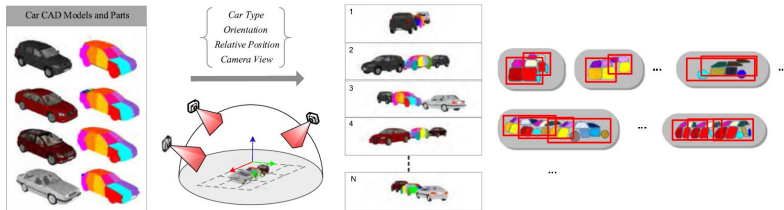# Learning And-Or Model to Represent Context and Occlusion for Car Detection and Viewpoint Estimation
T. Wu, B. Li and SC. Zhu (PAMI 2016)

- Car detection and viewpoint estimation from images
- And-Or model embeds a grammar for representing large structural and appearance variations in a reconfigurable hierarchy
- Learning an And-Or model that takes into account structural and appearance variations at multi-car, single-car and part levels jointly
- Learning process consists of two stages in a weakly supervised way
  - The structure of the model is learned mining multi-car contextual patterns, occlusion configurations, combination of parts
  - Model parameters are jointly trained using Weak-Label Structural SVM
- Evaluation of car detection with KITTI, PASCAL VOC2007 car dataset, and two self-collected car dataset and car viewpoint estimation with PASCAL VOC2006, PASCAL3D+