

Radiative Backpropagation: An Adjoint Method for Lightning-Fast Differentiable Rendering

Errata

Last updated: 2021-08-31

2021-08-31 There was a typo in Section 3.3: the *rows* of the Jacobian are the parametric derivatives of pixel measurements, not the columns. The author version of the article was updated to fix this typo.

2021-08-01 In Section 3.8, the claim that the sign of gradients remain correct despite setting $L_i = 1$ (“Biased I” variant of the algorithm) is wrong. While good results can indeed be achieved with this variant, it should be considered biased. This is explained and illustrated in detail in Section 3.2 of *Path Replay Backpropagation: Differentiating Light Paths using Constant Memory and Linear Time* [1].

References

- [1] Delio Vicini, Sébastien Speierer, and Wenzel Jakob. Path replay backpropagation: Differentiating light paths using constant memory and linear time. *Transactions on Graphics (Proceedings of SIGGRAPH)*, 40(4):108:1–108:14, August 2021.