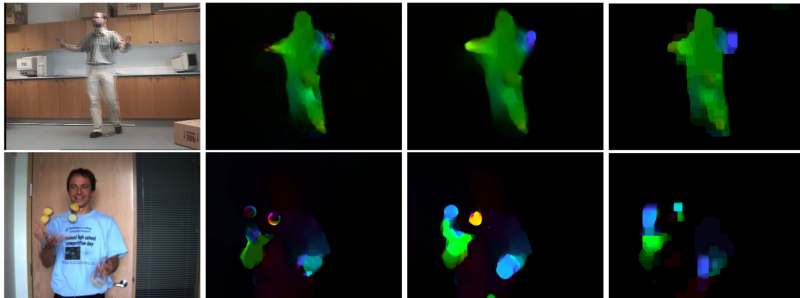


# Large Displacement Optical Flow: Descriptor Matching in Variational Motion Estimation

T. Brox, J. Malik (PAMI 2011)



- ▶ Coarse-to-fine warping for optical flow estimation
  - ▶ can handle large displacements
  - ▶ small objects moving fast are problematic
- ▶ Integration of rich descriptors into a variational formulation
  - ▶ Simple nearest neighbor search in coarse grid
  - ▶ Feature matches used as soft constraint in continuous approach
  - ▶ Continuation method: coarse-to-fine while reducing the importance of descriptor matches
- ▶ Quantitative results only on Middlebury but real world qualitative results