



# Efficient Shadow Anti-Aliasing Techniques using Silhouette Revectorization



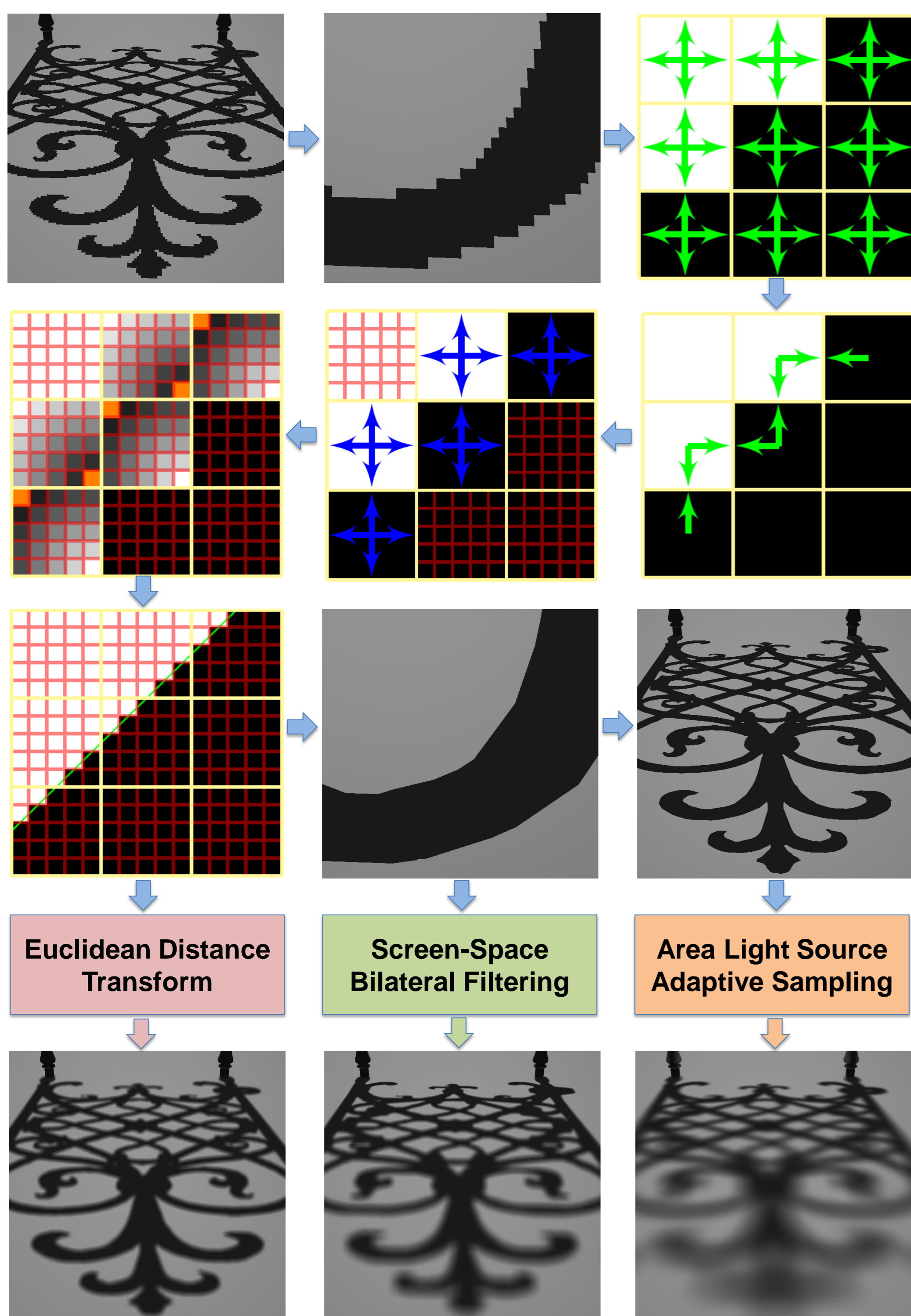
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## I. Introduction

In this thesis' work<sup>1</sup>, we propose a set of real-time techniques that use the concept of shadow revectorization to minimize aliasing and light leaking artifacts commonly produced by related work and found in hard (umbra) and soft (penumbra) shadows.

## II. Shadow Silhouette Revectorization

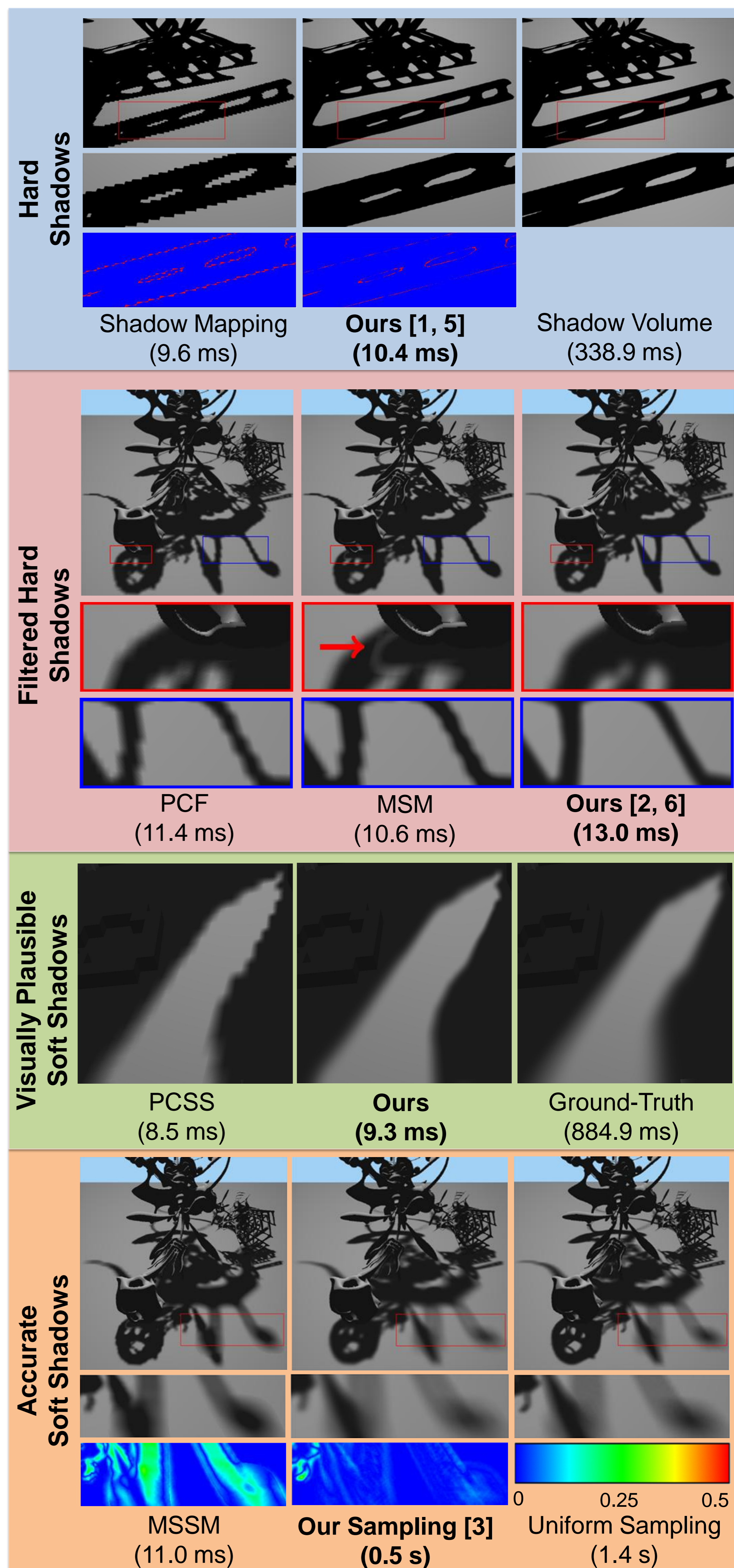


## Publications

- [1] M. Macedo and A. Apolinário. "Revectorization-Based Shadow Mapping". In *Graphics Interface*, 2016, pp. 75-83;
- [2] M. Macedo and A. Apolinário. "Euclidean Distance Transform Shadow Mapping". In *Graphics Interface*, 2017, pp. 171-180;
- [3] M. Macedo and A. Apolinário. "Revectorization-Based Accurate Soft Shadow using Adaptive Area Light Source Sampling". In *Graphics Interface*, 2017, pp. 181-189;
- [4] M. Macedo and A. Apolinário. "Euclidean Distance Transform Soft Shadow Mapping". In *SIBGRABI*, 2017, pp. 238-245;
- [5] M. Macedo, A. Teixeira, A. Apolinário and K. Agüero. "Hard Shadow Anti-Aliasing for Spot Lights in a Game Engine". In *SBGAMES*, 2017, pp. 106-115;
- [6] M. Macedo and A. Apolinário. "Improved Anti-Aliasing for Euclidean Distance Transform Shadow Mapping". *Computers & Graphics*, vol. 71, 2018, pp. 166-179;

<sup>1</sup> Ph. D. work conducted between March 2015 and May 2018

## III. Results



Acknowledgments:

