A Taxonomy and Evaluation of Dense Two-Frame Stereo Correspondence Algorithms D. Scharstein, R. Szeliski (IJCV 2002)



- Presents a taxonomy of dense, two-frame stereo methods designed to assess the different components of individual stereo algorithms
- Uses this taxonomy to highlight the most important features of existing stereo algorithms and to study important algorithmic components in isolation
- Provides a test bed for the quantitative evaluation of stereo algorithms with sample implementations along with test data
- Produces new calibrated multi-view stereo data sets with hand-labeled ground truth
- Performs an extensive experimental investigation in order to assess the impact of the different algorithmic components
- Demonstrates the limitations of local methods & assesses the value of different global techniques &s their sensitivity to key parameters