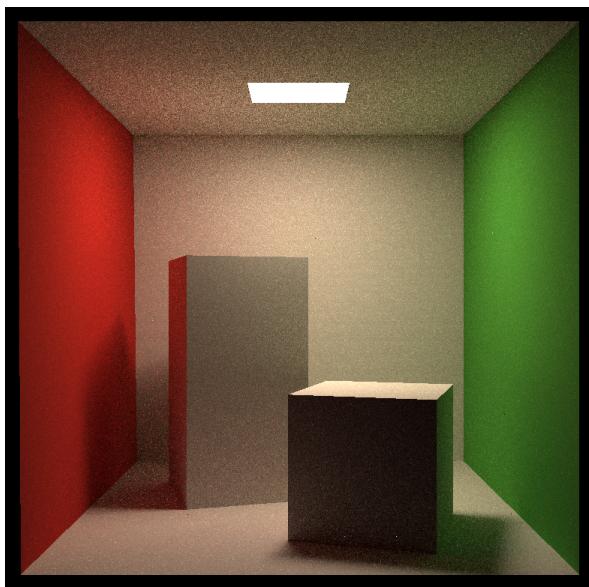
Setting : Ubuntu 18.04.2 , CPU AMD R5 3400G



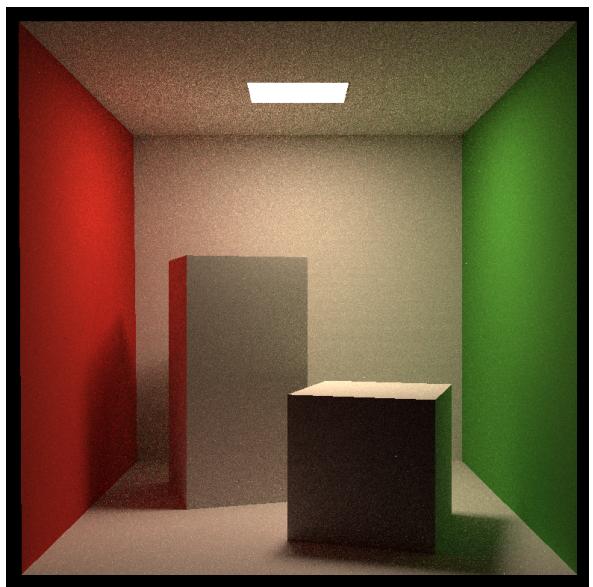
SSP16 , 4 threads , 104s



SSP16 , 1 thread , 255s



SSP64 , 4 threads , 328s



SSP64 , 1 thread , 1017s