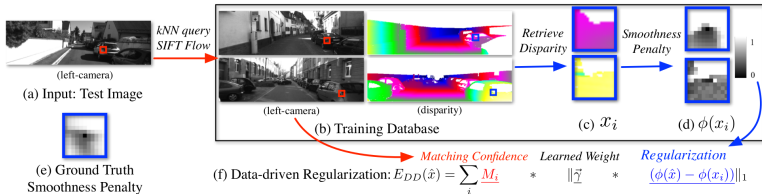


A Data-driven Regularization Model for Stereo and Flow

D. Wei, C. Liu, and W. T. Freeman (THREEDV 2014)



- ▶ Resolving local ambiguity of the disparity or flow
 - ▶ by considering the semantic information
 - ▶ without explicit object modelling
- ▶ Data driven approach:
 - ▶ Transferring shape information from semantically matched patches in the database
 - ▶ Relative-relationship transfer (by subtracting disparity at the center pixel) rather than data-term transfer (absolute values)
 - ▶ Similar local shape information while absolute disparity values differ
- ▶ A standard MRF model using gradient descent for inference
- ▶ Comparable or better results on the KITTI stereo and flow datasets
- ▶ Improved results on the Sintel flow dataset