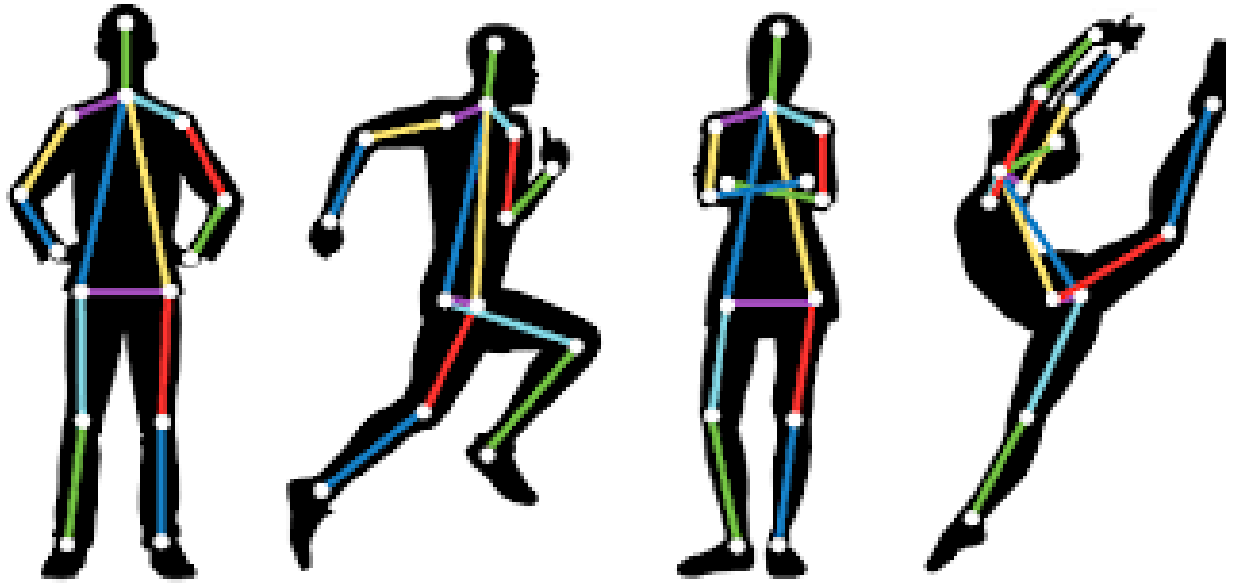
DL: Сверточные сети
Детектирование объектов

План

- Семантическая сегментация
- Детектирование
- Извлечение точек

Pose estimation

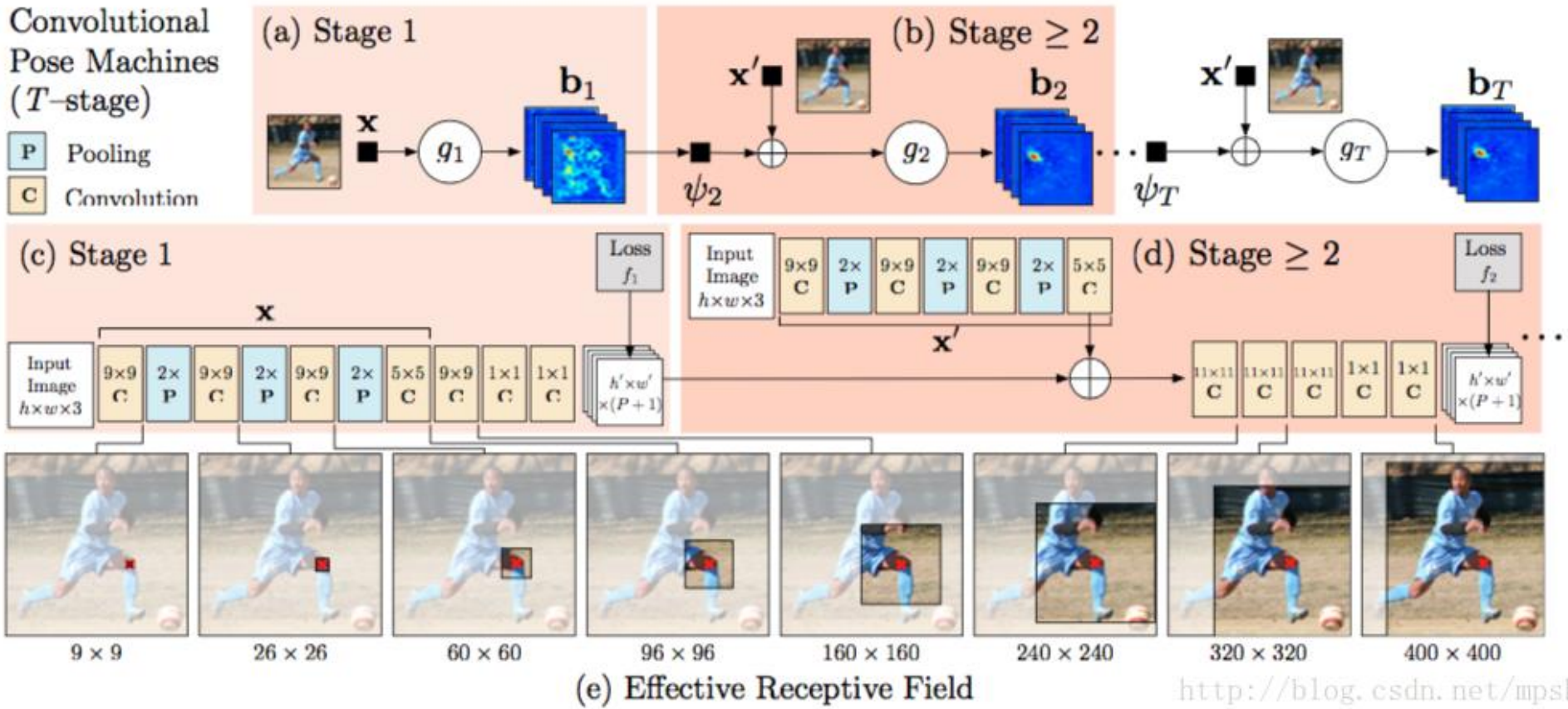


https://nanonets.com/blog/human-pose-estimation-2d-guide/

CPM

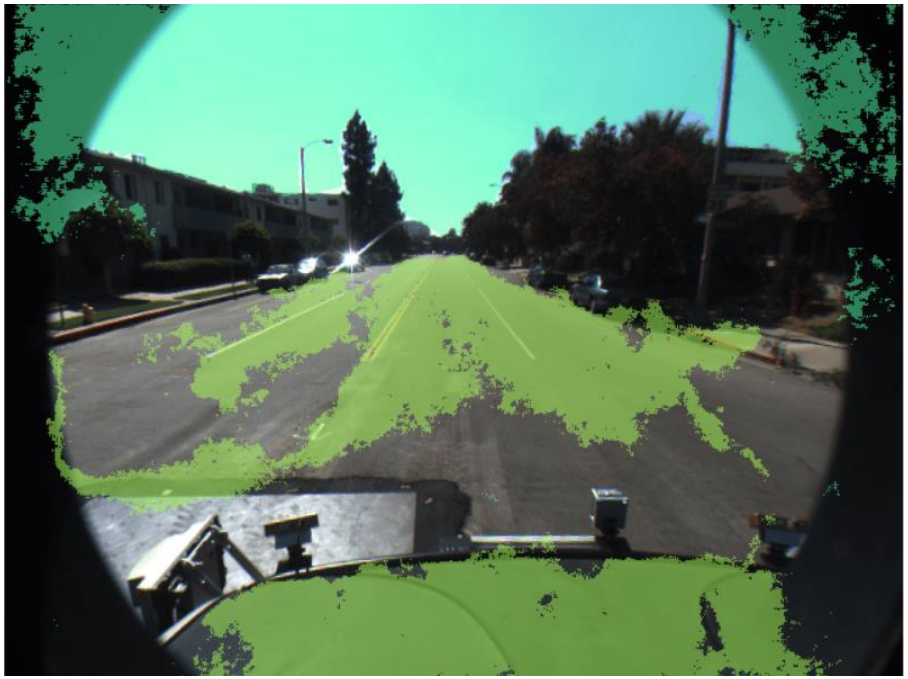

Initial stage
220 x 220
55 x 55 x 48
27 x 27 x 128
4096
4096
DNN-based regressor
Stage s
DNN-based refiner
send refined values
to next stage

CPM



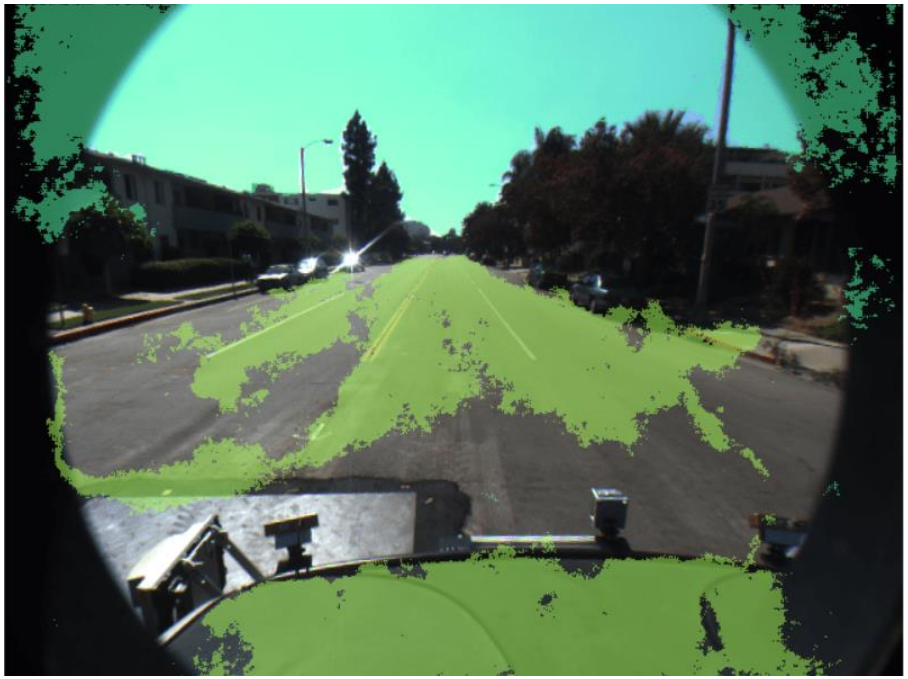
Семантическая сегментация

Семантическая сегментация: Segnet



web(fullfile(docroot, 'vision/ug/automate-ground-truth-labeling-for-semantic-segmentation.html'))

Семантическая сегментация: deepLabv3



web(fullfile(docroot, 'vision/ref/deeplabv3pluslayers.html'))

Faster RCNN

web(fullfile(docroot, 'vision/ref/fasterrcnnlayers.html'))

web(fullfile(docroot, 'vision/ug/object-detection-using-deep-learning.html'))

web(fullfile(docroot, 'vision/ug/object-detection-using-faster-r-cnn-deep-learning.html'))

Yolo v2

web(fullfile(docroot, 'vision/ug/getting-started-with-yolo-v2.html'))

web(fullfile(docroot, 'vision/ug/train-an-object-detector-using-you-only-look-once.html'))

Yolo v3

web(fullfile(docroot, 'vision/ug/getting-started-with-yolo-v3.html'))

web(fullfile(docroot, 'vision/ug/object-detection-using-yolo-v3-deep-learning.html'))