

Stochastic Soft Shadow Mapping Supplementary Material

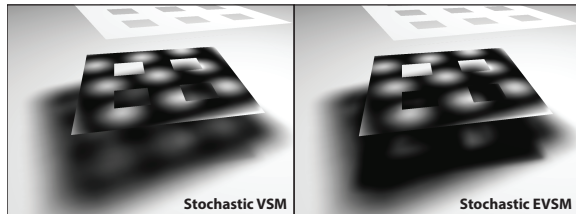
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1. Introduction

This supplementary material contains an additional illustrative figure and comparisons for additional scenes.

2. Stochastic VSM vs. Stochastic EVSM



Akin to pre-filtered hard shadows, stochastic VSM suffers from light leaking, which is largely reduced by using an EVSM basis instead. This limitation is mentioned in Sec. 5.1 in our paper. Additionally, Fig. 15 in the paper compares our results with these two bases for a more complex scene.

3. Additional Comparisons

We show more detailed performance comparisons between our method (SEVSM - Stochastic EVSM), PCSS, Multi-Layer SM Filtering (MLF), and a ray-traced ground truth in Table 1. The corresponding result images are shown in Fig. 1.

	GRID	GRIDS	SKELETON	TEAPOT
SEVSM				
Sample	0.9	1.21	5.1	5.67
Pre-Filter	2.57	6.6	5.67	6.78
Shadowing	0.23	0.56	0.53	0.65
Total	3.7	8.37	11.3	13.1
MLF				
Rendering	0.91	1.0	0.94	1.04
Generation	6.07	7.12	7.96	12.9
Shadowing	41.5	47.7	27.7	37.9
Total	48.5	55.8	36.6	51.9
PCSS				
SM Generation	0.37	0.35	0.39	0.37
Shadowing	21.7	16.4	12.8	15.2
Total	22.07	16.75	13.19	15.57
RT				
Rendering	2048	2150	3328	3456

Table 1: Performance comparisons between the methods. Times are given in milliseconds.

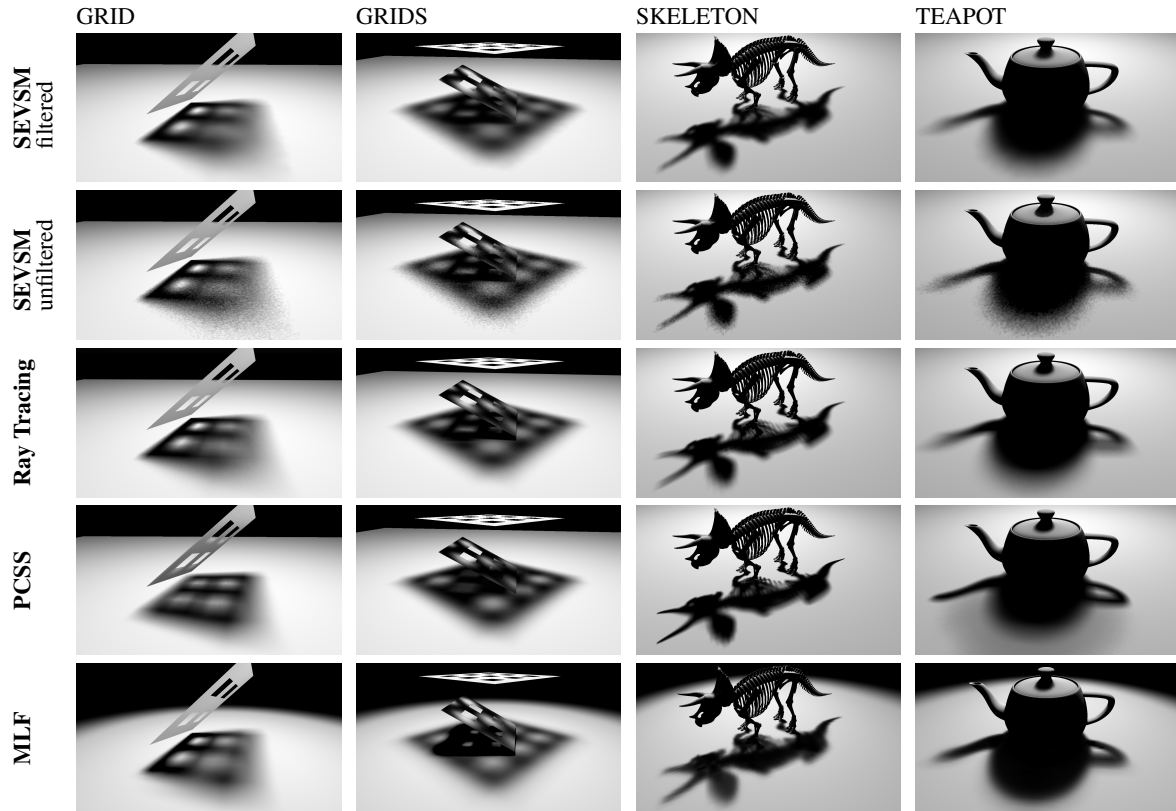


Figure 1: Additional comparison images. The ray-traced ground truth was rendered with 256 samples per pixel, all shadow mapping methods used 1024×1024 texels.