

Daisuke Miyazaki, Kenji Hara, Katsushi Ikeuchi,
"Photometric Stereo beyond Glass: Active Separation of Transparent Layer and Five-Light
Photometric Stereo with M-Estimator Using Laplace Distribution for a Virtual Museum,"
Proceedings of International Workshop on Photometric Analysis for Computer Vision,
Rio de Janeiro, Brazil, 2007.10

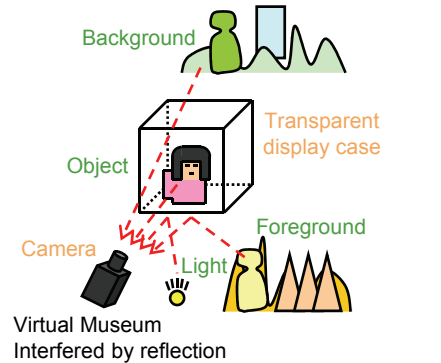
Photometric Stereo beyond Glass:

Active Separation of Transparent Layer and Five-Light Photometric Stereo with M-Estimator Using Laplace Distribution for a Virtual Museum

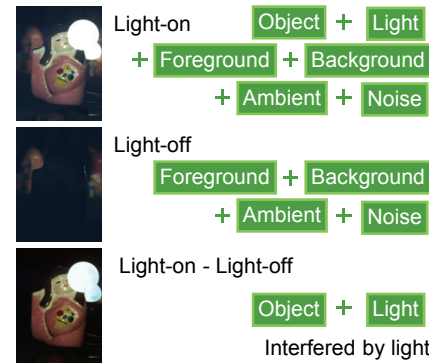
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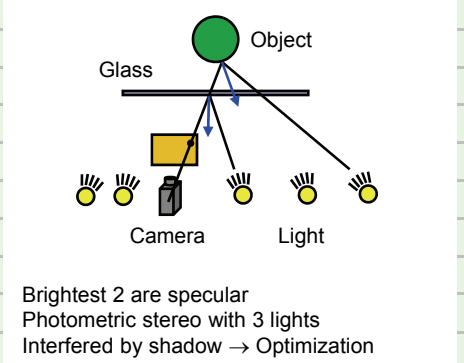
→ Glass Display Case



→ Separation

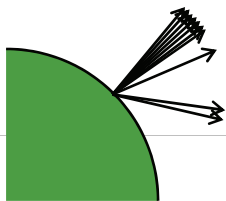


→ 5-light

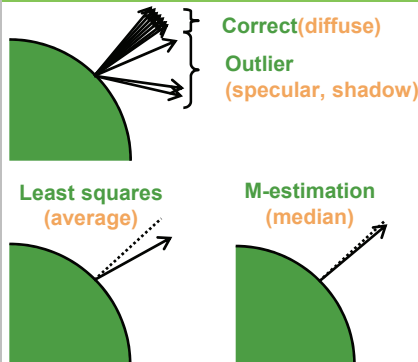


→ Candidates

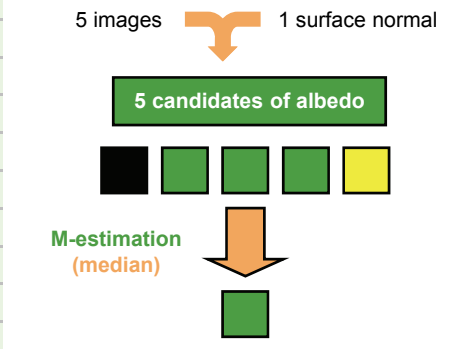
Combination: choose 3 images from 5 lights
Photometric stereo with 3 images
 ${}_5C_3=10$ candidates of surface normal



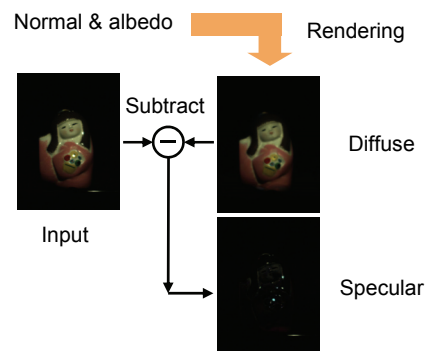
→ M-Estimation



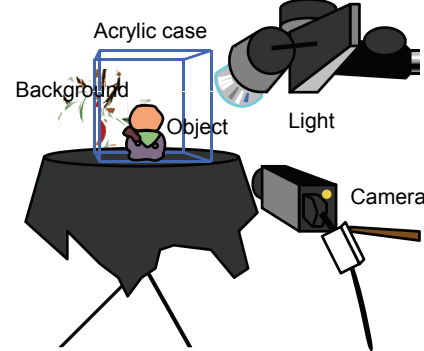
→ Albedo



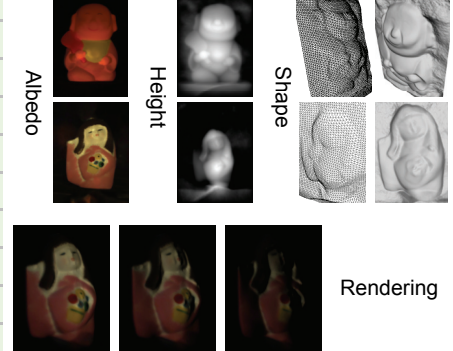
→ Specular reflection



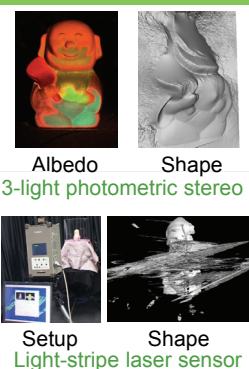
→ Setup



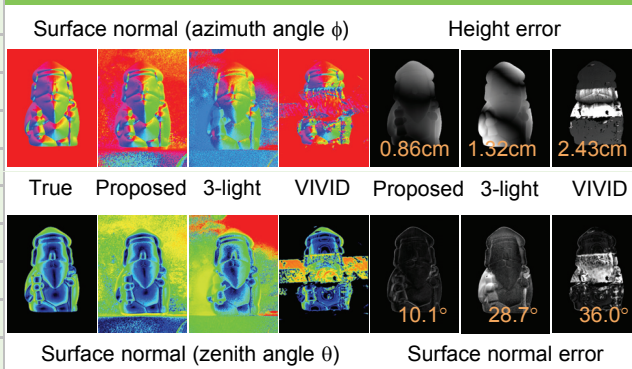
→ Measurement result



→ Compare



→ Evaluation



→ Application Field

