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Summary

This article introduces a newly created volumetric lighting model that generates volume renderings of high quality through simulating shadowing and scattering. Using the efficient hardware that comes with consumer graphics hardware, it allows for interactive frame rates within its illumination propagation based system. The authors provide clear figures and images of the model's success, including an MRT scan of a human head and a fairly impressive CT scan of a mouse with closeups of such. They found that the model has the capability to improve the depth perception of volume renderings, and in turn is easy to implement and combine with clipping planes and other classification techniques. As a result from this, the authors acknowledge its potential to be integrated in other volume rendering frameworks, looks to improve upon the created technique's spatial comprehension, and looks to investigate the influence of multiple light sources on the model itself.