Supplementary Document on Euclidean Distance Transform Shadow Mapping

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In this supplementary document, we show a visual comparison between the hard shadow filtering techniques (namely PCF, VSM, MSM, RPCF and EDTSM) and the ground-truth reference solution for two scenes shown in the paper. For the complex object shown in Fig. 1, whose penumbra size greatly varies along the shadow silhouette, none of the methods are able to produce visually accurate shadows. For the simple object shown in Fig. 2, the shadows produced by most of the techniques resemble the ground-truth one.
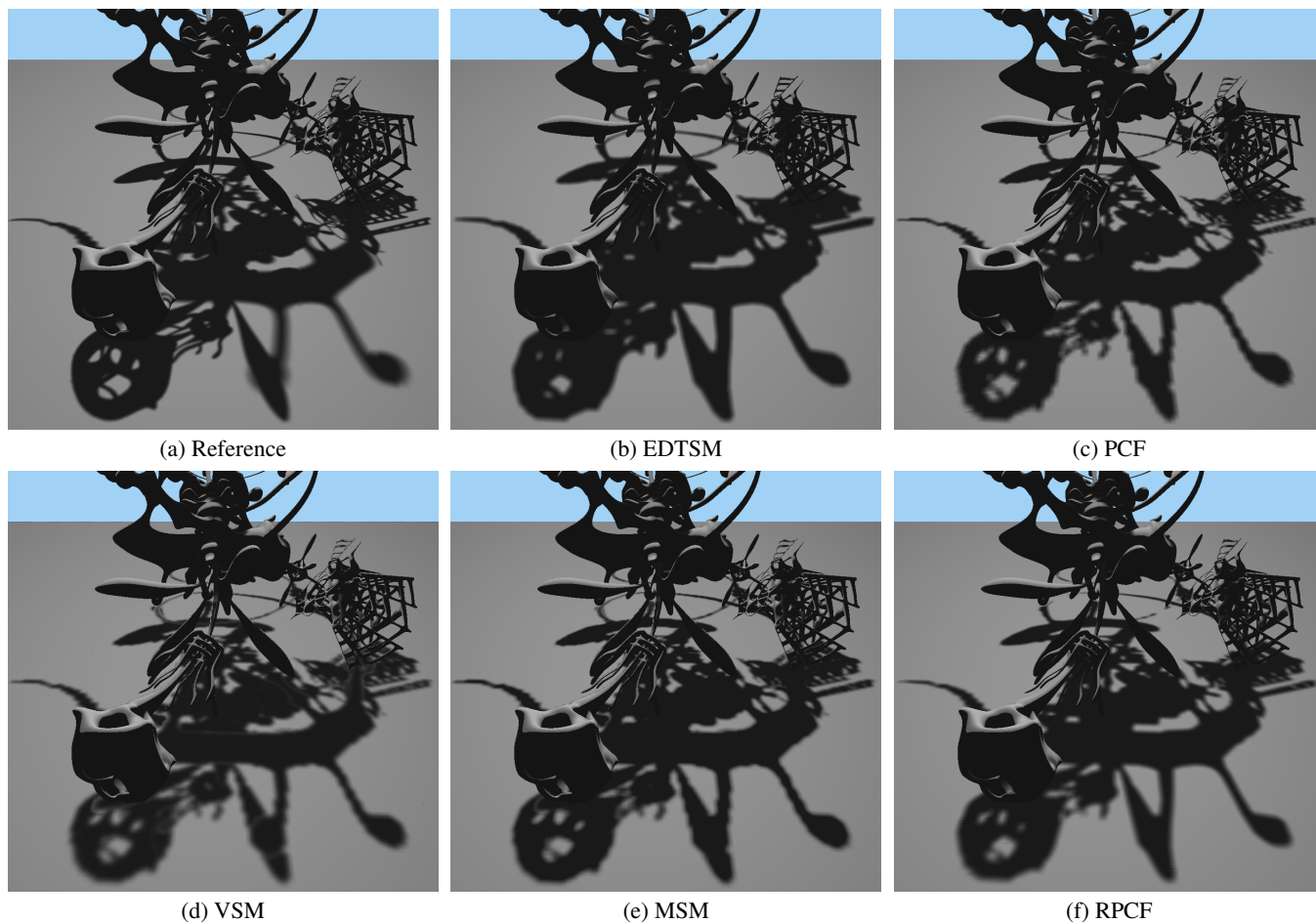

(a) Reference   (b) EDTSM   (c) PCF

(d) VSM   (e) MSM   (f) RPCF

Figure 1: A comparison between the shadows produced the ground-truth reference solution (a) and the different hard shadow filtering techniques (b, c, d, e, f). Images were generated for the YeahRight model using a 1024^2 shadow map resolution.

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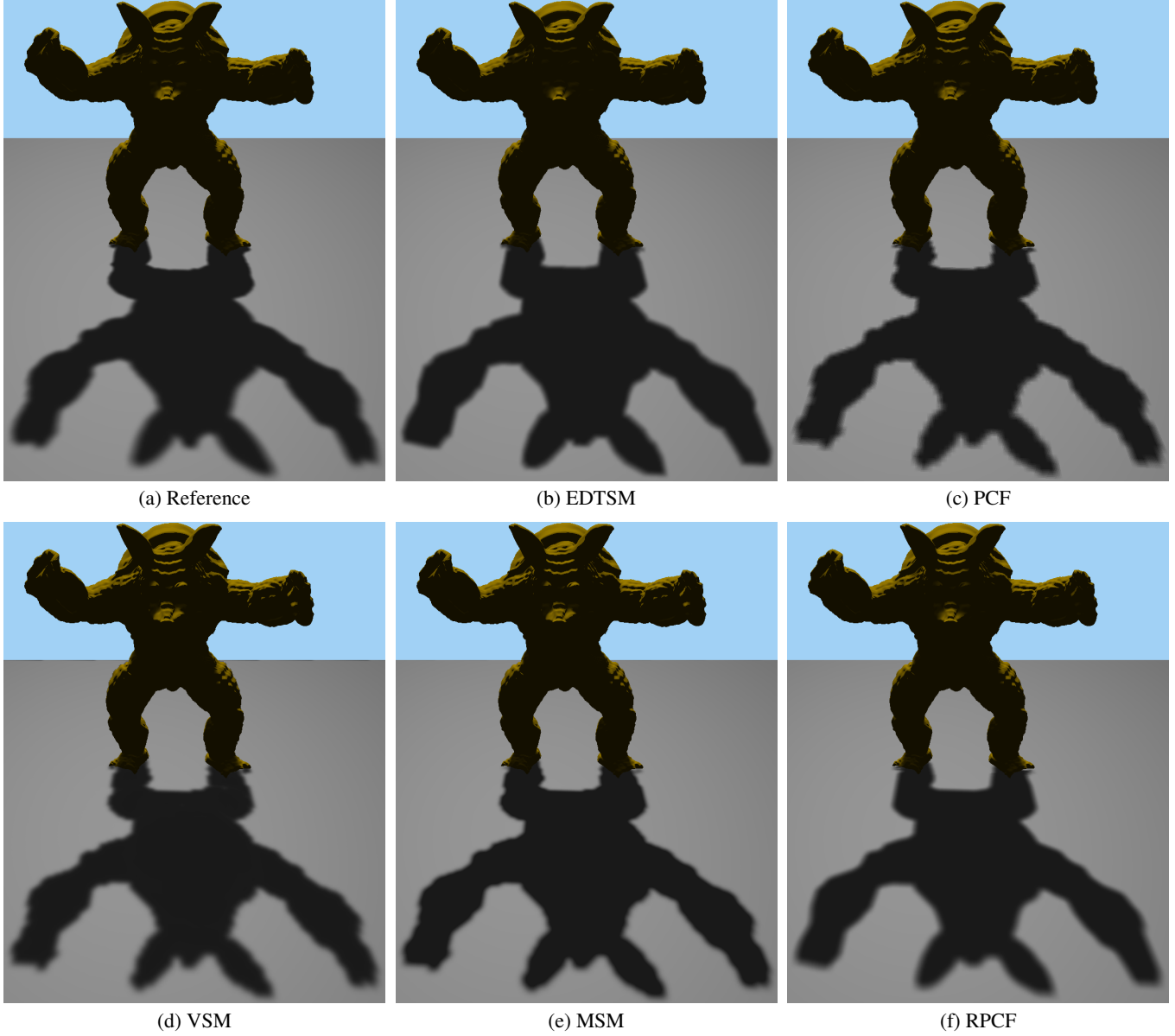(a) Reference　　　(b) EDTSM　　　(c) PCF

(d) VSM　　　(e) MSM　　　(f) RPCF

Figure 2: A comparison between the shadows produced the ground-truth reference solution (a) and the different hard shadow filtering techniques (b, c, d, e, f). Images were generated for the Armadillo model using a 512^2 shadow map resolution.