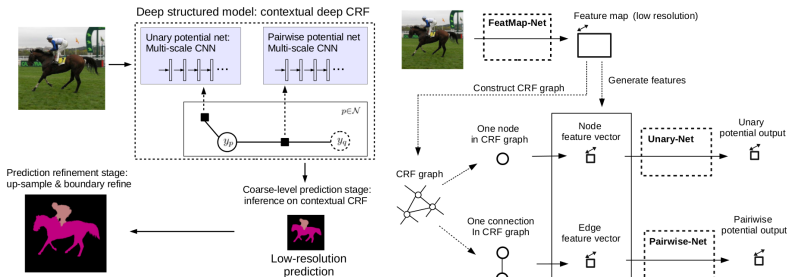# Efficient Piecewise Training of Deep Structured Models for Semantic Segmentation

G. Lin, C. Shen, A. van den Hengel, I. Reid (CVPR 2016)

- Semantic segmentation using contextual information
- Patch-patch context: Piecewise training of CRFs with CNN-based unary and pairwise potentials (connecting every patch with surrounding, above/below relations)
- Patch-background context: multi-scale image input, sliding pyramid pooling
- Prediction: first coarse-level (CRF), and then refinement (Dense CRF)
- New state-of-the-art on NYUDv2, PASCAL VOC 2012, PASCAL-Context, and SIFT-flow datasets