

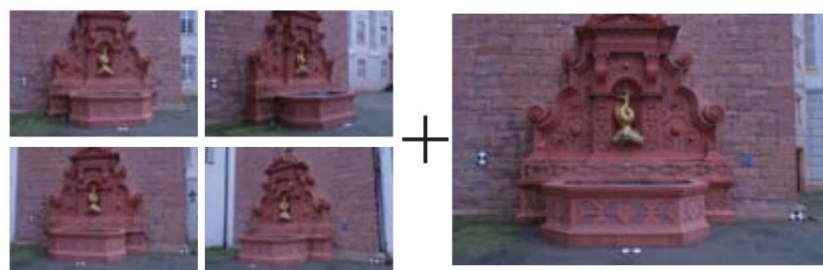


Joint view selection and depth map estimation

[1] Zheng, E., et al.(2014). PatchMatch Based Joint View Selection and Depth map Estimation. *In international conference of CVPR*.

Contribution:

- Posing the problem within a probabilistic framework that jointly models pixel-level view selection and depthmap estimation given the local pairwise image photoconsistency.
- The corresponding graphical model is solved by EM-based view selection probability inference and PatchMatch-like depth sampling and propagation.
- EM-propagation process, which is different from former work, is in a single direction so every pixel is determined by one of its neighbor.



Source images

Reference image

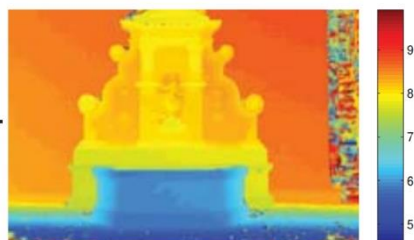
E step:
Image Selection
Probability
Inference



M step:
PatchMatch
Depth
Estimation



Selection probability maps



Depthmap