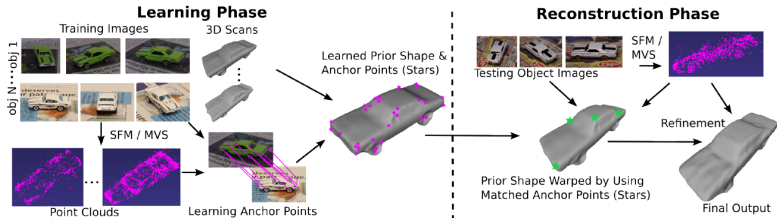# Dense Object Reconstruction with Semantic Priors
S. Y. Bao, M. Chandraker, Y. Lin and S. Savarese (CVPR 2013)

- Dense reconstruction incorporating semantic information to overcome drawbacks of traditional multiview stereo
- Learning a prior comprised of a mean shape and a set of weighted anchor points
- Training from of 3D scans and images of objects from various viewpoints
- Robust algorithm to match anchor points across instances enables learning a mean shape for the category
- Shape of an object modelled as warped version of the category mean with instance-specific details
- Qualitative and quantitative results on a small dataset of model cars using leave-one-out